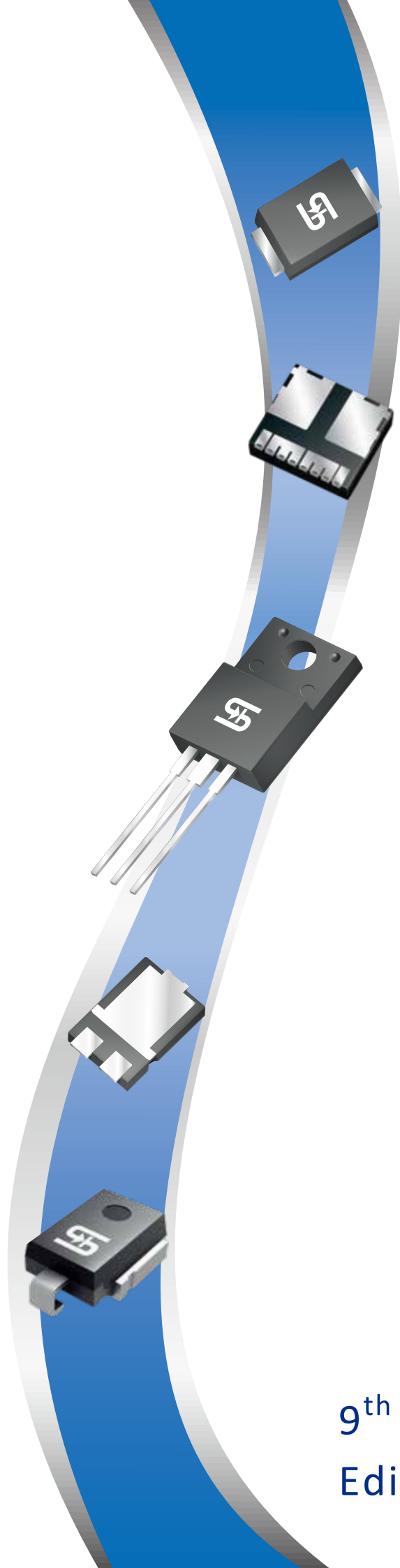




TAIWAN  
SEMICONDUCTOR



# PRODUCT SELECTOR GUIDE

[www.taiwansemi.com](http://www.taiwansemi.com)

9<sup>th</sup>  
Edition



## BRIDGE RECTIFIERS

STANDARD .....	4-5
FAST ( $t_{rr} = 150...500ns$ ) .....	6
HIGH EFFICIENT ( $t_{rr} = 50...75ns$ ) .....	6
SUPER FAST ( $t_{rr} = 35ns$ ) .....	6
SCHOTTKY .....	7

## DIODES

STANDARD .....	7-8
FAST ( $t_{rr} = 120...500ns$ ) .....	9
HIGH EFFICIENT ( $t_{rr} = 50...80ns$ ) .....	10-11
SUPER FAST ( $t_{rr} = 35...40ns$ ) .....	12-13
ULTRA FAST ( $t_{rr} = 15...30ns$ ) .....	14
SCHOTTKY .....	15-18
TRENCH SCHOTTKY .....	19-20
ESD CAPABILITY .....	20
SWITCHING (SMALL SIGNAL) .....	21
TVS .....	22-23
ZENER .....	24-25

## ESD

ESD PROTECTION .....	25
----------------------	----

## DIACS

DIAC .....	25
------------	----

**MOSFETS**

MOSFET - DUAL, ASYMMETRIC DUAL AND COMPLEMENTARY .....	26-27
MOSFET - SINGLE P-CHANNEL .....	28-29
MOSFET - SINGLE N-CHANNEL .....	30-39

**TRANSISTORS**

BIPOLAR TRANSISTOR - NPN .....	40-41
BIPOLAR TRANSISTOR - PNP .....	42
DIGITAL TRANSISTOR - COMPLEX .....	42

**THYRISTORS**

THYRISTOR .....	43
-----------------	----

**AMPLIFIERS & COMPARATORS**

AMPLIFIER & COMPARATOR .....	43
------------------------------	----

**ANALOG ICs**

ANALOG IC - RESET IC .....	44
ANALOG IC - AMPLIFIER AND VOLTAGE REFERENCE .....	44

**HALL EFFECT SENSORS**

HALL EFFECT SENSOR .....	45
--------------------------	----

**LED DRIVERS**

LED DRIVER .....	46
------------------	----

**LINEAR VOLTAGE REGULATORS**

LINEAR VOLTAGE REGULATOR .....	47-48
--------------------------------	-------

**SWITCHING REGULATORS**

SWITCHING REGULATOR .....	49
---------------------------	----

**VOLTAGE REFERENCES**

VOLTAGE REFERENCE .....	50
-------------------------	----

**APPENDIX**

PACKING CODE LIST .....	51-59
OUTLINE DRAWINGS .....	60-75

## BRIDGES - STANDARD

(T<sub>A</sub>=25°C unless otherwise noted)

★=AEC-Q101 qualified

Part Number	I <sub>F(AV)</sub>	V <sub>RRM</sub>	I <sub>FSM</sub>	V <sub>F</sub>	I <sub>r</sub>	T <sub>J</sub> Max.	Package Description
	(A)	(V)	(A)	(V)	(μA)	(°C)	
MBS2~MBS10 ★	0.8	200-1,000	35	1	5	150	MBS
MBS6-K~MBS10-K	0.8	600-1,000	35	1	5	150	MBS
ABS2~ABS10 ★	1	200-1,000	30	0.95	10	150	ABS
ABS4-K~ABS10-K	1	400-1,000	30	0.95	10	150	ABS
DBL104G-T~DBL107G-T	1	400-1,000	30-40	1.1	2	150	DBL
DBLS104G-T~DBLS107G-T	1	400-1,000	30-40	1.1	2	150	DBLS
DBL101G~DBL107G ★	1	50-1,000	30-40	1.1	2	150	DBL
DBLS101G~DBLS107G ★	1	50-1,000	30-40	1.1	2	150	DBLS
ABS6-T~ABS10-T	1	600-1,000	30	0.95	10	150	ABS
ABS15LJ	1.5	600	60	0.95	5	150	ABS
DBL154G-T~DBL157G-T	1.5	400-1,000	50	1.1	2	150	DBL
DBLS154G-T~DBLS157G-T	1.5	400-1,000	50	1.1	2	150	DBLS
DBL151G~DBL159G ★	1.5	50-1,400	50	1.1-1.25	2	150	DBL
DBLS151G~DBLS159G ★	1.5	50-1,400	50	1.1-1.25	2	150	DBLS
ABS15J~ABS15M ★	1.5	600-1,000	40	1	5	150	ABS
ABS20M	2	1,000	50	1.1	5	150	ABS
ABS20M-T	2	1,000	50	1.1	5	150	ABS
DBL204G-T~DBL207G-T	2	400-1,000	50	1.15	2	150	DBL
DBLS204G-T~DBLS207G-T	2	400-1,000	50	1.15	2	150	DBLS
KBPF204G~KBPF207G	2	400-1,000	60	1.1	5	150	KBPF
GBL201~GBL207 ★	2	50-1,000	60	1	5	150	GBL
DBL201G~DBL209G ★	2	50-1,400	50	1.15-1.3	2	150	DBL
DBLS201G~DBLS209G ★	2	50-1,400	50	1.15-1.3	2	150	DBLS
D2S805~D2S880 ★	2	50-800	80	1.1	10	150	GBL
UR2KB60~UR2KB100	2	600-1,000	62	1.05	10	150	D3K
YBS2204G~YBS2207G	2.2	400-1,000	90	0.92	5	150	YBS
KBPF304G~KBPF307G	3	400-1,000	80	1.1	5	150	KBPF
YBS3004G~YBS3007G	3	400-1,000	110	1.02	5	150	YBS
UR3KB60~UR3KB100	3	600-1,000	90	1	10	150	D3K
GBU404-K~GBU407-K	4	400-1,000	150	1.1	5	150	GBU
KBPF404G~KBPF407G	4	400-1,000	120	1.1	5	150	KBPF
TS4K40~TS4K80 ★	4	400-800	120	1	10	150	TS4K
TS4K40-A~TS4K80-A	4	400-800	120	1	10	150	TS4K
GBLA005~GBLA10 ★	4	50-1,000	120	1	5	150	GBL
GBL005~GBL10 ★	4	50-1,000	150	1	5	150	GBL
GBU401~GBU407 ★	4	50-1,000	150	1.1	5	150	GBU
KBL401G~KBL407G	4	50-1,000	150	1.1	10	150	KBL
KBU401G~KBU407G	4	50-1,000	150	1.1	5	150	KBU
UR4KB60-B~UR4KB100-B	4	600-1,000	135	1	10	150	D3K
TBS406~TBS410	4	600-1,000	110	1	2	150	TBS
GBU604-K~GBU607-K	6	400-1,000	175	1.1	5	150	GBU
TS6K40~TS6K80 ★	6	400-800	150	1.1	5	150	TS4K
TS6K40-T~TS6K80-T	6	400-800	150	1	10	150	TS4K
GBU601~GBU607 ★	6	50-1,000	175	1.1	5	150	GBU
KBL601G~KBL607G	6	50-1,000	175	1.1	10	150	KBL
KBU601G~KBU607G	6	50-1,000	175	1.1	5	150	KBU

## BRIDGES - STANDARD

Part Number	I <sub>F(AV)</sub>	V <sub>RRM</sub>	I <sub>FSM</sub>	V <sub>F</sub>	I <sub>r</sub>	T <sub>J</sub> Max.	Package Description
	(A)	(V)	(A)	(V)	(μA)	(°C)	
TS6P01G~TS6P07G ★	6	50-1,000	150	1	10	150	TS-6P
TS6P01G-K~TS6P07G-K	6	50-1,000	150	1	10	150	TS-6P
TS6KL60~TS6KL100 ★	6	600-1,000	150	1.05	5	150	KBJL
TBS606~TBS610	6	600-1,000	150	1	2	150	TBS
GBU804-K~GBU807-K	8	400-1,000	200	1.1	5	150	GBU
GBU801~GBU807 ★	8	50-1,000	200	1.1	5	150	GBU
KBU801G~KBU807G	8	50-1,000	200	1.1	5	150	KBU
TS8P01G~TS8P07G ★	8	50-1,000	200	1	10	150	TS-6P
UR8KB60~UR8KB100	8	600-1,000	170	1.1	10	150	D3K
TS10K40~TS10K80 ★	10	400-800	150	1.1	10	150	TS4K
TS10K40-A~TS10K80-A	10	400-800	150	1	10	150	TS4K
GBU1001~GBU1007 ★	10	50-1,000	220	1	5	150	GBU
KBU1001G~KBU1007G	10	50-1,000	200	1.1	5	150	KBU
TS10P01G~TS10P07G ★	10	50-1,000	200	1	10	150	TS-6P
TS10P01G-K~TS10P07G-K	10	50-1,000	200	1	10	150	TS-6P
TS10KL60~TS10KL100 ★	10	600-1,000	180	1	5	150	KBJL
T10JA05G~T10JA07G	10	600-1,000	144	1.1	5	150	TS-6PL
GBPC15005~GBPC1510	15	50-1,000	300	1.1	5	150	GBPC
GBPC15005M~GBPC1510M	15	50-1,000	300	1.1	5	150	GBPC-M
GBPC15005W~GBPC1510W	15	50-1,000	300	1.1	5	150	GBPC-W
TS15P01G~TS15P07G ★	15	50-1,000	240	1	10	150	TS-6P
TS15P05G-K~TS15P07G-K	15	600-1,000	240	1	10	150	TS-6P
T15JA05G~T15JA07G	15	600-1,000	208	1.1	5	150	TS-6PL
GBU15L05~GBU15L06 ★	15	600-800	200	0.9-0.96	5	150	GBU
TS15PL05G~TS15PL06G ★	15	600-800	200	0.9-0.93	5	150	TS-6P
TS20P01G~TS20P07G ★	20	50-1,000	250	1	10	150	TS-6P
GBU2504~GBU2507	25	400-1,000	300	1.1	10	150	GBU
GBPC25005~GBPC2510	25	50-1,000	300	1.1	5	150	GBPC
GBPC25005M~GBPC2510M	25	50-1,000	300	1.1	5	150	GBPC-M
GBPC25005W~GBPC2510W	25	50-1,000	300	1.1	5	150	GBPC-W
TS25P01G~TS25P07G ★	25	50-1,000	350	1.0	10	150	TS-6P
TS25P05G-K~TS25P07G-K	25	600-1,000	350	1.1	10	150	TS-6P
T25JA05G~T25JA07G	25	600-1,000	312	1.15	5	150	TS-6PL
TS25PL05G~TS25PL06G ★	25	600-800	300	0.92-0.95	10	150	TS-6P
GBPC35005~GBPC3510	35	50-1,000	400	1.1	5	150	GBPC
GBPC35005M~GBPC3510M	35	50-1,000	400	1.1	5	150	GBPC-M
GBPC35005W~GBPC3510W	35	50-1,000	400	1.1	5	150	GBPC-W
TS35P05G~TS35P07G ★	35	600-1,000	350	1.1	10	150	TS-6P
GBPC40005~GBPC4010	40	50-1,000	400	1.1	10	150	GBPC40
GBPC40005M~GBPC4010M	40	50-1,000	400	1.1	10	150	GBPC40-M
TS40P05G~TS40P07G ★	40	600-1,000	400	1.1	10	150	TS-6P
GBPC50005~GBPC5010	50	50-1,000	400	1.1	10	150	GBPC40
GBPC50005M~GBPC5010M	50	50-1,000	400	1.1	10	150	GBPC40-M
TS50P05G~TS50P07G ★	50	600-1,000	400	1.1	10	150	TS-6P



## BRIDGES - FAST ( $t_{rr} = 150...500ns$ )

( $T_A=25^\circ C$  unless otherwise noted)

★=AEC-Q101 qualified

Part Number	$t_{rr}$	$I_{F(AV)}$	$V_{RRM}$	$I_{FSM}$	$V_F$	$I_R$	$T_J$ Max.	Package Description
	(ns)	(A)	(V)	(A)	(V)	( $\mu A$ )	( $^\circ C$ )	
RMB2S~RMB6S ★	150	0.8	200-600	30	1	5	150	MBS
RDBLS207G ★	300	2	1,000	50	1.15	2	150	DBLS
RABS15M ★	500	1.5	1,000	50	1.30	1	150	ABS-L

## BRIDGES - SCHOTTKY

( $T_A=25^\circ C$  unless otherwise noted)

★=AEC-Q101 qualified

Part Number	$I_{F(AV)}$	$V_{RRM}$	$I_{FSM}$	$V_F$	$I_R$	$T_J$ Max.	Package Description
	(A)	(V)	(A)	(V)	( $\mu A$ )	( $^\circ C$ )	
SBS24~SBS26 ★	2	40-60	50	0.5-0.7	50-100	150	ABS
SBS34~SBS36 ★	3	40-60	80	0.5-0.7	500	125-150	ABS

## BRIDGES - HIGH EFFICIENT ( $t_{rr} = 50...75ns$ )

( $T_A=25^\circ C$  unless otherwise noted)

★=AEC-Q101 qualified

Part Number	$t_{rr}$	$I_{F(AV)}$	$V_{RRM}$	$I_{FSM}$	$V_F$	$I_R$	$T_J$ Max.	Package Description
	(ns)	(A)	(V)	(A)	(V)	( $\mu A$ )	( $^\circ C$ )	
TSS4B04G ★	50	4	400	150	1.3	5	150	TS4B
HDBL101G~HDBL107G ★	50-75	1	50-1,000	50	1-1.7	5	150	DBL
HDBLS101G~HDBLS107G ★	50-75	1	50-1,000	50	1-1.7	5	150	DBLS

## DIODES - STANDARD

( $T_A=25^\circ C$  unless otherwise noted)

★=AEC-Q101 qualified

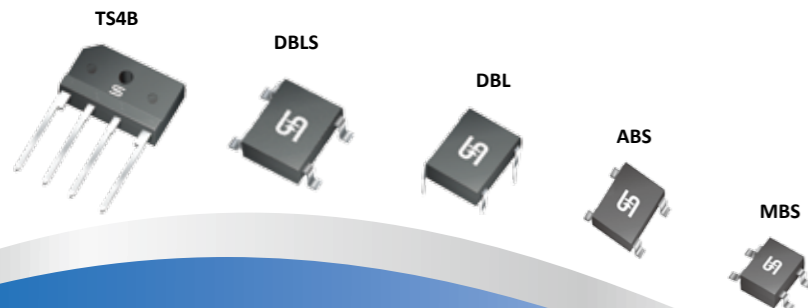
Part Number	$I_{F(AV)}$	$V_{RRM}$	$I_{FSM}$	$V_F$	$I_R$	$T_J$ Max.	Package Description
	(A)	(V)	(A)	(V)	( $\mu A$ )	( $^\circ C$ )	
SDLW~SMLW ★	0.8	200-1,000	20	1.1	1	150	SOD-123W
1N4005SG ★	1	600	30	1	5	175	A-405
S1D-K~S1M-K	1	200-1,000	30	1.1	1	175	DO-214AC (SMA)
S1DLW~S1MLW ★	1	200-1,000	30	1.1	1	175	SOD-123W
S1DFS~S1MFS ★	1	200-1,000	30	1.1	1	150	SOD-128
S1D-T~S1M-T	1	200-1,000	30-40	1.1	1	175	DO-214AC (SMA)
S1DF-T~S1MF-T	1	200-1,000	30	1.1	5	150	SMAF
S1GFL~S1MFL	1	400-1,000	30	1.1	1	150	SOD-123FL
S1GM~S1JM ★	1	400-600	20	1.1	1	175	Micro SMA
2CZ4004~2CZ4006	1	400-800	7.5	1.1	5	150	SOD-123
1N4001G~1N4007G ★	1	50-1,000	30	1	5	150	DO-204AL (DO-41)
1N4001G-K~1N4007G-K	1	50-1,000	30	1	5	150	DO-204AL (DO-41)
S1AB~S1MB ★	1	50-1,000	30	1.1	5	150	DO-214AA (SMB)
LL4001G~LL4007G	1	50-1,000	30	1.1	5	150	MELF (Plastic)
S1AL~S1ML ★	1	50-1,000	30	1.1	5	175	Sub SMA
1T1G~1T7G ★	1	50-1,000	30	1-1.1	5	150	TS-1
1T1G-K~1T7G-K	1	50-1,000	30	1-1.1	5	150	TS-1
S1A~S1M ★	1	50-1,000	30-40	1.1	1	175	DO-214AC (SMA)
S1JLS~S1MLS ★	1.2	600-1,000	50	1.3	5	150	SOD-123HE
S15DLW~S15MLW ★	1.5	200-1,000	50	1.1	1	175	SOD-123W

## BRIDGES - SUPER FAST ( $t_{rr} = 35ns$ )

( $T_A=25^\circ C$  unless otherwise noted)

★=AEC-Q101 qualified

Part Number	$t_{rr}$	$I_{F(AV)}$	$V_{RRM}$	$I_{FSM}$	$V_F$	$I_R$	$T_J$ Max.	Package Description
	(ns)	(A)	(V)	(A)	(V)	( $\mu A$ )	( $^\circ C$ )	
EABS1D~EABS1J ★	35	1	200-600	40	0.95-1.7	1	150	ABS
TSS4B01G~TSS4B03G ★	35	4	50-200	150	0.98	5	150	TS4B



## DIODES - STANDARD

(T<sub>A</sub>=25°C unless otherwise noted)

★=AEC-Q101 qualified

Part Number	I <sub>F(AV)</sub>	V <sub>RRM</sub>	I <sub>FSM</sub>	V <sub>F</sub>	I <sub>R</sub>	T <sub>J</sub> Max.	Package Description
	(A)	(V)	(A)	(V)	(μA)	(°C)	
1N5391G~1N5399G ★	1.5	50-1,000	50	1-1.1	5	150	DO-204AC (DO-15)
1N5391G-T~1N5399G-T	1.5	50-1,000	50	1-1.1	5	150	DO-204AC (DO-15)
S2AA~S2MA ★	1.5	50-1,000	50	1.1	5	150	DO-214AC (SMA)
S2DAF-T~S2MAF-T	2	200-1,000	50	1.1	5	150	SMAF
S2DA~S2MA-T	2	200-1,000	50	1.1	5	150	DO-214AC (SMA)
S2DFL~S2MFL	2	200-1,000	40	1.1	5	150	SOD-123FL
S2D-T~S2M-T	2	200-1,000	50	1.1	5	150	DO-214AA (SMB)
2A01G~2A07G ★	2	50-1,000	70	1-1.1	5	150	DO-204AC (DO-15)
2A01G-T~2A07G-T	2	50-1,000	70	1-1.1	5	150	DO-204AC (DO-15)
S2A~S2V ★	2	50-1,400	50	1.15	1	150	DO-214AA (SMB)
S3DB-K~S3MB-K	3	200-1,000	50	1.15	5	150	DO-214AB (SMC)
BY251G~BY254G	3	200-800	150	1	5	150	DO-201AD
S3AB~S3MB ★	3	50-1,000	80	1.15	10	150	DO-214AA (SMB)
S3A~S3M ★	3	50-1,000	100	1.15	10	150	DO-214AB (SMC)
S3A-T~S3M-T	3	50-1,000	100	1.15	10	150	DO-214AB (SMC)
1N5400G~1N5408G ★	3	50-1,000	125	1-1.1	5	150	DO-201AD
1N5400G-K~1N5408G-K	3	50-1,000	125	1-1.1	5	150	DO-201AD
3A60~3A100 ★	3	600-1,000	120	1.1	5	150	DO-204AC (DO-15)
S4A~S4M ★	4	50-1,000	100	1.15	10	150	DO-214AB (SMC)
S5GB~S5MB ★	5	400-1,000	200	1.1	10	150	DO-214AA (SMB)
S5A~S5M ★	5	50-1,000	100	1.15	10	150	DO-214AB (SMC)
S5AC-K~S5MC-K	5	50-1,000	100	1.15	1	150	DO-214AB (SMC)
6A05G~6A100G ★	6	50-1,000	250	1-1.1	10	150	R-6
S8GC~S8MC ★	8	400-1,000	200	0.985	10	150	DO-214AB (SMC)
S8GC-T~S8MC-T	8	400-1,000	200	1.15	1.15	150	DO-214AB (SMC)
GPA801~GPA807 ★	8	50-1,000	150	1.1	5	150	TO-220AC
S10GC~S10MC ★	10	400-1,000	250	1.1	1	150	DO-214AB (SMC)
GP1001~GP1007 ★	10	50-1,000	125	1.1	5	150	TO-220AB
GPAS1001~GPAS1007	10	50-1,000	150	1.1	5	150	TO-263AB (D <sup>2</sup> -PAK)
S12GC~S12MC ★	12	400-1,000	300	1.1	1	150	DO-214AB (SMC)
S15GC~S15MC ★	15	400-1,000	350	1.1	1	150	DO-214AB (SMC)
GP1601~GP1607 ★	16	50-1,000	150	1.1	10	150	TO-220AB
P2500M ★	25	1,000	650	0.87	5	175	P2500

DO-214AB (SMC)



DO-214AA (SMB)



DO-214AC (SMA)



## DIODES - FAST (t<sub>rr</sub> = 120...500ns)

(T<sub>A</sub>=25°C unless otherwise noted)

★=AEC-Q101 qualified

Part Number	t <sub>rr</sub>	I <sub>F(AV)</sub>	V <sub>RRM</sub>	I <sub>FSM</sub>	V <sub>F</sub>	I <sub>R</sub>	T <sub>J</sub> Max.	Package Description
	(ns)	(A)	(V)	(A)	(V)	(μA)	(°C)	
BYG21M ★	120	1.5	1,000	50	1.6	1	150	DO-214AC (SMA)
TPAR3D~TPAR3J	120	3	200-600	60	1.55	10	175	TO-277A (SMPC)
RS2D-T~RS2M-T	150	2	200-1,000	50	1.3	5	150	DO-214AA (SMB)
RS2DA-T~RS2MA-T	150	2	200-1,000	50	1.3	5	150	DO-214AC (SMA)
RS3DB-T~RS3MB-T	150	3	200-1,000	80	1.3	5	150	DO-214AA (SMB)
RS3MFS ★	160	3	1,000	80	1.3	5	150	SOD-128
1N4933G~1N4937G ★	200	1	50-600	30	1.2	5	150	DO-204AL (DO-41)
1N4933G-K~1N4937G-K	200	1	50-600	30	1.2	5	150	DO-204AL (DO-41)
RS1JLS~RS1MLS ★	300	1.2	600-1,000	50	1.3	5	150	SOD-123HE
BA157G-K~BA159G-K	500	1	400-1,000	30	1.3	5	150	DO-204AL (DO-41)
RS1DLW~RS1MLW ★	150-250	1	200-1,000	30	1.3	5	175	SOD-123W
BA157G~BA159G ★	150-250	1	400-1,000	30	1.2	5	150	DO-204AL (DO-41)
RS1AFL~RS1MFL	150-250	1	50-1,000	30	1.05-1.3	5	150	SOD-123FL
RS2DFL~RS2MFL	150-250	2	200-1,000	40	1.3	5	150	DO-214AA (SMB)
RS2DAF-T~RS1MAF-T	150-250	2	200-1,000	30	1.3	5	150	SMAF
RSFAL~RSFML ★	150-500	0.5	50-1,000	10	1.3	5	150	Sub SMA
RS1AL~RS1ML ★	150-500	0.8	50-1,000	30	1.3	5	150	Sub SMA
RS1D-T~RS1M-T	150-500	1	200-1,000	30	1.3	5	150	DO-214AC (SMA)
RS1DF-T~RS1MF-T	150-500	1	200-1,000	30	1.3	5	150	SMAF
RS1DFS~RS1MFS ★	150-500	1	200-1,000	30	1.3	5	150	SOD-128
FR101G~FR107G ★	150-500	1	50-1,000	30	1.3	5	150	DO-204AL (DO-41)
FR101G-K~FR107G-K	150-500	1	50-1,000	30	1.3	5	150	DO-204AL (DO-41)
RS1A~RS1M ★	150-500	1	50-1,000	30	1.3	5	150	DO-214AC (SMA)
F1T1G~F1T7G ★	150-500	1	50-1,000	30	1.3	5	150	TS-1
F1T1G-K~F1T7G-K	150-500	1	50-1,000	30	1.3	5	150	TS-1
FR151G~FR157G ★	150-500	1.5	50-1,000	50	1.3	5	150	DO-204AC (DO-15)
FR151G-T~FR157G-T	150-500	1.5	50-1,000	50	1.3	5	150	DO-204AC (DO-15)
RS2AA~RS2MA ★	150-500	1.5	50-1,000	50	1.3	5	150	DO-214AC (SMA)
FR201G~FR207G ★	150-500	2	50-1,000	55	1.3	5	150	DO-204AC (DO-15)
FR201G-T~FR207G-T	150-500	2	50-1,000	55	1.3	5	150	DO-204AC (DO-15)
RS2A~RS2M ★	150-500	2	50-1,000	50	1.3	5	150	DO-214AA (SMB)
FR301G~FR307G ★	150-500	3	50-1,000	125	1.3	5	150	DO-201AD
FR301G-K~FR307G-K	150-500	3	50-1,000	125	1.3	5	150	DO-201AD
RS3A-K~RS3M-K	150-500	3	50-1,000	100	1.3	10	150	DO-214AB (SMC)
RS3A~RS3M ★	150-500	3	50-1,000	100	1.3	10	150	DO-214AB (SMC)
RS5D-T~RS5M-T	150-500	5	200-1,000	164	1.3	10	150	DO-214AB (SMC)
RS1JM~RS1KM	250-500	1	600-800	20	1.3	5	150	Micro SMA

Micro SMA



SOD-123W



SOD-128



## DIODES - HIGH EFFICIENT ( $t_{rr} = 50...80ns$ )

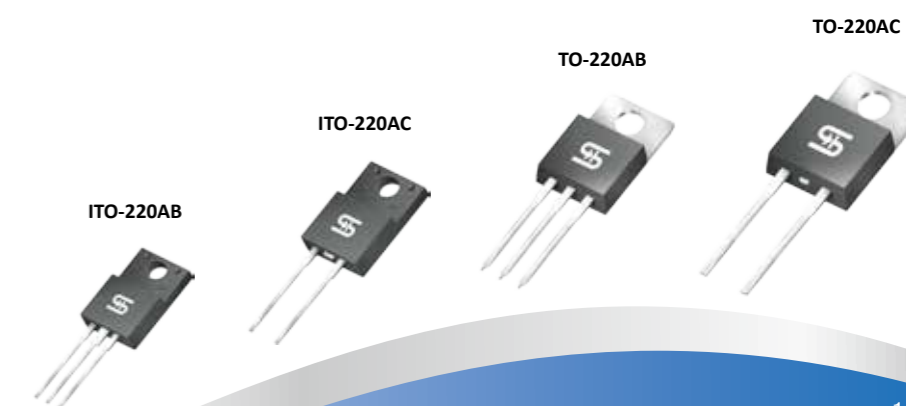
## DIODES - HIGH EFFICIENT ( $t_{rr} = 50...80ns$ )

( $T_A=25^\circ C$  unless otherwise noted)

★=AEC-Q101 qualified

Part Number	$t_{rr}$ (ns)	$I_{F(AV)}$ (A)	$V_{RRM}$ (V)	$I_{FSM}$ (A)	$V_F$ (V)	$I_r$ ( $\mu A$ )	$T_j$ Max. ( $^\circ C$ )	Package Description
MUR160A ★	50	1	600	35	1.25	5	175	DO-204AL (DO-41)
MUR140S~MUR160S ★	50	1	400-600	35	1.25	5	175	DO-214AA (SMB)
MUR260 ★	50	2	600	35	1.35	5	175	DO-204AC (DO-15)
MUR340SB~MUR360SB ★	50	3	400-600	75	1.00-1.25	10-250	175	DO-214AA (SMB)
MUR340S~MUR360S ★	50	3	400-600	75	1.25	10	175	DO-214AB (SMC)
MUR440S~MUR460S ★	50	4	400-600	75	1.25	10	175	DO-214AB (SMC)
MUR440~MUR460 ★	50	4	400-600	125	1.28	10	175	DO-201AD
MUR4L40~MUR4L60 ★	50	4	400-600	125	1.28	10	175	DO-201AD
MUR840~MUR860 ★	50	8	400-600	100	1.3-1.7	5	175	TO-220AC
MURF1640CT~MURF1660CT ★	50	16	400-600	100	1.3-1.5	10	150	ITO-220AB
MUR1640CT~MUR1660CT ★	50	16	400-600	100	1.3-1.5	10	175	TO-220AB
UGA15120 ★	58	15	1,200	200	2.9	5	175	TO-220AC
BYG23M ★	65	1.5	1,000	50	1.7	1	150	DO-214AC (SMA)
TPAU3D~TPAU3J	65	3	200-600	50	1.88	10	175	TO-277A (SMPC)
MURF8L60 ★	65	8	600	100	1.3	5	175	ITO-220AC
MUR8L60 ★	65	8	600	100	1.3	5	175	TO-220AC
BYG20D~BYG20J ★	75	1.5	200-600	30	1.4	1	150	DO-214AC (SMA)
HER157G-K~HER158G-K	75	1.5	800-1,000	50	1.7	5	150	DO-204AC (DO-15)
HER207G-K~HER208G-K	75	2	800-1,000	60	1.7	5	150	DO-204AC (DO-15)
HERF1007GA~HERF1008GA ★	80	10	800-1,000	125	1.7	10	150	ITO-220AB
HSDLW~HSMLW	50-75	0.8	200-1,000	20	1-1.7	1	150	SOD-123W
HS1D-K~HS1M-K	50-75	1	200-1,000	30	1-1.7	5	150	DO-214AC (SMA)
HS1DLW~HS1MLW ★	50-75	1	200-1,000	30	1-1.7	1	175	SOD-123W
HS1DF-T~HS1MF-T	50-75	1	200-1,000	30	1-1.7	5	150	SMAF
HER101G~HER108G ★	50-75	1	50-1,000	30	1-1.7	5	150	DO-204AL (DO-41)
UF1A~UF1M ★	50-75	1	50-1,000	30	1-1.7	5	150	DO-204AL (DO-41)
UF4001~UF4007 ★	50-75	1	50-1,000	30	1-1.7	5	150	DO-204AL (DO-41)
HER101G-K~HER108G-K	50-75	1	50-1,000	30	1-1.7	5	150	DO-204AL (DO-41)
HS1A~HS1M ★	50-75	1	50-1,000	30	1-1.7	5	150	DO-214AC (SMA)
US1A~US1M ★	50-75	1	50-1,000	30	1-1.7	5	150	DO-214AC (SMA)
HS1AFL~HS1MFL	50-75	1	50-1,000	30	0.95-1.7	5	150	SOD-123FL
HS1AL~HS1ML ★	50-75	1	50-1,000	30	0.95-1.7	5	150	Sub SMA
HT11G~HT18G ★	50-75	1	50-1,000	30	1-1.7	5	150	TS-1
HT11G-K~HT18G-K	50-75	1	50-1,000	30	1-1.7	5	150	TS-1
MUR160~MUR190 ★	50-75	1	600-900	35	1.25-1.7	5	175	DO-204AC (DO-15)
HS15DLW~HS15MLW ★	50-75	1.5	200-1,000	40	0.95-1.7	1	150	SOD-123W
HER151G~HER158G ★	50-75	1.5	50-1,000	50	1-1.7	5	150	DO-204AC (DO-15)
HS2AA~HS2MA ★	50-75	1.5	50-1,000	50	1-1.7	5	150	DO-214AC (SMA)
HER151G-T~HER156G-T	50-75	1.5	50-600	50	1-1.7	5	150	DO-204AC (DO-15)
HS2DFL~HS2MFL	50-75	2	200-1,000	40	1-1.7	5	150	SOD-123FL
HS2DAF-T~HS2MAF-T	50-75	2	200-1,000	50	1-1.7	5	150	SMAF
HS2DA-T~HS2MA-T	50-75	2	200-1,000	50	1-1.7	5	150	DO-214AC (SMA)
HS2D-T~HS2M-T	50-75	2	200-1,000	50	1-1.7	5	150	DO-214AA (SMB)
HS2A~HS2M ★	50-75	2	50-1,000	50	1-1.7	5	150	DO-214AA (SMB)
HER201G~HER208G ★	50-75	2	50-1,000	60	1-1.7	5	150	DO-204AC (DO-15)
HER201G-T~HER206G-T	50-75	2	50-600	60	1-1.7	5	150	DO-204AC (DO-15)

Part Number	$t_{rr}$ (ns)	$I_{F(AV)}$ (A)	$V_{RRM}$ (V)	$I_{FSM}$ (A)	$V_F$ (V)	$I_r$ ( $\mu A$ )	$T_j$ Max. ( $^\circ C$ )	Package Description
HS3DB-K~HS3MB-K	50-75	3	200-1,000	80	1-1.7	5	150	DO-214AA (SMB)
HS3D-K~HS3M-K	50-75	3	200-1,000	88	1-1.7	10	150	DO-214AB (SMC)
HER3L03G~HER3L06G ★	50-75	3	200-600	100-125	1.3-1.7	3-10	150	DO-201AD
HS3AB~HS3MB ★	50-75	3	50-1,000	100	1-1.7	10	150	DO-214AA (SMB)
HER301G-K~HER308G-K	50-75	3	50-1,000	125	1-1.7	10	150	DO-201AD
HER301G~HER308G ★	50-75	3	50-1,000	125	1-1.7	10	150	DO-201AD
HS3A~HS3M ★	50-75	3	50-1,000	150	1-1.7	10	150	DO-214AB (SMC)
HS5D-A~HS5M-K	50-75	5	200-1,000	164	1-1.7	10	150	DO-214AB (SMC)
HS5A~HS5M ★	50-75	5	50-1,000	150	1-1.7	10	150	DO-214AB (SMC)
HER601G~HER606G ★	50-75	6	50-600	150	1-1.7	10	150	R-6
HERAF801G~HERAF808G ★	50-80	8	50-1,000	150	1-1.7	10	150	ITO-220AC
HERA801G~HERA808G ★	50-80	8	50-1,000	150	1-1.7	10	150	TO-220AC
HERF1001G~HERF1008G ★	50-80	10	50-1,000	125	1-1.7	10	150	ITO-220AB
HER1001G~HER1008G ★	50-80	10	50-1,000	125	1-1.7	10	150	TO-220AB
HERAF1001G~HERAF1008G ★	50-80	10	50-1,000	150	1-1.7	10	150	ITO-220AC
HERF1601G~HERF1608G ★	50-80	16	50-1,000	125	1-1.7	10	150	ITO-220AB
HER1601G~HER1608G ★	50-80	16	50-1,000	125	1-1.7	10	150	TO-220AB
HER1601PT~HER1608PT ★	50-80	16	50-1,000	200	1-1.7	10	150	TO-247AD (TO-3P)
HERAF1601G~HERAF1606G ★	50-80	16	50-600	250	1-1.7	10	150	ITO-220AC
HER3001PT~HER3006PT ★	50-80	30	50-600	300	1-1.7	10	150	TO-247AD (TO-3P)





## DIODES - SUPER FAST ( $t_{rr} = 35...40ns$ )

## DIODES - SUPER FAST ( $t_{rr} = 35...40ns$ )

( $T_A=25^\circ C$  unless otherwise noted)

★=AEC-Q101 qualified

Part Number	$t_{rr}$	$I_{F(AV)}$	$V_{RRM}$	$I_{FSM}$	$V_F$	$I_R$	$T_J$ Max.	Package Description
	(ns)	(A)	(V)	(A)	(V)	( $\mu A$ )	( $^\circ C$ )	
ESDLW~ES1LW ★	35	0.8	200-600	20	0.95-1.7	1	150	SOD-123W
ES1D-T~ES1J-T	35	1	200-600	30	0.95-1.7	5	150	DO-214AC (SMA)
ES1LD~ES1LJ ★	35	1	200-600	30	0.95-1.7	5	150	DO-214AC (SMA)
ES1DLW~ES1JLW ★	35	1	200-600	30	0.95-1.7	5	175	SOD-123W
ES1DF-T~ES1JF-T	35	1	200-600	30	0.95-1.7	5	150	SMAF
ES1DFL~ES1JFL	35	1	200-600	30	1-1.7	5	150	SOD-123FL
SF11G~SF18G ★	35	1	50-600	30	0.95-1.7	5	150	DO-204AL (DO-41)
SF11G-K~SF18G-K	35	1	50-600	30	0.95-1.7	5	150	DO-204AL (DO-41)
ES1A~ES1J ★	35	1	50-600	30	0.95-1.7	5	150	DO-214AC (SMA)
ES1AL~ES1JL ★	35	1	50-600	30	0.95-1.7	5	150	Sub SMA
SFT11G~SFT18G ★	35	1	50-600	30	0.95-1.7	5	150	TS-1
ES15DLW~ES15JLW ★	35	1.5	200-600	40	0.95-1.7	1	150	SOD-123W
ES2LD~ES2LJ ★	35	2	200-600	50	0.94-1.7	10	150	DO-214AA (SMB)
SF2L4G~SF2L8G ★	35	2	200-600	50	0.95-1.7	1	150	DO-204AC (DO-15)
ES2D-T~ES2J-T	35	2	200-600	50	0.95-1.7	10	150	DO-214AA (SMB)
ES2DAF-T~ES2JF-T	35	2	200-600	50	0.95-1.7	5	150	SMAF
ES2DA-T~ES2JF-T	35	2	200-600	50	0.95-1.7	5	150	DO-214AC (SMA)
ES2DFL~ES2JFL	35	2	200-600	40	1-1.7	5	150	SOD-123FL
SF21G~SF28G ★	35	2	50-600	50	0.95-1.7	5	150	DO-204AC (DO-15)
SF21G-T~SF28G-T	35	2	50-600	50	0.95-1.7	5	150	DO-204AC (DO-15)
ES2A~ES2J ★	35	2	50-600	50	0.95-1.7	10	150	DO-214AA (SMB)
ES2AA~ES2JA ★	35	2	50-600	50	0.95-1.7	10	150	DO-214AC (SMA)
ES3D-A~ES3J-A	35	3	200-600	88	0.95-1.7	5	150	DO-214AB (SMC)
ES3DB-A~ES3JB-A	35	3	200-600	80	0.95-1.7	5	150	DO-214AA (SMB)
31DF4~31DF6	35	3	400-600	45	1.7	20	150	DO-201AD
SF31G~SF38G ★	35	3	50-600	125	0.95-1.7	5	150	DO-201AD
SF31G-A~SF38G-A	35	3	50-600	125	0.95-1.7	5	150	DO-201AD
ES3A~ES3J ★	35	3	50-600	100	0.95-1.7	10	150	DO-214AB (SMC)
ES3AB~ES3JB ★	35	3	50-600	100	1-1.45	10	150	DO-214AA (SMB)
SF41G~SF48G ★	35	4	50-600	125	1-1.7	5	150	DO-201AD
ES5D-T~ES5J-T	35	5	200-600	164	0.95-1.7	10	150	DO-214AB (SMC)
SFAF501G~SFAF508G ★	35	5	50-600	125	0.975-1.7	10	150	ITO-220AC
SFF501G~SFF508G ★	35	5	50-600	70	0.98-1.7	10	150	ITO-220AB
SF61G~SF68G ★	35	6	50-600	150	0.975-1.7	5	150	DO-201AD
UGA8120 ★	35	8	1,200	80	2.8	5	175	TO-220AC
SFAF801G~SFAF808G ★	35	8	50-600	125	0.95-1.7	10	150	ITO-220AC
SFAS801G~SFAS808G ★	35	8	50-600	125	0.95-1.7	10	150	TO-263AB (D <sup>2</sup> -Pak)
SF801G~SF808G ★	35	8	50-600	125	0.975-1.7	10	150	TO-220AB
SFA801G~SFA808G ★	35	8	50-600	125	0.975-1.7	10	150	TO-220AC
SFAS1008G ★	35	10	600	125	1.7	10	150	TO-263AB (D <sup>2</sup> -Pak)
SFF10L04G~SFF10L08G ★	35	10	200-600	80-125	0.98-1.7	10	150	ITO-220AB
SFF10L04GA~SFF10L08GA ★	35	10	200-600	80-125	0.98-1.7	10	150	ITO-220AB
SFS1001G~SFS1008G ★	35	10	50-600	125	0.975-1.7	1	150	TO-263AB (D <sup>2</sup> -Pak)
SFF1001G~SFF1008G ★	35	10	50-600	125	0.975-1.7	10	150	ITO-220AB
SFF1001GA~SFF1008GA ★	35	10	50-600	125	0.975-1.7	10	150	ITO-220AB
SFAF1001G~SFAF1008G ★	35	10	50-600	150	0.975-1.7	10	150	ITO-220AC

Part Number	$t_{rr}$	$I_{F(AV)}$	$V_{RRM}$	$I_{FSM}$	$V_F$	$I_R$	$T_J$ Max.	Package Description
	(ns)	(A)	(V)	(A)	(V)	( $\mu A$ )	( $^\circ C$ )	
SF1001G~SF1008G ★	35	10	50-600	125	0.975-1.7	10	150	TO-220AB
SFA1001G~SFA1008G ★	35	10	50-600	125	0.975-1.7	10	150	TO-220AC
SF1601PT~SF1608PT ★	35	16	50-600	150	0.95-1.7	10	150	TO-247AD (TO-3P)
SFF1601G~SFF1608G ★	35	16	50-600	125	0.975-1.7	10	150	ITO-220AB
SFAF1601G~SFAF1608G ★	35	16	50-600	200	0.975-1.7	10	150	ITO-220AC
SF1601G~SF1608G ★	35	16	50-600	125	0.975-1.7	10	150	TO-220AB
SFS1601G~SFS1608G ★	35	16	50-600	125	0.975-1.7	10	150	TO-263AB (D <sup>2</sup> -Pak)
SFF2004GA~SFF2008GA ★	35	20	200-600	150	0.975-1.7	10	150	ITO-220AB
SF2001G~SF2008G ★	35	20	50-600	150	0.975-1.7	5	150	TO-220AB
SFF2001G~SFF2008G ★	35	20	50-600	150	0.975-1.7	10	150	ITO-220AB
SFAF2001G~SFAF2008G ★	35	20	50-600	200	0.975-1.7	10	150	ITO-220AC
SF2001PT~SF2008PT ★	35	20	50-600	280	1.1-1.9	10	150	TO-247AD (TO-3P)
SF3001PT~SF3008PT ★	35	30	50-600	300	0.95-1.7	10	150	TO-247AD (TO-3P)
UG6005PT ★	35	60	300	300	1.25	5	175	TO-247AD (TO-3P)
UG2JA ★	55	2	600	40	1.3	2	150	DO-214AC (SMA)
TPMR6G~TPMR6J	35-40	6	400-600	100	1.2-1.8	10	175	TO-277A (SMPC)
TPMR10D~TPMR10J	35-40	10	200-600	150	0.95-1.8	5-10	175	TO-277A (SMPC)



## DIODES - ULTRA FAST ( $t_{rr} = 15...30ns$ )

## DIODES - SCHOTTKY

( $T_A=25^\circ\text{C}$  unless otherwise noted)

★=AEC-Q101 qualified

Part Number	$t_{rr}$	$I_{F(AV)}$	$V_{RRM}$	$I_{FSM}$	$V_F$	$I_R$	$T_J$ Max.	Package Description
	(ns)	(A)	(V)	(A)	(V)	( $\mu\text{A}$ )	( $^\circ\text{C}$ )	
UG06A~UG06D ★	15	0.6	50-200	40	0.95	5	150	TS-1
ES1DV ★	15	1	200	30	0.92	5	150	DO-214AC (SMA)
ESH1B~ESH1D ★	15	1	100-200	30	0.9	1	175	DO-214AC (SMA)
UG2D ★	15	2	200	80	0.95	5	150	DO-204AC (DO-15)
UF1DLW~UF1JLW ★	20	1	200-600	30	0.95-1.5	1	150	SOD-123W
ES2DV ★	20	2	200	50	0.9	10	150	DO-214AA (SMB)
ES3DV ★	20	3	200	100	0.9	10	150	DO-214AB (SMC)
UG54GS	20	5	200	65	1.1	10	175	DO-204AC (DO-15)
UG5J ★	20	5	600	65	3	30	150	TO-220AC
UG55J ★	20	5	600	65	2	20	150	TO-263AB (D <sup>2</sup> -PAK)
UG54G~UG58G ★	20	5	200-600	65	1.05-2.1	10-30	150-175	DO-201AD
UGF12J ★	20	12	600	135	2	5	150	ITO-220AC
UG12J ★	20	12	600	135	2	5	150	TO-220AC
ESH2BA~ESH2DA ★	25	1	100-200	50	0.9	1	175	DO-214AC (SMA)
ESH1DFSH ★	25	1	200	60	0.94	5	175	SOD-128
ESH1DM~ESH1JM ★	25	1	200-600	15	1.5	1	150	Micro SMA
MUR105S~MUR120S ★	25	1	50-200	40	0.875	2	175	DO-214AA (SMB)
ESH2B~ESH2D ★	25	2	100-200	60	0.93	2	175	DO-214AA (SMB)
ESH2DFSH ★	25	2	200	80	0.96	5	175	SOD-128
UG305P	25	3	300	50	1.1	10	150	TO-277A (SMPC)
ESH3B~ESH3D ★	25	3	100-200	125	0.9	5	175	DO-214AB (SMC)
ESH3DFSH ★	25	3	200	132	0.95	5	175	SOD-128
MUR305SB~MUR320SB ★	25	3	50-200	75	0.9	5	175	DO-214AA (SMB)
MUR305S~MUR320S ★	25	3	50-200	75	0.875	5	175	DO-214AB (SMC)
MUR420S ★	25	4	200	75	0.875	5	175	DO-214AB (SMC)
MUR420 ★	25	4	200	125	0.89	5	175	DO-201AD
MUR4L20 ★	25	4	200	125	0.89	5	175	DO-201AD
UF5JFC	25	5	600	55	2.8	30	150	ITO-220AC
UGF5J ★	25	5	600	65	3	30	150	ITO-220AC
TPUH6D~TPU6J ★	25	6	200-600	80	1.05-3	10	175	TO-277A (SMPC)
MUR820 ★	25	8	200	100	0.975	5	175	TO-220AC
UGF8J ★	25	8	600	65	2.9	30	150	ITO-220AC
UG8J ★	25	8	600	65	2.9	30	150	TO-220AC
MURF880G	25	8	800	100	2.3	1	175	ITO-220AC
UGF10G~UGF10J ★	25	10	400-600	90	1.25-2	5	150-175	ITO-220AC
UG10G~UG10J ★	25	10	400-600	90	1.25-2	10-30	150-175	TO-220AC
UGF12JD ★	25	12	600	100	3.1	0.5	175	ITO-220AC
MURF1620CT ★	25	16	200	100	0.975	5	150	ITO-220AB
MUR1620CT ★	25	16	200	100	0.975	5	175	TO-220AB
UGF1606G ★	25	16	400	90	1.25	10	175	ITO-220AB
UG2004PT ★	25	20	200	200	0.93	200	175	TO-247AD (TO-3P)
UGF8JD ★	30	8	600	100	2.3	0.5	150	ITO-220AC
UGF1004G~UGF1008G ★	20-25	10	200-600	70	0.95-1.7	10	150-175	ITO-220AB
UGF1004GA~UGF1008GA ★	20-25	10	200-600	70	0.95-1.7	10	150-175	ITO-220AB
UGF2004G~UGF2008G ★	20-25	20	200-600	150	0.95-1.7	5	150-175	ITO-220AB
UG1004G~UG1008G ★	22-30	10	200-600	10	0.95-1.7	10	150-175	TO-220AB

( $T_A=25^\circ\text{C}$  unless otherwise noted)

★=AEC-Q101 qualified

Part Number	$I_{F(AV)}$	$V_{RRM}$	$I_{FSM}$	$V_F$	$I_R$	$T_J$ Max.	Package Description
	(A)	(V)	(A)	(V)	( $\mu\text{A}$ )	( $^\circ\text{C}$ )	
SD101AW~SD101CW	0.015	40-60	0.05-2	0.39-0.41	0.2	125	SOD-123
RB751V-40	0.03	40	0.2	0.37	0.5	125	SOD-323
RB751V-40WS	0.03	40	0.2	0.37	0.5	125	SOD-323F
TSS0340U	0.03	45	0.5	0.37	1	125	0603
TSS0340L	0.03	45	0.5	0.37	0.5	125	1005
RB706F-40	0.03	45	0.2	0.37	1	125	SOT-323
TSS70U	0.07	70	0.1	1	0.1	125	0603
TSS70L	0.07	70	0.1	1	0.1	125	1005
BAS70~BAS70-06	0.07	70	0.1	0.41	0.1	150	SOT-23
RB520G-30	0.10	30	0.5	0.41	0.1	125	SOD-723F
RB500V-40	0.10	45	1	0.45	1	125	SOD-323F
TSS42U~TSS43U	0.20	30	4	1	0.5	125	0603
TSS54U	0.20	30	0.6	1	2	125	0603
TSS42L~TSS43L	0.20	30	4	4	0.5	125	1005
TSS54L	0.20	30	0.6	1	0.5	125	1005
BAT42W~BAT43W	0.20	30	4	1	0.5	125	SOD-123
BAT42WS~BAT43WS	0.20	30	4	1	0.5	125	SOD-323F
B0530WS	0.20	30	5	1	0.5	125	SOD-323F
BAT43X	0.20	30	4	1	0.5	125	SOD-523F
RB520S-30	0.20	30	1	0.6	1	125	SOD-523F
BAT54~BAT54S	0.20	30	0.6	1	2	125	SOT-23
BAT54W/AW/CW/SW	0.20	30	0.6	1	2	150	SOT-323
BAT54T/AD/CD/SD/BR	0.20	30	0.6	1	2	125	SOT-363
BAT54T/AD/CD/SD/BR-G	0.20	30	0.6	1	2	150	SOT-363
TSS0230U	0.20	35	1	0.6	1	125	0603
TSS0230LU	0.20	35	1	0.5	30	125	0603-B
TSS40U	0.20	40	0.6	1	0.2	125	0603
TSS40L	0.20	40	0.6	0.38	0.2	125	1005
BAS40~BAS40-06	0.20	40	0.6	0.38	0.2	125	SOT-23
RB495D	0.35	40	1.5	0.55	70	125	SOT-23
SD103AW~SD103CW	0.35	20-40	1.5	0.6	5	125	SOD-123
RB551V-40	0.50	40	2	0.47	100	150	SOD-323
SR002~SR010 ★	0.50	20-100	30	0.55-0.85	100-500	150	DO-204AL (DO-41)
B0520LW~B0540W	0.50	20-40	5.5	0.39-0.51	20-250	125	SOD-123
B0520LWF~B0540WF	0.50	20-40	5.5	0.39-0.51	20-250	125-150	SOD-123F
SKL13B ★	1.00	30	50	0.39	200	150	DO-214AA (SMB)
SS120 ★	1.00	200	40	0.95	100	150	DO-214AC (SMA)
SR102~SR115 ★	1.00	20-150	30	0.55-0.95	100-500	125-150	DO-204AL (DO-41)
SK12B~SK115B ★	1.00	20-150	30	0.5-0.95	500	125-150	DO-214AA (SMB)
SS12~SS115 ★	1.00	20-150	40	0.5-0.95	100-200	125-150	DO-214AC (SMA)
SS12L5~SS115L5 ★	1.00	20-150	30	0.45-0.90	50-400	125-150	SOD-123HE
SS12L~SS115L ★	1.00	20-150	30	0.45-0.90	50-400	125-150	Sub SMA
SRT12~SRT115 ★	1.00	20-150	25	0.45-0.90	50-400	125-150	TS-1
1N5817~1N5819 ★	1.00	20-40	30	0.45-0.60	1,000	150	DO-204AL (DO-41)
SSL12~SSL14 ★	1.00	20-40	50	0.39	200	125	DO-214AC (SMA)
LL5817~LL5819	1.00	20-40	25	0.45-0.60	500	125	MELF

## DIODES - SCHOTTKY

Part Number	$I_{F(AV)}$	$V_{RRM}$	$I_{FSM}$	$V_F$	$I_R$	$T_J$ Max.	Package Description
	(A)	(V)	(A)	(V)	( $\mu$ A)	( $^{\circ}$ C)	
LSR102~LSR106	1.00	20-60	25	0.55-0.70	1,000	125-150	MELF
SS13M~SS16M ★	1.00	30-60	25	0.55-0.68	50	150	Micro SMA
SS14LW~SS115LW ★	1.00	40-150	30	0.55-0.95	10-100	150	SOD-123W
SS1H4LS~SS1H20LS ★	1.00	40-200	30	0.65-0.85	1	150	SOD-123HE
SS1H4LW~SS1H20LW ★	1.00	40-200	30	0.65-0.85	0.5	175	SOD-123W
SSH210 ★	2.00	100	75	0.79	1	175	DO-214AA (SMB)
SS22~SS215 ★	2.00	20-150	50	0.5-0.95	100-400	125-150	DO-214AA (SMB)
SK22A~SK215A ★	2.00	20-150	50	0.5-0.95	100-500	125-150	DO-214AC (SMA)
SS22L~SS215L ★	2.00	20-150	50	0.5-0.85	100-400	125-150	Sub SMA
SR202~SR220 ★	2.00	20-200	50	0.55-0.95	100-500	125-150	DO-204AC (DO-15)
SSL22~SSL24 ★	2.00	20-40	80	0.41	400	125	DO-214AA (SMB)
SS22M~SS24M ★	2.00	20-40	25	0.60	150	150	Micro SMA
SK24A-T~SK210A-T	2.00	40-100	50	0.5-0.85	100-500	125-150	DO-214AC (SMA)
SS24LW~SS220LW ★	2.00	40-200	50	0.55-0.95	10-200	150	SOD-123W
1N5820~1N5822 ★	3.00	20	80	0.48-0.53	500	150	DO-201AD
SSL32~SSL34 ★	3.00	20	100	0.41	200-500	150	DO-214AB (SMC)
SR302~SR320 ★	3.00	20-200	80	0.55-0.95	100-500	150	DO-201AD
SK32B~SK320B ★	3.00	20-200	70	0.5-0.95	100-500	125-150	DO-214AA (SMB)
SS32~SS320 ★	3.00	20-200	70-100	0.5-0.95	100-500	150	DO-214AB (SMC)
SK32A~SK320A ★	3.00	20-200	70	0.55-0.95	100-500	150	DO-214AC (SMA)
SK34A-T~SK310A-T	3.00	40-100	70	0.55-0.85	100-500	150	DO-214AC (SMA)
SS34L~SS310L ★	3.00	40-100	80	0.5-0.85	100-500	150	Sub SMA
SS34LW~SS320LW ★	3.00	40-200	80	0.55-0.95	10-200	150	SOD-123W
SSB44 ★	4.00	40	100	0.5	200	150	DO-214AA (SMB)
MBRF5100~MBRF5200 ★	5.00	100-200	120	0.9-1.02	100	150	ITO-220AC
SK52B~SK515B ★	5.00	20-150	120	0.55-0.95	100-500	150	DO-214AA (SMB)
SRAF520~SRAF5150 ★	5.00	20-150	120	0.55-0.95	100-500	125-150	ITO-220AC
SR502~SR520 ★	5.00	20-200	120	0.55-1.05	100-500	150	DO-201AD
SK52C~SK520C ★	5.00	20-200	120	0.55-0.95	300-500	150	DO-214AB (SMC)
MBRF735~MBRF7150 ★	7.50	35-150	150	0.75-1.02	100	150	ITO-220AC
MBR735~MBR7150 ★	7.50	35-150	150	0.75-0.92	100	150	TO-220AC
SK82C~SK810C ★	8.00	20-100	150	0.55-0.90	500	125-150	DO-214AB (SMC)
SRAF820~SRAF8150 ★	8.00	20-150	150	0.55-0.95	100-500	150	ITO-220AC
SRA820~SRA8150 ★	8.00	20-150	150	0.55-0.95	100-500	150	TO-220AC
SRAS820~SRAS8150 ★	8.00	20-150	150	0.55-0.95	100	150	TO-263AB (D <sup>2</sup> -Pak)
SR802~SR820 ★	8.00	20-200	150	0.55-1.02	100-500	150	DO-201AD
MBRF835CT~MBRF8150CT	8.00	35-150	150	0.55-0.95	100	150	ITO-220AB
MBRF10L100CT ★	10.00	100	120	0.76	20	150	ITO-220AB
MBR10L100CT ★	10.00	100	120	0.76	20	150	TO-220AB
MBR10H100CT~MBR10H200CT ★	10.00	100~200	120	0.85-0.88	5	175	TO-220AB
MBRF10H100CT~MBRF10H200CT ★	10.00	100-200	120	0.85-0.88	5	175	ITO-220AB
MBRS10H100CT~MBRS10H200CT ★	10.00	100-200	120	0.85-0.88	5	175	TO-263AB (D <sup>2</sup> -Pak)
SRAF1020~SRAF10150 ★	10.00	20-150	200	0.55-0.95	100-500	150	ITO-220AC
SR1020~SR10150 ★	10.00	20-150	120	0.55-0.95	100-500	150	TO-220AB
SRA1020~SRA10150 ★	10.00	20-150	170	0.55-0.95	100-500	150	TO-220AC
SRS1020~SRS10150 ★	10.00	20-150	120	0.55-1.00	100-500	150	TO-263AB (D <sup>2</sup> -Pak)

## DIODES - SCHOTTKY

Part Number	$I_{F(AV)}$	$V_{RRM}$	$I_{FSM}$	$V_F$	$I_R$	$T_J$ Max.	Package Description
	(A)	(V)	(A)	(V)	( $\mu$ A)	( $^{\circ}$ C)	
SRF1020~SRF10200 ★	10.00	20-200	120	0.55-1.00	100-500	125-150	ITO-220AB
MBRS1035~MBRS10150 ★	10.00	35-150	120	0.8-1.05	100	175	TO-263AB (D <sup>2</sup> -Pak)
MBRS1035CT~MBRS10150CT ★	10.00	35-150	120	0.7-0.88	100	150	TO-263AB (D <sup>2</sup> -Pak)
MBRF1035CT~MBRF10200CT ★	10.00	35-200	120	0.7-0.88	100	150	ITO-220AB
MBRF1035~MBRF10200 ★	10.00	35-200	150	0.7-1.05	100	150	ITO-220AC
MBR1035CT~MBR10200CT ★	10.00	35-200	120	0.7-0.88	100	150	TO-220AB
MBR1035~MBR10200 ★	10.00	35-200	150	0.7-1.05	100	150	TO-220AC
MBRS1045CT-Y~MBRS10150CT-Y	10.00	45-150	120	0.7-0.88	100	150	TO-263AB (D <sup>2</sup> -Pak)
MBRF1045CT-Y~MBRF10200CT-Y	10.00	45-200	120	0.7-0.88	100	150	ITO-220AB
MBR1045CT-Y~MBR10200CT-Y	10.00	45-200	120	0.7-0.88	100	150	TO-220AB
SR1202~SR1204 ★	12.00	20-40	280-320	0.55	500	150	DO-201AD
SK12H45~SK12H60 ★	12.00	45-60	320	0.55-0.70	150	175	DO-201AD
SK15H45 ★	15.00	45	340	0.56	150	175	R-6
MBRS15H45CT ★	15.00	45	150	0.68	30	175	TO-263AB (D <sup>2</sup> -Pak)
SR1502~SR1504 ★	15.00	20-40	300-340	0.55	500	150	R-6
MBRF1535CT~MBRF15150CT ★	15.00	35-150	150	0.75-0.95	100-500	150	ITO-220AB
MBR1535CT~MBR15150CT ★	15.00	35-150	150	0.57-1.05	100	150	TO-220AB
MBRS1535CT~MBRS15150CT ★	15.00	35-150	150	0.75-0.95	100	150	TO-263AB (D <sup>2</sup> -Pak)
MBRF1545CT-Y~MBRF15200CT-Y	15.00	45-200	150	0.75-0.95	100-500	150	ITO-220AB
MBR1545CT-Y~MBR15200CT-Y	15.00	45-200	150	0.57-1.05	100	150	TO-220AB
MBRS1545CT-Y~MBRS15200CT-Y	15.00	45-200	150	0.75-0.95	100	150	TO-263AB (D <sup>2</sup> -Pak)
MBRF16H45	16.00	45	275	0.63	500	150	ITO-220AC
SRAF1620~SRAF16100 ★	16.00	20-100	275	0.55-0.92	100-500	125-150	ITO-220AC
SRA1620~SRA16100 ★	16.00	20-100	200	0.55-0.92	100-500	125-150	TO-220AC
SRS1620~SRS16100 ★	16.00	20-100	150	0.55-0.90	100-500	125-150	TO-263AB (D <sup>2</sup> -Pak)
SRF1620~SRF16150 ★	16.00	20-150	200	0.55-1.00	100-500	125-150	ITO-220AB
SR1620~SR16150 ★	16.00	20-150	170	0.55-1.05	100-500	125-150	TO-220AB
SR1620PT~SR16150PT ★	16.00	20-150	200	0.55-1.00	100-500	125-150	TO-247AD (TO-3P)
MBRF1635~MBRF16150 ★	16.00	35-150	150	0.63-0.95	100-500	150	ITO-220AC
MBR1635~MBR16150 ★	16.00	35-150	150	0.63-0.95	100-500	150	TO-220AC
MBRS1635~MBRS16150 ★	16.00	35-150	150	0.63-0.95	100-500	150	TO-263AB (D <sup>2</sup> -Pak)
SK20H45 ★	20.00	45	275	0.55	500	175	R-6
MBR20100CT	20.00	100	150	0.85	100	150	I <sup>2</sup> Pak
MBRF20L100CT~MBRF20L120CT ★	20.00	100-120	150	0.75-0.83	20	150	ITO-220AB
MBR20L100CT~MBR20L120CT ★	20.00	100-120	150	0.75-0.83	20	150	TO-220AB
MBRF20H100CT~MBRF20H200CT ★	20.00	100-200	150	0.85-0.88	5	175	ITO-220AB
MBR20H100CT~MBR20H200CT ★	20.00	100-200	150	0.85-0.88	5	175	TO-220AB
MBRS20H100CT~MBRS20H200CT ★	20.00	100-200	150	0.85-0.88	5	175	TO-263AB (D <sup>2</sup> -Pak)
SRF2020~SRF20150 ★	20.00	20-150	200	0.55-1.02	100-500	125-150	ITO-220AB
SR2020~SR20150 ★	20.00	20-150	200	0.55-1.02	100-500	125-150	TO-220AB
SRA2020~SRA20150 ★	20.00	20-150	300	0.55-1.02	100-500	150	TO-220AC
SR2020PT~SR20150PT ★	20.00	20-150	200	0.55-1.02	100-500	125-150	TO-247AD (TO-3P)
SRAS2020~SRAS20150 ★	20.00	20-150	330	0.57-1.02	100-500	150	TO-263AB (D <sup>2</sup> -Pak)
SRS2020~SRS20150 ★	20.00	20-150	200	0.55-1.02	100-500	125-150	TO-263AB (D <sup>2</sup> -Pak)
MBRF2035~MBRF20100 ★	20.00	35-100	150	0.75-0.95	100-200	150	ITO-220AC
MBRS2035CT~MBRS20150CT ★	20.00	35-150	150	0.8-0.95	100	150	TO-263AB (D <sup>2</sup> -Pak)

## DIODES - SCHOTTKY

Part Number	$I_{F(AV)}$	$V_{RRM}$	$I_{FSM}$	$V_F$	$I_R$	$T_J$ Max.	Package Description
	(A)	(V)	(A)	(V)	( $\mu$ A)	( $^{\circ}$ C)	
MBRF2035CT~MBRF20200CT ★	20.00	35-200	150	0.8-0.95	100	150	ITO-220AB
MBR2035CT~MBR20200CT ★	20.00	35-200	150	0.8-0.99	100	150	TO-220AB
MBR2035CT-Y~MBR20200CT-Y	20.00	35-200	150	0.8-0.99	100	150	TO-220AB
MBR2035PT~MBR20200PT ★	20.00	35-200	150	0.8-0.95	100	150	TO-247AD (TO-3P)
MBRF2045CT-Y~MBRF20200CT-Y	20.00	45-200	150	0.8-0.95	100	150	ITO-220AB
MBRS2045CT-Y~MBRS20200CT-Y	20.00	45-200	150	0.7-0.99	100	150	TO-263AB (D <sup>2</sup> -Pak)
MBRS25H45CT ★	25.00	45	150	0.70	200	175	TO-263AB (D <sup>2</sup> -Pak)
MBRF2535CT~MBRF25150CT ★	25.00	35-150	200	0.75-0.95	100-2,000	150	ITO-220AB
MBR2535CT~MBR25150CT ★	25.00	35-150	200	0.75-0.95	100-200	150	TO-220AB
MBRS2535CT~MBRS25150CT ★	25.00	35-150	200	0.65-0.95	100-200	150	TO-263AB (D <sup>2</sup> -Pak)
MBRF2545CT-Y~MBRF25150CT-Y	25.00	45-150	200	0.82-0.95	100-2,000	150	ITO-220AB
MBR2545CT-Y~MBR25150CT-Y	25.00	45-150	200	0.82-0.95	100-200	150	TO-220AB
MBRF30L45CT ★	30.00	45	220	0.55	400	150	ITO-220AB
MBRS3045CT ★	30.00	45	220	0.70	200	150	TO-263AB (D <sup>2</sup> -Pak)
MBRS30H45CT ★	30.00	45	220	0.70	200	175	TO-263AB (D <sup>2</sup> -Pak)
MBRF3080CT ★	30.00	80	200	0.84	200	150	ITO-220AB
MBRI30100CT	30.00	100	200	0.84	200	150	I <sup>2</sup> Pak
MBR30H100CT ★	30.00	100	150	0.85	10	175	TO-220AB
MBRF30L120CT ★	30.00	120	200	0.88	20,000	150	ITO-220AB
MBR30L120CT ★	30.00	120	200	0.88	20	150	TO-220AB
SR3020PT~SR30150PT ★	30.00	20-150	300	0.55-1.00	500-1,000	150	TO-247AD (TO-3P)
MBR3035CT~MBR30150CT ★	30.00	35-150	200	0.7-0.95	100-200	150	TO-220AB
MBRF3035CT~MBRF30200CT ★	30.00	35-200	200	0.7-0.95	200	150	ITO-220AB
MBR3035PT~MBR30200PT ★	30.00	35-200	200	0.75-1.05	100-1,000	150	TO-247AD (TO-3P)
MBR30L45CT~MBR30L100CT ★	30.00	45-100	220	0.55-0.77	400-500	150	TO-220AB
MBR3045CT-Y~MBR30150CT-Y	30.00	45-150	200	0.7-0.95	100-200	150	TO-220AB
MBRF3045CT-Y~MBRF30200CT-Y	30.00	45-200	200	0.7-0.95	200-500	150	ITO-220AB
MBRS4060CT ★	40.00	60	300	0.80	100	175	TO-263AB (D <sup>2</sup> -Pak)
SR4020PT~SR40100PT ★	40.00	20-100	400	0.55-0.90	500-1,000	125-150	TO-247AD (TO-3P)
MBR4035PT~MER40200PT ★	40.00	35-200	330	0.75-0.90	100-1000	150	TO-247AD (TO-3P)
MBRS6040CT ★	60.00	40	250	0.75	100	150	TO-263AB (D <sup>2</sup> -PAK)
MBR6035PT~MBR60100PT ★	60.00	35-100	420	0.7-0.84	1,000	150	TO-247AD (TO-3P)

SMPC4.6U



TO-277A (SMPC)



SMPC4.6



## DIODES - TRENCH SCHOTTKY

( $T_A=25^{\circ}$ C unless otherwise noted)

★=AEC-Q101 qualified

Part Number	$I_{F(AV)}$	$V_{RRM}$	$I_{FSM}$	$V_F$	$I_R$	$T_J$ Max.	Package Description
	(A)	(V)	(A)	(V)	( $\mu$ A)	( $^{\circ}$ C)	
TSS83L45	3	45	30	0.56	500	150	SOD-128
TSP3H150S	3	150	90	0.86	10	150	TO-277A (SMPC)
TSSA3U45~TSSA3U60 ★	3	45-60	50	0.48-0.54	500	150	DO-214AC (SMA)
TSSW3U45~TSSW3U60 ★	3	45-60	50	0.47-0.58	1,000	150	SOD-123W
TSSE3H45~TSSE3H60 ★	3	45-60	60	0.57-0.60	100	150	SOD-123HE
TSSE3U45~TSSE3U60 ★	3	45-60	80	0.47-0.58	1,000	150	SOD-123HE
TSPB5H100S~TSPB5H150S	5	100-150	100	0.66-0.84	100-150	150	SMPC4.0
TSUP5M45SH~TSUP5M60SH ★	5	45-60	110	0.6-0.64	150-200	175	SMPC4.6U
TSPB10U45S	10	45	275	0.46	300	150	SMPC4.0
TSF10U60C	10	60	150	0.48	500	150	ITO-220AB
TSI10L200CW	10	200	100	0.9	50	150	I <sup>2</sup> PAK
TSD10L200CW	10	200	100	0.9	50	150	TO-263AB (D <sup>2</sup> -PAK)
TSI10H100CW~TSI10H200CW	10	100-200	100	0.7-0.91	100	150	I <sup>2</sup> PAK
TSF10L100CW~TSF10L200CW	10	100-200	100	0.8-0.9	50	150	ITO-220AB
TST10H100CW~TST10H200CW	10	100-200	100	0.7-0.91	100	150	TO-220AB
TSD10H100CW~TSD10H200CW	10	100-200	100	0.7-0.91	100	150	TO-263AB (D <sup>2</sup> -PAK)
TSP10U45S~TSP10U120S	10	45-120	140-280	0.46-0.78	150-300	150	TO-277A (SMPC)
TSF10H45C~TSF10H200C	10	45-200	100	0.58-0.62	500	150	ITO-220AB
TSSD10L45SW~TSSD10L200SW	10	45-200	120	0.55-0.66	50	150	TO-252 (D-PAK)
TSP10H45S~TSP10H200S	10	45-200	180	0.57-0.64	150	150	TO-277A (SMPC)
TSUP10M45SH~TSUP10M60SH ★	10	45-60	220	0.6-0.64	200-250	175	SMPC4.6U
TST10L60W~TST10L200CW	10	60-200	100	0.57-0.64	150	150	TO-220AB
TSP12U120S	12	120	150	0.78	500	150	TO-277A (SMPC)
TSF15L60CW	15	60	80	0.7	100	150	ITO-220AB
TSP15H120S~TSP15H200S	15	120-200	250	0.75-0.89	150-250	150	TO-277A (SMPC)
TSPB15U45S~TSPB15U100S	15	45-100	150-200	0.56-0.7	250-2,000	150	SMPC4.0
TSUP15M45SH~TSUP15M60SH ★	15	45-60	290	0.6-0.64	350-450	175	SMPC4.6U
TSP15U50~TSP15U120S	15	50-100	150-280	0.56-0.7	250-2,000	150	TO-277A (SMPC)
TSN520M60	20	60	200	0.58	500	150	PDFN56
TSP20U60S	20	60	280	0.58	500	150	TO-277A (SMPC)
TSPB20U80S	20	80	200	0.64	300	150	SMPC4.0
TSF20H100C-S~TSF20H150C-S	20	100-150	120	0.79-0.92	100-150	150	ITO-220AB
TSF20H100C~TSF20H200C	20	100-200	120	0.81-0.93	100-250	150	ITO-220AB
TSI20H100CW~TSI20H200CW	20	100-200	150	0.79-0.93	100-200	150	I <sup>2</sup> PAK
TSD20H100CW~TSD20H200CW	20	100-200	150	0.57-0.77	100-200	150	TO-263AB (D <sup>2</sup> -PAK)
TST20H100CW~TST20H300CW	20	100-300	150-180	0.79-0.98	100-200	150	TO-220AB
TSF20U45C~TSF20U100C	20	45-100	100-180	0.53-0.67	300-500	150	ITO-220AB
TST20U45C~TST20U100C	20	45-100	120-150	0.53-0.79	300-500	150	TO-220AB
TSSD20L45SW~TSSD20L200SW	20	45-200	200	0.65-1.1	20-100	150	TO-252 (D-PAK)
TSF20L45C~TSF20L200C	20	45-200	120-150	0.53-0.79	300-500	150	ITO-220AB
TST20U45CW~TST20U60CW	20	45-60	200	0.53-0.79	300-500	150	TO-220AB
TST20L60CW~TST20L200CW	20	60-200	100	0.65-0.99	100-500	150	TO-220AB
TSN525M60	25	60	220	0.63	500	150	PDFN56
TST30L45C	30	45	120	0.67	650	150	TO-220AB
TSI30H100CW~TSI30H200CW	30	100-200	200	0.78-0.92	150-250	150	I <sup>2</sup> PAK
TST30H100CW~TST30H200CW	30	100-200	200	0.78-0.92	150-250	150	TO-220AB

## DIODES - TRENCH SCHOTTKY

Part Number	$I_{F(AV)}$ (A)	$V_{RRM}$ (V)	$I_{FSM}$ (A)	$V_F$ (V)	$I_R$ ( $\mu$ A)	$T_J$ Max. ( $^{\circ}$ C)	Package Description
TSD30H100CW~TSD30H200CW	30	100-200	200	0.78-0.92	150-250	150	TO-263AB (D <sup>2</sup> -PAK)
TSF30U45C~TSF30U120C	30	45-120	160-250	0.50-0.74	500	150	ITO-220AB
TSF30H45C~TSF30H200C	30	45-200	150-170	0.61-0.92	150-500	150	ITO-220AB
TSF30L45C~TSF30L200C	30	45-200	160-180	0.55-0.96	100-500	150	ITO-220AB
TST30L45CW~TST30L200CW	30	45-200	180-200	0.55-0.96	100-500	150	TO-220AB
TST30U45C~TST30U60C	30	45-60	250	0.54-0.57	500	150	TO-220AB
TST30U45CW~TST30U60CW	30	45-60	250	0.55-0.58	500	150	TO-220AB
TSF40U100C	40	100	250	0.7	500	150	ITO-220AB
TSF40H100C~TSF40H200C	40	100-200	250	0.72-0.93	150-500	150	ITO-220AB
TSF40L45C~TSF40L200C	40	45-200	200-250	0.6-0.98	100-500	150	ITO-220AB
TST40L45CW~TST40L200CW	40	45-200	220-250	0.59-0.63	100-500	150	TO-220AB

## DIODES - ESD CAPABILITY

( $T_A=25^{\circ}$ C unless otherwise noted)

★=AEC-Q101 qualified

Part Number	$I_F$ (AV)	$V_{RRM}$	$I_{FSM}$	$V_F$	ISO 10605, C = 330 pF, R = 330 $\Omega$ (Typ.)	$T_J$ Max.	Package Description
TSDGLW ★	1	400	40	1	25	175	SOD-123W
TSD1G ★	1	400	40	1.25	25	175	DO-214AC (SMA)
TSD2G ★	2	400	50	1	30	175	DO-214AA (SMB)
TSD3G ★	3	400	100	1	30	175	DO-214AB (SMC)



## DIODES - SWITCHING (SMALL SIGNAL 150...500mW)

( $T_A=25^{\circ}$ C unless otherwise noted)

Part Number	$V_{RRM}$ (V)	$V_R$ (V)	$P_D$ (mW)	$I_{F(AV)}$ (A)	$I_{FSM}$ (A)	Pulse Width (ms)	$V_F$ @ $I_F$ (V)	(mA)	$I_R$ @ $V_R$ ( $\mu$ A)	(V)	$C_j$ (Typ.) @ $V_R$ @ f (pF)	(V)	MHz	$t_{tr}$ (ns)	$T_J$ Max. ( $^{\circ}$ C)	Package Description
BAW56~BAV99	70	70	225	0.200	2.00	0.001	1.000	50	2.500	70	2.0	0.0	1.0	6	150	SOT-23
BAV99L	70	70	225	0.200	0.50	1000	1.000	50	2.500	70	1.5	0.0	1.0	6	150	SOT-23
TS4148 RWG	75	75	350	0.150	4.00	0.001	1.000	50	2.500	75	4.0	0.0	1.0	4	125	1005
TS4148C	75	75	200	0.150	0.80	8.3	1.000	10	5.000	75	4.0	0.0	1.0	4	150	0603 (Ceramics)
TS4148 RYG	75	75	400	0.150	2.00	8.3	1.000	100	5.000	75	4.0	0.0	1.0	4	150	0805 (Ceramics)
TS4148 RXG	75	75	500	0.150	2.00	8.3	1.000	100	5.000	75	4.0	0.0	1.0	4	150	1206 (Ceramics)
1N4148WS~1N9148BWS	75	75	200	0.100	-	-	0.72-1.00	10-100	5.000	75	4.0	0.0	1.0	4	150	SOD-323F
BAS16	75	75	225	0.150	2.00	0.001	0.715	1	1.000	75	2.0	0.0	1.0	4	150	SOT-23
BAS116	75	75	225	0.200	0.50	0.001	0.900	1	0.005	75	2.0	0.0	1.0	3	150	SOT-23
LL4148/LL4448	75	75-100	500	0.150	2.00	8.3	0.72-1	5-50	5.000	20	4.0	0.0	1.0	4	175	MMELF
LS4148	75	75-100	500	0.450	2.00	-	1.000	10	5.000	75	4.0	0.0	1.0	4	175	QMELF
1N4148W~1N9148BW	75	75-100	400	0.150	2.00	0.001	0.72-1	5-100	5.000	75	4.0	0.0	1.0	4	150	SOD-123F
MMBD4148/CA/CC/SE	75	75-100	350	0.200	2.00	0.001	1.000	10	5.000	75	4.0	0.0	1.0	4	150	SOT-23
MBD4448HAQW/HADW/ HCDW/HSDW/HTW	80	80	200	0.500	1.50	0.001	0.715	5	0.100	70	3.5	6.0	1.0	4	150	SOT-363
BAV99W	85	75	200	0.150	4.00	0.001	0.715	1	1.000	75	1.5	0.0	1.0	4	150	SOT-323
BAV99S	85	75	200	0.150	4.50	0.001	0.715	1	1.000	75	1.5	0.0	1.0	6	150	SOT-363
1SS133M	90	80	300	0.150	2.00	-	1.200	100	0.500	80	4.0	0.0	1.0	4	200	DO-34
1SS355	90	80	200	0.250	0.50	-	1.200	100	0.100	80	4.0	0.5	1.0	4	150	SOD-323F
1N4148WS-G	100	75	200	0.150	2.00	0.001	1.000	50	1.000	75	2.0	0.0	1.0	4	150	SOD-323
TS4448 RG	100	80	150	0.125	1.00	8.3	0.720	5	0.025	20	9.0	0.5	1.0	9	125	0603
TS4448 RW	100	80	200	0.125	1.00	8.3	0.720	5	0.025	20	9.0	0.0	1.0	9	125	1005
1N4148W-G	100	100	350	0.150	2.00	1	0.715	1	0.025	20	2.0	0.0	1.0	4	150	SOD-123
BAS316	100	100	200	0.250	4.00	0.001	0.715-1.25	1-150	0.030	25	1.5	0.0	1.0	4	150	SOD-323
BAS316WS	100	100	200	0.250	4.00	0.001	0.715-1.25	1-150	0.030	20	1.5	0.0	1.0	4	150	SOD-323F
1SS400	100	100	200	0.200	0.50	-	1.200	100	0.100	80	4.0	0.5	1.0	4	150	SOD-523F
1N4148~1N9148	100	75-100	500	0.150	2.00	0.001	0.72-1	5-10	5.000	75	4.0	0.0	1.0	4	150	DO-35
BAS21~BAS21S	250	250	225	0.200	1.00	8.3	1.000	100	0.100	200	5.0	1.0	1.0	50	150	SOT-23
BAV101~BAV103	250	100-200	500	0.200	4.00	0.001	1.000	100	0.100	100-200	4.0	0.0	1.0	50	200	MMELF
BAV19W~BAV21W	250	120-250	410	0.200	4.00	0.001	1-1.25	100-200	0.100	100-200	5.0	0.0	1.0	50	150	SOD-123F
MMBD3004~MMBD3004SE	350	350	350	0.225	4.00	0.001	1-1.25	100-200	0.1-100	240	5.0	1.0	1.0	50	150	SOT-23
BAS19~BAS20	100-150	100-150	250	0.200	-	-	1-1.25	100-200	0.100	100-150	5.0	0.0	1.0	50	150	SOT-23
BAS19W~BAS21W	100-250	100-250	200	0.200	-	-	1-1.25	30-100	0.100	100-200	5.0	0.0	1.0	50	150	SOT-323
BAV19W-G~BAV21W-G	120-250	100-200	500	0.200	2.50	1	1-1.25	100-200	0.100	100-200	5.0	0.0	1.0	50	150	SOD-123
BAV19~BAV21	120-250	120-250	500	0.200	4.00	0.001	1-1.25	100-200	0.100	120-250	5.0	0.0	1.0	50	175	DO-35
BAV19WS-G~BAV21WS-G	120-250	120-250	200	0.200	2.50	0.001	1-1.25	100-200	0.100	100-200	5.0	0.0	1.0	50	150	SOD-323
BAV19WS~BAV21WS	120-250	120-250	200	-	2.50	0.001	1-1.25	100-200	0.100	100-200	5.0	0.0	1.0	50	150	SOD-323F



## DIODES - TVS

(T<sub>A</sub>=25°C unless otherwise noted)

★=AEC-Q101 qualified

Part Number	Polarity	Steady State Power Dissipation at T <sub>L</sub> =75°C, Lead Length 0.375", 9.5mm	Peak Power Dissipation at T <sub>A</sub> = 25°C, tp=1ms	Breakdown Voltage		Stand Off Voltage	Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load	Package Description
		P <sub>D</sub> (W)	P <sub>PK</sub> (W)	V <sub>BR</sub> Min.(V)	V <sub>BR</sub> Max.(V)	V <sub>WM</sub> (V)	I <sub>FSM</sub> (A)	
SMF5.0A~SMF100A ★	Unidirectional	1	200	6.4-111	7-123	5 - 100	not available	SOD-123W
BZW04-5V8~BZW04-376 ★	Unidirectional	1	400	6.45-418	7.14-462	5.8-376	40	DO-204AL (DO-41)
BZW04-5V8B~BZW04-376B ★	Bidirectional			6.45-418	7.14-462	5.8-376		
P4KE6.8~P4KE440 ★	Unidirectional	1	400	6.12-396	7.48-484	5.5-356	40	DO-204AL (DO-41)
P4KE6.8A~P4KE440A ★	Unidirectional			6.46-418	7.14-462	5.8-376		
P4KE6.8C~P4KE440C ★	Bidirectional			6.12-396	7.48-484	5.5-356		
P4KE6.8CA~P4KE440CA ★	Bidirectional			6.46-418	7.14-462	5.8-376		
P4SMA6.8~P4SMA200 ★	Unidirectional	1	400	6.12-180	7.48-220	5.5-162	40	DO-214AC (SMA)
P4SMA6.8A~P4SMA200A ★	Unidirectional			6.46-190	7.14-210	5.8-171		
P4SMA6.8C~P4SMA200C ★	Bidirectional			6.12-180	7.48-220	5.5-162		
P4SMA6.8CA~P4SMA200CA ★	Bidirectional			6.46-190	7.14-210	5.8-171		
SMAJ5.0~SMAJ188 ★	Unidirectional	1	400	6.4-209	7.3-255	5-188	40	DO-214AC (SMA)
SMAJ5.0A~SMAJ188A ★	Unidirectional			6.4-209	7-231	5-188		
SMAJ5.0C~SMAJ188C ★	Bidirectional			6.4-209	7.3-255	5-188		
SMAJ5.0CA~SMAJ188CA ★	Bidirectional			6.4-209	7-231	5-188		
PGSMAJ10A~PGSMAJ100A ★	Unidirectional	1	400	11.1-111	12.3-123	10-100	40	DO-214AC (SMA)
PGSMAJ10CA~PGSMAJ100CA ★	Bidirectional			11.1-111	12.3-123	10-100		
SMA4S12AH~SMA4S60AH ★	Unidirectional	7.5	400	13.4-67.1	14.8-74.1	12-60	not available	SOD-128
SMA4F12AH~SMA4F60AH ★	Unidirectional	7.5	400	13.4-67.1	14.8-74.1	12-60	not available	ThinSMA
SMA6S12AH~SMA6S60AH ★	Unidirectional	7.14	600	13.4-67.1	14.8-74.1	12-60	not available	SOD-128
SMA6F12AH~SMA6F60AH ★	Unidirectional	7.14	600	13.4-67.1	14.8-74.1	12-60	not available	ThinSMA
BZW06-13~BZW06-376 ★	Unidirectional	1.7	600	14.3-418	15.8-462	12.8-376	100	DO-204AC (DO-15)
BZW06-13B~BZW06-376B ★	Bidirectional			14.3-418	15.8-462	12.8-376		
SA5.0~SA170 ★	Unidirectional	3	500	6.4-189	7.3-231	5-170	70	DO-204AC (DO-15)
SA5.0A~SA170A ★	Unidirectional			6.4-189	7-209	5-170		
SA5.0C~SA170C ★	Bidirectional			6.4-189	7.3-231	5-170		
SA5.0CA~SA170CA ★	Bidirectional			6.4-189	7-209	5-170		
P6SMB6.8~P6SMB220 ★	Unidirectional	3	600	6.12-198	7.48-242	5.5-175	100	DO-214AA (SMB)
P6SMB6.8A~P6SMB220A ★	Unidirectional			6.45-209	7.14-231	5.8-185		
P6SMB6.8C~P6SMB220C ★	Bidirectional			6.12-198	7.48-242	5.5-175		
P6SMB6.8CA~P6SMB220CA ★	Bidirectional			6.45-209	7.14-231	5.8-185		
SMBJ5.0~SMBJ170 ★	Unidirectional	3	600	6.4-189	7.3-231	5-170	100	DO-214AA (SMB)
SMBJ5.0A~SMBJ170A ★	Unidirectional			6.4-189	7-209	5-170		
SMBJ5.0C~SMBJ170C ★	Bidirectional			6.4-189	7.3-231	5-170		
SMBJ5.0CA~SMBJ170CA ★	Bidirectional			6.4-189	7-209	5-170		
SMBJ5V0A~SMBJ170A	Unidirectional	3	600	6.4-189	7-209	5-170	100	DO-214AA (SMB)
SMBJ5V0CA~SMBJ170CA	Bidirectional			6.4-189	7-209	5-170		
SMA6J10A~SMA6J30A ★	Unidirectional	4	600	11.1-33.3	12.3-36.8	10-30	50	DO-214AC (SMA)
P6KE6.8~P6KE440 ★	Unidirectional	5	600	6.12-396	7.48-484	5.5-356	100	DO-204AC (DO-15)
P6KE6.8A~P6KE440A ★	Unidirectional			6.45-418	7.14-462	5.8-376		
P6KE6.8C~P6KE440C ★	Bidirectional			6.12-396	7.48-484	5.5-356		
P6KE6.8CA~P6KE440CA ★	Bidirectional			6.45-418	7.14-462	5.8-376		

## DIODES - TVS

Part Number	Polarity	Steady State Power Dissipation at T <sub>L</sub> =75°C, Lead Length 0.375", 9.5mm	Peak Power Dissipation at T <sub>A</sub> = 25°C, tp=1ms	Breakdown Voltage		Stand Off Voltage	Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load	Package Description
		P <sub>D</sub> (W)	P <sub>PK</sub> (W)	V <sub>BR</sub> Min.(V)	V <sub>BR</sub> Max.(V)	V <sub>WM</sub> (V)	I <sub>FSM</sub> (A)	
P6KE6V8A~P6KE440A	Unidirectional	5	600	6.12-396	7.48-484	5.5-356	100	DO-15
P6KE6V8CA~P6KE440CA	Bidirectional			6.12-396	7.48-484	5.5-356		
1KSMB10A~1KSMB100A ★	Unidirectional	5	1,000	9.5-95	10.5-105	8.55-85.5	100	DO-214AA (SMB)
1KSMB10CA~1KSMB100CA ★	Bidirectional			9.5-95	10.5-105	8.55-85.5		
SMB10J9.0A~SMB10J40A ★	Unidirectional	5	1,000	10-44.4	11.1-49.1	9-40	100	DO-214AA (SMB)
SMB10J9.0CA~SMB10J40CA ★	Bidirectional			10-44.4	11.1-49.1	9-40		
1.5KE6.8~1.5KE440 ★	Unidirectional	5	1,500	6.12-396	7.48-484	5.5-356	200	DO-201
1.5KE6.8A~1.5KE440A ★	Unidirectional			6.45-418	7.14-462	5.8-376		
1.5KE6.8C~1.5KE440C ★	Bidirectional			6.12-396	7.48-484	5.5-356		
1.5KE6.8CA~1.5KE440CA ★	Bidirectional			6.45-418	7.14-462	5.8-376		
1V5KE6V8A~1V5KE440A	Unidirectional	5	1,500	6.45-418	7.14-462	5.8-376	200	DO-201
1V5KE6V8CA~1V5KE440CA	Bidirectional			6.45-418	7.14-462	5.8-376		
SMCJ5.0~SMCJ170 ★	Unidirectional	5	1,500	6.4-189	7.3-231	5-170	200	DO-214AB (SMC)
SMCJ5.0A~SMCJ170A ★	Unidirectional			6.4-189	7-209	5-170		
SMCJ5.0C~SMCJ170C ★	Bidirectional			6.4-189	7.3-231	5-170		
SMCJ5.0CA~SMCJ170CA ★	Bidirectional			6.4-189	7-209	5-170		
SMCJ5V0A~SMCJ170A	Unidirectional	5	1,500	6.4-189	7-209	5-170	200	DO-214AB (SMC)
SMCJ5V0CA~SMCJ170CA	Bidirectional			6.4-189	7-209	5-170		
TLD5S10AH~TLD5S43AH ★	Unidirectional	5	3,600	11.1-47.8	12.3-52.8	10-43	500	DO-218AB
5.0SMDJ16A~5.0SMDJ100A ★	Unidirectional	6.25	5,000	17.8-111	19.7-123	16-100	not available	DO-214AB (SMC)
TLD6S10AH~TLD6S43AH ★	Unidirectional	6	4,600	11.1-47.8	12.3-52.8	10-43	600	DO-218AB
1.5SMC6.8~1.5SMC200 ★	Unidirectional	6.5	1,500	6.12-180	7.48-220	5.5 - 171	200	DO-214AB (SMC)
1.5SMC6.8A~1.5SMC200A ★	Unidirectional			6.45-190	7.14-210	5.5 - 171		
1.5SMC6.8C~1.5SMC200C ★	Bidirectional			6.12-180	7.48-220	5.5 - 171		
1.5SMC6.8CA~1.5SMC200CA ★	Bidirectional			6.45-190	7.14-210	5.5 - 171		
SMDJ10A~SMDJ100A ★	Unidirectional	6.5	3,000	11.1-111	12.3-123	10-100	300	DO-214AB (SMC)
SMDJ10CA~SMDJ64CA ★	Bidirectional			11.1-71.1	12.3-78.6	10-64		
TLD8S10AH~TLD8S43AH ★	Unidirectional	8	6,600	11.1-47.8	12.3-52.8	10-43	700	DO-218AB
SMA6S12AH~SMA6S60AH ★	Unidirectional	7.14	600	13.4-67.1	14.8-74.1	12-60	not available	SOD-128
SMA6F12AH~SMA6F60AH ★	Unidirectional	7.14	600	13.4-67.1	14.8-74.1	12-60	not available	ThinSMA
SMA4S12AH~SMA4S60AH ★	Unidirectional	7.5	400	13.4-67.1	14.8-74.1	12-60	not available	SOD-128
SMA4F12AH~SMA4F60AH ★	Unidirectional	7.5	400	13.4-67.1	14.8-74.1	12-60	not available	ThinSMA
3KSMC21AH ★	Unidirectional	8.5	3,000	20	22.2	18	300	DO-214AB (SMC)



## DIODES - ZENER

(T<sub>A</sub>=25°C unless otherwise noted)

Part Number	P <sub>D</sub>	Tolerance	V <sub>Z</sub> @ I <sub>ZT</sub> Nom.	V <sub>Z</sub> @ I <sub>ZT</sub> Min.	V <sub>Z</sub> @ I <sub>ZT</sub> Max.	I <sub>ZT</sub> @ V <sub>Z</sub>	Z <sub>0T</sub> @ I <sub>ZT</sub>	Z <sub>0K</sub> @ I <sub>ZK</sub>	I <sub>R</sub> @ V <sub>R</sub>	I <sub>R</sub> @ V <sub>R</sub>	T <sub>J</sub> Max.	Package
	(mW)	+/- (%)	(V)	(V)	(V)	(mA)	(Ω)	(mA)	(μA)	(V)	(°C)	Description
BZX584B5V1~BZX584B20	150	2	5.1-20	5.00-19.6	5.20-20.4	5	15-60	1.00	0.1-3	2-14	150	SOD-523F
TSZU52C2V0~TSZU52C39	150	5	-	1.90-37.05	2.10-40.95	5	7-100	5.00	0.1-100	1-29	125	0603
BZT52B2V4S~BZT52B75S	200	2	2.4-75	2.35-73.5	2.45-76.5	2-5	10-255	0.5-1	0.045-45	1-52.5	150	SOD-323F
UDZ53V6B~UDZ536B	200	2	3.6-36	3.6-35.07	3.85-36.87	5	20-100	1.00	0.045-4.5	1-27	150	SOD-323F
BZX585B2V4~BZX585B24	200	2	2.4-51	2.35-49.98	2.45-52.02	2-5	10-180	0.5-1	0.045-45	1-35.7	150	SOD-523F
TSZL52C2V4~TSZL52C39	200	5	-	2.28-37.05	2.52-40.95	5	7-95	1.00	0.1-100	1-29	125	1005
BZT52C2V4S~BZT52C75S	200	5	2.4-75	2.28-71.25	2.52-78.75	2-5	10-255	0.5-1	0.045-45	1-52.5	150	SOD-323F
BZT52C2V7K~BZT52C75K	200	5	2.7-75	2.5-70	2.9-79	5	10-255	1.00	0.1-120	1-57	150	SOD-523F
AZ23C2V7~AZ23C51	300	5	2.7-51.0	2.5-48	2.9-54	5	7-100	1.00	0.1	0.8-38	150	SOT-23
BZX84C2V4~BZX84C39	300	5	2.4-39	2.2-37	2.6-41	2-5	10-130	0.5-1	0.1-50	1-27.3	150	SOT-23
BZT52C2V4-G~BZT52C43-G	350	5	2.4-43	2.2-40	2.6-46	2-5	10-130	0.5-1	0.1-50	1-32	150	SOD-123
BZT52B2V4-G~BZT52B43-G	410	2	2.4-43	2.35-41.46	2.45-42.84	2-5	10-130	0.5-1	0.1-50	1-29.4	150	SOD-123
BZY55B2V4~BZY55B36	500	2	2.4-36	2.35-35.28	2.45-36.72	5	7-85	1.00	0.1-50	1-27	150	0805
BZS55B2V4~BZS55B36	500	2	2.4-36	2.35-35.28	2.45-36.72	5	7-85	1.00	0.1-50	1-27	150	1206
BZX55B2V4~BZX55B75	500	2	2.4-75	2.35-73.5	2.45-76.5	2.5-5	7-170	0.5-1	0.1-50	1-56	175	DO-35
BZX79B2V4~BZX79B75	500	2	2.4-75	2.35-73.5	2.45-76.5	2.5-5	10-255	0.5-1	0.05-100	1-52.5	175	DO-35
BZV55B2V4~BZV55B75	500	2	2.4-75	2.35-73.5	2.45-76.5	2.5-5	7-170	0.5-1	0.1-50	1-56	175	MMELF
BZT55B2V4~BZT55B75	500	2	2.4-75	2.35-73.5	2.45-76.5	2.5-5	7-170	0.5-1	0.1-50	1-56	175	QMMELF
BZT52B2V4~BZT52B75	500	2	2.4-75	2.35-73.5	2.45-76.5	2-5	10-255	0.5-1	0.045-45	1-52.5	150	SOD-123F
BZY55C2V4~BZY55C36	500	5	2.4-36	2.28-34.2	2.52-37.8	5	7-85	1.00	0.1-50	1-27	150	0805
BZS55C2V4~BZS55C36	500	5	2.4-36	2.28-34.2	2.52-37.8	5	7-85	1.00	0.1-50	1-27	150	1206
1N5221B~1N5263B	500	5	2.4-56.0	-	-	2.2-20	7-150	-	0.1-100	1-43	100	DO-35
BZX55C2V0~BZX55C75	500	5	2-75	1.88-70	2.11-80	2.5-5	7-170	0.5-1	0.1-100	1-56	175	DO-35
BZX79C2V0~BZX79C75	500	5	2-75	1.88-70	2.21-80	2-5	10-255	0.5-1	0.05-150	1-52.5	175	DO-35
BZV55C2V4~BZV55C75	500	5	2.4-75	2.28-70	2.56-80	2.5-5	7-170	0.5-1	0.1-50	1-56	175	MMELF
BZT55C2V4~BZT55C75	500	5	2.4-75	2.28-70	2.56-79	2.5-5	7-170	0.5-1	0.1-50	1-56	175	QMMELF
BZT52C2V4~BZT52C75	500	5	2.4-75	2.28-71.25	2.52-78.75	2-5	10-255	0.5-1	0.045-45	1-52.5	150	SOD-123F
MMSZ5221B~MMSZ5262B	500	5	2.4-51	2.28-48.45	2.52-53.55	2.7-20	5-125	0.25	0.1-100	1-39	150	SOD-123F
MTZJ2V0SA~MTZJ56S	500	-	1.99-56.5	1.88-53	2.1-60	5	20-120	-	0.2-120	0.5-43	175	DO-34
1N4728G~1N4758G	1,000	5	3.3-56	-	-	4.5-76	10-110	0.25-1	5-100	1-42.6	-	DO-204AL (DO-41)
ZM4728A~ZM4758A	1,000	5	3.3-56	-	-	4.5-76	2-110	0.25-1	5-100	1-42.6	175	MELF
BZX85C3V3~BZX85C56	1,300	5	3.3-56	3.1-52	3.5-60	4-80	3-120	0.25-1	0.5-40	1-39	-	DO-204AL (DO-41)

## DIODES - ZENER

(T<sub>A</sub>=25°C unless otherwise noted)

★=AEC-Q101 qualified

Part Number	P <sub>D</sub>	Tolerance	V <sub>Z</sub> @ I <sub>ZT</sub> Nom.	V <sub>Z</sub> @ I <sub>ZT</sub> Min.	V <sub>Z</sub> @ I <sub>ZT</sub> Max.	I <sub>ZT</sub> @ V <sub>Z</sub>	T <sub>J</sub> Max.	Package Description
	(mW)	+/- (%)	(V)	(V)	(V)	(mA)	(°C)	
BZD17C11P~BZD17C220P ★	800	6	11-220	10.4-208	11.6-233	4-50	175	Sub SMA
1N4740A~1M200Z ★	1,000	5	10-200	9.5-190	10.5-210	1.2-25	150	DO-204AL (DO-41)
1PGSMA4740~1PGSMA200Z ★	1,000	5	10-200	9.5-190	10.5-210	1.2-25	175	DO-214AC (SMA)
BZD27C11PW~BZD27C220PW ★	1,000	5	11-220	10.5-209	11.6-231	5-50	175	SOD-123W
BZD27C10P~BZD27C220P ★	1,000	6	11-220.5	9.4-208	10.6-233	5-50	175	Sub SMA
1SMA4737~1SMA200Z ★	1,000	5	7.5-200	7.1-190	7.9-210	1.2-34	175	DO-214AC (SMA)
1SMA5926~1SMA5956 ★	1,500	5	11-200	10.45-190	11.55-210	1.9-34.1	150	DO-214AC (SMA)
2M6.8Z~2M200Z ★	2,000	5	6.8-200	6.4-190	7.1-210	2.5-100	150	DO-204AC (DO-15)
1SMB5926~1SMB5956 ★	3,000	5	11-200	10.45-190	11.55-210	1.9-34.1	150	DO-214AA (SMB)
1PGSMB5926~1PGSMB5956 ★	3,000	5	11-200	10.45-190	11.55-210	1.9-34.1	175	DO-214AA (SMB)
1SMC5352 ★	5,000	5	15	14.25	15.75	75	150	DO-214AB (SMC)
1PGSMC5348~1PGSMC5369 ★	5,000	5	11-51	10.45-48.45	11.55-53.55	25-125	175	DO-214AB (SMC)

## ESD - PROTECTION

(T<sub>A</sub>=25°C unless otherwise noted)

Part Number	Family	V <sub>BR</sub> (Min.)	I <sub>R</sub>	V <sub>WM</sub>	@ V <sub>WM</sub> ID	I <sub>PPM</sub>	@ I <sub>PPM</sub> V <sub>C</sub>	C <sub>J</sub>	P <sub>PP</sub>	T <sub>J</sub> Max.	Channel	Package Description
		(V)	(μA)	(V)	(μA)	(A)	(°C)	(pF)	(W)	(°C)		
TESDE5V0~TESDE24V	Bidirectional	5.1-25	2	5-24	2	1-5	15-51	10-15	25-75	150	1	0503
TESDU5V0~TESDU24V	Bidirectional	5.1-25	2	5-24	2	1-5	15-51	10-15	25-75	150	1	0603
TESDL5V0~TESDL24V	Bidirectional	5.1-25	2	5-24	2	1-5	15-51	10-15	25-75	150	1	1005
TESDUB5V0~TESDUB24V	Bidirectional	5.1-25	2	5-24	2	1-5	15-47	10-15	25-75	125	1	0603-B
TESD5V0L1UC	Bidirectional	6	0.1	5	0.1	3	15	2	100	150	1	DFN1006L
TESD24VS2BT	Bidirectional	25.4	5	24	0.05	3	70	11	200	150	2	SOT-23
TESD5V0V4UA	Unidirectional	6	1	5	1	5	19	0.8	95	125	4	2510P10 (DSON10)
TESD5V0V4UCX6	Unidirectional	6	0.1	5	0.1	5	15	0.6	75	150	4	SOT-26
TESD5V0V4UCU6	Unidirectional	6	3	5	3	6	25	3	150	150	4	SOT-363

## DIACS (TRIGGER DIODE)

(T<sub>A</sub>=25°C unless otherwise noted)

Part Number	V <sub>BO</sub>	+/- V <sub>BO</sub>	I <sub>BO</sub>	P <sub>D</sub>	I <sub>FRM</sub>	I <sub>BO</sub> Max.	I <sub>R</sub> Max.	Package Description
	(V)	(V)	(mA)	(mW)	(A) @ Pulse Width (ms)	μA	C <sub>J</sub> (pF)	
SODDB3T	34	2	0.015	400	-	-	10	SOD-123
SODDB3	36	3	0.100	400	-	-	10	SOD-123

SOD-123F



SOD-123



SOT-23



SOD-323F



SOD-523F



SOD-523F



SOD-123



Sub SMA



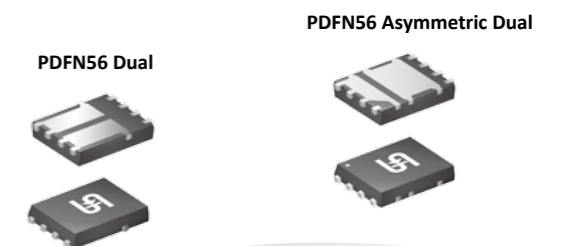
# MOSFETS - DUAL, ASYMMETRIC DAUL AND COMPLEMENTARY

# MOSFETS - DUAL, ASYMMETRIC DAUL AND COMPLEMENTARY

(T<sub>A</sub>=25°C unless otherwise noted)

Part Number	Configuration	Technology	Type	V <sub>DS</sub> (V)	V <sub>GS</sub> ± (V)	I <sub>D</sub> Max. (A)	V <sub>GS(th)</sub>			R <sub>DS(ON)</sub>			
							Min. (V)	Typ. (V)	Max. (V)	@ 10V		@ 4.5V	
							Typ. (mΩ)	Max. (mΩ)	Typ. (mΩ)	Max. (mΩ)			
TSM8568CS	Complementary	Trench	N-Channel	30	20	15	1	1.4	2.5	10	16	13	20
TSM8568CS	Complementary	Trench	P-Channel	-30	25	13	-1	-1.7	-2.5	18	24	30	37
TSM8588CS	Complementary	Trench	N-Channel	60	20	5	1.2	1.8	2.5	74	103	86	122
TSM8588CS	Complementary	Trench	P-Channel	-60	20	-4	-1.2	-1.5	-2.5	135	180	170	220
TSM2537CQ	Complementary	Trench	N-Channel	20	12	11.6	0.5	0.8	1	-	-	17	30
TSM2537CQ	Complementary	Trench	P-Channel	-20	12	-9	-0.45	-0.7	-1	-	-	48	55
TSM6502CR	Complementary	Trench	N-Channel	60	20	24	1.2	1.7	2.5	28	34	33	40
TSM6502CR	Complementary	Trench	P-Channel	-60	20	-18	-1.2	-1.5	-2.5	57	68	73	110
TSM680P06DPQ56	Dual	Trench	P-Channel	-60	20	-12	-1.2	-1.6	-2.5	54	68	90	110
TSM4925DCS	Dual	Trench	P-Channel	-30	20	-7.1	-1	-	-3	20	25	33	41
TSM4953DCS	Dual	Trench	P-Channel	-30	20	-4.9	-1	-1.5	-3	50	60	75	90
TSM3911DCX6	Dual	Trench	P-Channel	-20	8	-2.2	-0.45	-	-0.95	-	-	115	140
TSM500P02DCQ	Dual	Trench	P-Channel	-20	10	-4.7	-0.3	-0.6	-0.8	-	-	42	50
TSM9933DCS	Dual	Trench	P-Channel	-20	12	-4.7	-0.6	-	-1.4	-	-	48	60
TSM6963SDCA	Dual	Trench	P-Channel	-20	12	-4.5	-0.5	-	-1	-	-	23	30
TSM250N02DCQ	Dual	Trench	N-Channel	20	10	5.8	0.4	0.6	0.8	-	-	20	25
TSM6866SDCA	Dual	Trench	N-Channel	20	12	6	0.6	0.85	1.2	-	-	21	30
TSM9926DCS	Dual	Trench	N-Channel	20	12	6	0.6	0.85	1.2	-	-	21	30
TSM6968DCA	Dual	Trench	N-Channel	20	12	6.5	0.6	0.8	1	-	-	15	22
TSM6968SDCA	Dual	Trench	N-Channel	20	12	6.5	0.6	0.8	1	-	-	15	22
TSM4936DCS	Dual	Trench	N-Channel	30	20	5.9	1	1.5	3	32	36	42	53
TSM200N03DPQ33	Dual	Trench	N-Channel	30	20	20	1.2	1.5	2.5	17	20	23	30
TSM4946DCS	Dual	Trench	N-Channel	60	20	4.5	1	-	3	45	55	55	75
TSM5055DCR	Asymmetric Dual	Trench	N-Channel	30	20	38	1.2	1.9	2.5	8.8	11.7	12.8	14.9
TSM5055DCR	Asymmetric Dual	Trench	N-Channel	30	20	107	1.2	1.6	2.5	2.7	3.6	3.7	5.5

R <sub>DS(ON)</sub>				Q <sub>g</sub> (nC)		Q <sub>gs</sub>	Q <sub>gd</sub>	C <sub>iss</sub>	C <sub>oss</sub>	C <sub>rss</sub>	Package Description
@ 2.5V		@ 1.8V		@ 10V	@ 4.5V	(nC)	(nC)	(pF)	(pF)	(pF)	
Typ. (mΩ)	Max. (mΩ)	Typ. (mΩ)	Max. (mΩ)	Typ. (mΩ)	Max. (mΩ)	Typ. (mΩ)	Max. (mΩ)	Typ. (mΩ)	Max. (mΩ)	Typ. (mΩ)	
-	-	-	-	14	7	1.7	3.7	646	108	70	SOP-8
-	-	-	-	21.5	11	3.4	5.3	1,089	190	119	SOP-8
-	-	-	-	9.4	4.4	1.8	2.3	527	31	4	SOP-8
-	-	-	-	9	4.6	1.2	2.4	436	32	11	SOP-8
22	36	32	42	-	9.1	1.3	2.7	677	120	89	TDFN 2x2
60	78	78	90	-	9.8	1.1	2.7	744	106	97	TDFN 2x2
-	-	-	-	20.8	10.3	3.9	4.2	1,159	59	15	PDFN56 Dual
-	-	-	-	18.1	9.5	2.6	4.8	930	65	26	PDFN56 Dual
-	-	-	-	16.4	-	2.8	3.6	870	70	42	PDFN56 Dual
-	-	-	-	33	-	5.8	8.6	1,573	319	211	SOP-8
-	-	-	-	28	-	3	7	745	440	120	SOP-8
163	200	220	300	-	15.23	5.49	2.74	882.51	145.54	97.26	SOT-26
57	65	75	85	-	9.6	1.6	2	850	70	55	TDFN 2x2
65	85	-	-	-	8.5	2.1	4.7	1,500	220	160	SOP-8
30	42	45	68	-	20	1.4	1.9	640	180	90	TSSOP-8
27	35	39	55	-	7.7	0.9	2.4	535	60	34	TDFN 2x2
30	40	-	-	-	5	1	1.5	565	105	75	TSSOP-8
30	40	-	-	-	7.1	0.92	1.4	562	106	75	SOP-8
20	29	-	-	-	15	3.4	1.2	950	450	135	TSSOP-8
20	29	-	-	-	15	3.4	1.2	950	450	135	TSSOP-8
-	-	-	-	13	-	4.2	3.1	610	100	77	SOP-8
-	-	-	-	-	4	1	2.1	345	55	32	PDFN33
-	-	-	-	18	10.5	4.1	3	910	145	67	SOP-8
-	-	-	-	9.3	4.6	2.1	1.8	555	142	26	PDFN56 Asymmetric Dual
-	-	-	-	49	25	7.3	12	2,550	388	276	PDFN56 Asymmetric Dual





## MOSFETS - P-CHANNEL

(T<sub>A</sub>=25°C unless otherwise noted)

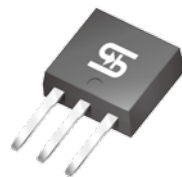
★=AEC-Q101 qualified

Part Number	Technology	Type	V <sub>DS</sub> (V)	V <sub>GS</sub> ± (V)	I <sub>D</sub> Max. (A)	V <sub>GS(th)</sub>			R <sub>DS(ON)</sub>			
						Min. (V)	Typ. (V)	Max. (V)	@ 10V		@ 4.5V	
						Typ. (mΩ)	Max. (mΩ)	Typ. (mΩ)	Max. (mΩ)			
TSM480P06CP	Trench	P-Channel	-60	20	-20	-1.2	-1.6	-2.2	39	48	53	65
TSM480P06CH	Trench	P-Channel	-60	20	-20	-1.2	-1.6	-2.2	39	48	53	65
TSM680P06CP	Trench	P-Channel	-60	20	-18	-1.2	-1.6	-2.2	54	68	72	110
TSM680P06CH	Trench	P-Channel	-60	20	-18	-1.2	-1.6	-2.2	54	68	72	110
TSM9409CS	Trench	P-Channel	-60	20	-3.5	-1	-	-	125	155	153	200
TSM2309CX	Trench	P-Channel	-60	20	-3.1	-1.2	-1.9	-2.5	160	190	200	240
TSM160P04LCRH	Trench	P-Channel	-40	20	-51	-1	-1.5	-2.5	9.9	16	13.5	22
TSM085P03CS	Trench	P-Channel	-30	20	-34	-1.2	-1.5	-2.5	7.7	8.5	11	14
TSM180P03CS	Trench	P-Channel	-30	20	-10	-1.2	-1.6	-2.5	14	18	23	30
TSM3481CX6	Trench	P-Channel	-30	20	-5.7	-1	-	-3	38	48	63	79
TSM9435CS	Trench	P-Channel	-30	20	-5.3	-1	-1.5	-3	50	60	75	90
TSM3457CX6	Trench	P-Channel	-30	20	-5	-1	-1.5	-3	50	60	82	100
TSM600P03CS	Trench	P-Channel	-30	20	-4.7	-1.2	-1.6	-2.5	44	60	73	90
TSM9434CS	Trench	P-Channel	-20	8	-6.4	-0.4	-	-1	-	-	31	40
TSM2305CX	Trench	P-Channel	-20	8	-3.2	-0.45	-0.7	-1	-	-	44	55
TSM160P02CS	Trench	P-Channel	-20	10	-11	-0.3	-0.6	-1.0	-	-	12	16
TSM260P02CX6	Trench	P-Channel	-20	10	-6.5	-0.3	-0.6	-1	-	-	21	26
TSM260P02CX	Trench	P-Channel	-20	10	-6.5	-0.3	-0.6	-1	-	-	21	26
TSM500P02CX	Trench	P-Channel	-20	10	-4.7	-0.3	-0.6	-0.8	-	-	42	50
TSM650P02CX	Trench	P-Channel	-20	10	-4.1	-0.4	-0.6	-0.8	-	-	52	65
TSM3443CX6	Trench	P-Channel	-20	12	-4.7	-0.5	-	-1.4	-	-	48	60

## MOSFETS - P-CHANNEL

R <sub>DS(ON)</sub>				Q <sub>g</sub> (nC)		Q <sub>gs</sub>	Q <sub>gd</sub>	C <sub>iss</sub>	C <sub>oss</sub>	C <sub>rss</sub>	Package Description
@ 2.5V		@ 1.8V		@ 10V	@ 4.5V	(nC)	(nC)	(pF)	(pF)	(pF)	
Typ. (mΩ)	Max. (mΩ)	Typ. (mΩ)	Max. (mΩ)	Typ. (mΩ)	Max. (mΩ)	Typ. (mΩ)	Max. (mΩ)	Typ. (mΩ)	Max. (mΩ)	Typ. (mΩ)	
-	-	-	-	22.4	-	4.1	5.2	1,250	85	65	TO-252 (D-PAK)
-	-	-	-	22.4	-	4.1	5.2	1,250	85	65	TO-251S (I-PAK SL)
-	-	-	-	16.4	-	2.8	3.6	870	70	42	TO-252 (D-PAK)
-	-	-	-	16.4	-	2.8	3.6	870	70	42	TO-251S (I-PAK SL)
-	-	-	-	-	-	1.7	1.5	540	60	30	SOP-8
-	-	-	-	8.2	-	1.8	1.5	425	35	20	SOT-23
-	-	-	-	48	23	7	9	2,712	270	150	PDFN56
-	-	-	-	56	28	9	11	3,216	409	277	SOP-8
-	-	-	-	-	14.6	4.1	6.3	1,730	180	125	SOP-8
-	-	-	-	18.09	-	6.52	3.25	1,047.98	172.82	115.5	SOT-26
-	-	-	-	27	-	3.43	1.71	551.57	90.96	60.79	SOP-8
-	-	-	-	27	-	3.43	1.71	551.57	90.96	60.79	SOT-26
-	-	-	-	-	5.1	2	2.2	560	55	40	SOP-8
45	60	-	-	-	12	1.7	3.3	1,020	191	140	SOP-8
65	80	90	130	10	5	0.7	4	990	125	100	SOT-23
16	22	21	28	-	27	2.4	5.3	2,320	280	175	SOP-8
26	32	32	40	-	19.5	2	3.6	1,670	220	120	SOT-26
26	32	32	40	-	19.5	2	3.6	1,670	220	120	SOT-23
57	65	75	85	-	9.6	1.6	2	850	70	55	SOT-23
73	85	105	130	-	6.4	0.9	1.6	515	55	20	SOT-23
80	100	-	-	-	6	1.4	1.9	640	180	90	SOT-26

TO-251S (IPAK SL)



TO-252 (DPAK)



SOT-23



SOT-26



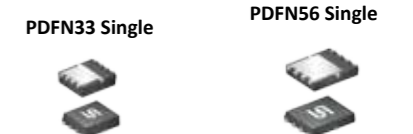
## MOSFETS - N-CANNEL

(T<sub>A</sub>=25°C unless otherwise noted)

Part Number	Technology	Type	V <sub>DS</sub> (V)	V <sub>GS</sub> ± (V)	I <sub>D</sub> Max. (A)	V <sub>GS(th)</sub>			R <sub>DS(ON)</sub>			
						Min. (V)	Typ. (V)	Max. (V)	@ 10V		@ 4.5V	
						Typ. (mΩ)	Max. (mΩ)	Typ. (mΩ)	Max. (mΩ)			
TSM2302CX	Trench	N-Channel	20	8	3.9	0.65	0.9	1.2	-	-	34	65
TSM4424CS	Trench	N-Channel	20	8	8	-	0.65	1	-	-	23	30
TSM4806CS	Trench	N-Channel	20	8	28	0.3	0.6	1	-	-	16	20
TSM250N02CX	Trench	N-Channel	20	10	5.8	0.4	0.6	0.8	-	-	20	25
TSM210N02CX	Trench	N-Channel	20	10	6.7	0.3	0.6	0.8	-	-	19	21
TSM3446CX6	Trench	N-Channel	20	12	5.3	0.5	0.87	1	-	-	27	33
TSM320N03CX	Trench	N-Channel	30	12	5.5	0.4	0.75	0.9	-	-	27	32
TSM05N03CW	Trench	N-Channel	30	20	5	1	-	3	46	60	70	90
TSM240N03CX	Trench	N-Channel	30	20	6.5	1.2	1.4	2.5	17	24	22	34
TSM240N03CX6	Trench	N-Channel	30	20	6.5	1.2	1.4	2.5	17	24	22	34
TSM180N03CS	Trench	N-Channel	30	20	9	1.2	1.6	2	16	18	23	28
TSM180N03PQ33	Trench	N-Channel	30	20	25	1.2	1.6	2.5	14	18	20	28
TSM042N03CS	Trench	N-Channel	30	20	30	1.2	1.6	2.5	3.8	4.2	5.2	6.0
TSM090N03CP	Trench	N-Channel	30	20	50	1	1.6	2.5	7.5	9	10	13
TSM090N03ECP	Trench	N-Channel	30	20	50	1.2	1.6	2.5	7.5	9	9.6	14
TSM085N03PQ33	Trench	N-Channel	30	20	52	1	1.6	2.5	6.2	8.5	9	13
TSM080N03EPQ56	Trench	N-Channel	30	20	55	1	1.6	2.5	6.5	8	9.5	12.5
TSM080NB03CR	Trench	N-Channel	30	20	59	1	1.8	2.5	5.8	8	10	15
TSM060N03PQ33	Trench	N-Channel	30	20	62	1.2	1.6	2.5	4.8	6.0	6.7	9.0
TSM060N03CP	Trench	N-Channel	30	20	70	1	1.6	2.5	4.8	6	6.5	9
TSM060N03ECP	Trench	N-Channel	30	20	70	1.0	1.6	2.5	4.8	6	6.5	9
TSM080N03PQ56	Trench	N-Channel	30	20	73	1	1.6	2.5	6.5	8	9.5	12.5
TSM038N03PQ33	Trench	N-Channel	30	20	78	1.2	1.6	2.5	3.0	3.8	4.0	5.5
TSM055N03EPQ56	Trench	N-Channel	30	20	80	1.2	1.6	2.5	4.5	5.5	6.3	8.5
TSM055N03PQ56	Trench	N-Channel	30	20	80	1.2	1.6	2.5	4.5	5.5	6.3	8.5
TSM040N03CP	Trench	N-Channel	30	20	90	1.2	1.6	2.5	3.1	4	4.5	6
TSM052NB03CR	Trench	N-Channel	30	20	90	1	1.6	2.5	3.2	5.2	5	8
TSM036N03PQ56	Trench	N-Channel	30	20	124	1.2	1.6	2.5	3	3.6	4	5.5
TSM018NB03CR	Trench	N-Channel	30	20	194	1	1.8	2.5	1.4	1.8	2.1	2.8
TSM150NB04DCR	Trench	N-Channel	40	20	38	2	3	4	11	15	-	-
TSM110NB04DCR	Trench	N-Channel	40	20	48	2	2.9	4	8.5	11	-	-
TSM051N04LCP	Trench	N-Channel	40	20	96	1.2	1.7	2.5	4.3	5.1	6	7
TSM038N04LCP	Trench	N-Channel	40	20	135	1.2	1.5	2.5	2.8	3.8	3.4	5
TSM2N7002KCX	Trench	N-Channel	60	20	0.3	1	1.5	2.5	1,200	2,000	2,000	4,000
TSM850N06CX	Trench	N-Channel	60	20	3	1.2	1.8	2.5	68	85	80	100
TSM900N06CW	Trench	N-Channel	60	20	5	1.2	1.8	2.5	76	90	87	100
TSM4436CS	Trench	N-Channel	60	20	8	1	-	3	30	36	35	43

## MOSFETS - N-CANNEL

R <sub>DS(ON)</sub>				Q <sub>g</sub> (nC)		Q <sub>gs</sub>	Q <sub>gd</sub>	C <sub>iss</sub>	C <sub>oss</sub>	C <sub>rss</sub>	Package Description
@ 2.5V		@ 1.8V		@ 10V	@ 4.5V	(nC)	(nC)	(pF)	(pF)	(pF)	
Typ. (mΩ)	Max. (mΩ)	Typ. (mΩ)	Max. (mΩ)								
45	95	-	-	-	5	1	2.5	587	94	64	SOT-23
25	35	35	45	-	11.2	1.4	2.2	500	300	140	SOP-8
20	25	25	31	-	12.3	1.95	3.08	961	92.3	80.4	SOP-8
27	35	39	55	-	7.7	0.9	2.4	535	60	34	SOT-23
22	25	26	32	-	5.8	0.6	2	600	70	45	SOT-23
33	40	-	-	-	8.8	0.72	4.3	700	125	110	SOT-26
32	40	-	-	-	8.9	1.5	2	792	53	21	SOT-23
-	-	-	-	-	-	1.9	1.35	555	120	60	SOT-223
-	-	-	-	-	4.1	1	2.1	345	55	32	SOT-23
-	-	-	-	-	4.1	1	2.1	345	55	32	SOT-26
-	-	-	-	-	4.1	1	2.1	345	55	32	SOP-8
-	-	-	-	-	4.1	1	2.1	345	55	32	PDFN33
-	-	-	-	-	24	4.2	13	2,200	280	177	SOP-8
-	-	-	-	-	7.5	1.3	4.5	750	150	110	TO-252 (D-PAK)
-	-	-	-	-	7.7	1.9	2.8	680	150	70	TO-252 (D-PAK)
-	-	-	-	14.3	7.2	2.6	3.4	817	155	96	PDFN33
-	-	-	-	-	7.5	1.3	4.5	750	150	110	PDFN56
-	-	-	-	20	10	4	5	1,097	180	106	PDFN56
-	-	-	-	25.4	12.9	3.8	5.7	1,342	227	169	PDFN33
-	-	-	-	-	11.1	1.85	6.8	1,160	200	180	TO-252 (D-PAK)
-	-	-	-	-	11.1	1.85	6.8	1,210	190	100	TO-252 (D-PAK)
-	-	-	-	14.4	7.2	2.6	3.3	843	157	95	PDFN56
-	-	-	-	-	24	6.9	11	2,557	380	276	PDFN33
-	-	-	-	-	11.1	1.85	6.8	1,210	190	100	PDFN56
-	-	-	-	-	11.1	1.85	6.8	1,160	200	180	PDFN56
-	-	-	-	-	24	4.2	13	2,200	280	177	TO-252 (D-PAK)
-	-	-	-	41	21	5	13	2,294	386	249	PDFN56
-	-	-	-	50	25	7.3	12	2,530	376	249	PDFN56
-	-	-	-	120	62	21	28	7,252	1,056	673	PDFN56
-	-	-	-	18	-	6	4	1,132	110	51	PDFN56
-	-	-	-	25	-	7	6	1,506	144	75	PDFN56
-	-	-	-	44.5	22.6	6.7	11	2,456	250	139	TO-252 (D-PAK)
-	-	-	-	104	53	14	23	5,509	548	332	TO-252 (D-PAK)
-	-	-	-	-	0.4	-	-	30	6	2.5	SOT-23
-	-	-	-	9.5	4.6	1.9	1.6	529	29	3	SOT-23
-	-	-	-	9.3	-	2.1	1.8	500	45	16	SOT-223
-	-	-	-	-	10.5	3.5	4.2	1,100	90	55	SOP-8



## MOSFETS - N-CANNEL

Part Number	Technology	Type	V <sub>DS</sub> (V)	V <sub>GS</sub> ± (V)	I <sub>D</sub> Max. (A)	V <sub>GS(th)</sub>			R <sub>DS(ON)</sub>			
						Min. (V)	Typ. (V)	Max. (V)	@ 10V		@ 4.5V	
						Typ. (mΩ)	Max. (mΩ)	Typ. (mΩ)	Max. (mΩ)			
TSM900N06CH	Trench	N-Channel	60	20	11	1.2	1.8	2.5	76	90	87	100
TSM900N06CP	Trench	N-Channel	60	20	11	1.2	1.8	2.5	76	90	87	100
TSM120N06LCS	Trench	N-Channel	60	20	23	1.2	1.7	2.5	10.4	12	11.9	15
TSM300N06DCR	Trench	N-Channel	60	20	25	2.5	3.2	4.5	25	30	-	-
TSM340N06CH	Trench	N-Channel	60	20	25	1.2	1.7	2.5	28	34	33	40
TSM340N06CP	Trench	N-Channel	60	20	25	1.2	1.7	2.5	28	34	33	40
TSM250N06DCR	Trench	N-Channel	60	20	30	2	3	4	21	25	-	-
TSM230N06CP	Trench	N-Channel	60	20	34	1.2	1.8	2.5	20	23	23	28
TSM170N06CH	Trench	N-Channel	60	20	38	1.2	1.7	2.5	15	17	17.5	20
TSM170N06CP	Trench	N-Channel	60	20	38	1.2	1.7	2.5	15	17	17.5	20
TSM025N04CR	Trench	N-Channel	40	20	161	2	2.8	4	1.8	2.5	-	-
TSM025N04LCR	Trench	N-Channel	40	20	161	1	1.6	2.5	1.8	2.5	2.4	3.2
TSM033N04CR	Trench	N-Channel	40	20	121	2	2.9	4	2.4	3.3	-	-
TSM033N04LCR	Trench	N-Channel	40	20	121	1	1.6	2.5	2.3	3.3	3.2	4
TSM070N04CR	Trench	N-Channel	40	20	75	2	2.9	4	4.7	7	-	-
TSM070N04LCR	Trench	N-Channel	40	20	75	1	1.7	2.5	4.4	7	6.4	9.5
TSM110N04CR	Trench	N-Channel	40	20	54	2	3.2	4	7.7	11	-	-
TSM110N04LCR	Trench	N-Channel	40	20	54	1	1.9	2.5	8	11	12	16
TSM150N04CR	Trench	N-Channel	40	20	41	2	3.2	4	10	15	-	-
TSM150N04LCR	Trench	N-Channel	40	20	41	1	1.8	2.5	9	15	14	19
TSM045N06CR	Trench	N-Channel	60	20	104	2	3	4	4.5	5	-	-
TSM048N06LCR	Trench	N-Channel	60	20	107	1	1.8	2.5	4	4.8	4.8	6.8
TSM130N06CR	Trench	N-Channel	60	20	51	2	3	4	11	13	-	-
TSM130N06LCR	Trench	N-Channel	60	20	51	1	1.7	2.5	12	13	14	18
TSM220N06CR	Trench	N-Channel	60	20	35	2	3.3	4	19	22	-	-
TSM220N06LCR	Trench	N-Channel	60	20	35	1	1.7	2.5	18	22	21	28
TSM300N06CR	Trench	N-Channel	60	20	27	2.5	3.4	4.5	25	30	-	-
TSM280N06LCR	Trench	N-Channel	60	20	28	1	2	2.5	24	28	32	39
TSM120N06LCP	Trench	N-Channel	60	20	70	1.2	1.7	2.5	9.7	12	11	15
TSM089N08LCR	Trench	N-Channel	80	20	67	1	1.9	2.5	6.4	8.9	8	11
TSM2328CX	Trench	N-Channel	100	20	1.5	1	-	2.5	-	250	-	-
TSM950N10CW	Trench	N-Channel	100	20	6.5	1.2	1.6	2.5	80	95	85	110
TSM900N10CH	Trench	N-Channel	100	20	15	1.2	1.6	2.5	72	90	75	100
TSM900N10CP	Trench	N-Channel	100	20	15	1.2	1.6	2.5	72	90	75	100
TSM160N10LCR	Trench	N-Channel	100	20	46	1.2	1.9	2.5	14	16	16	20
TSM4800N15CX6	Trench	N-Channel	150	20	1.4	2	2.9	3.5	392	480	-	-
TSM650N15CS	Trench	N-Channel	150	20	9	2	2.7	4	51	65	-	-
TSM650N15CR	Trench	N-Channel	150	20	24	2	2.7	4	47	65	-	-

## MOSFETS - N-CANNEL

R <sub>DS(ON)</sub>				Q <sub>g</sub> (nC)		Q <sub>gs</sub>	Q <sub>gd</sub>	C <sub>iss</sub>	C <sub>oss</sub>	C <sub>rss</sub>	Package Description
@ 2.5V		@ 1.8V		@ 10V	@ 4.5V	(nC)	(nC)	(pF)	(pF)	(pF)	
Typ. (mΩ)	Max. (mΩ)	Typ. (mΩ)	Max. (mΩ)								
-	-	-	-	9.3	-	2.1	1.8	500	45	16	TO-251S (I-PAK SL)
-	-	-	-	9.3	-	2.1	1.8	500	45	16	TO-252 (D-PAK)
-	-	-	-	37	19	6	8	2,193	208	88	SOP-8
-	-	-	-	17	-	6	4	1,079	68	16	PDFN56
-	-	-	-	16.6	-	2.2	3.9	1,180	68	45	TO-251S (I-PAK SL)
-	-	-	-	16.6	-	2.2	3.9	1,180	68	45	TO-252 (D-PAK)
-	-	-	-	22	-	7	5	1,461	89	20	PDFN56
-	-	-	-	28	-	3.5	6.5	1,680	115	85	TO-252 (D-PAK)
-	-	-	-	28.5	13.5	5.5	5	900	130	90	TO-251 (I-PAK)
-	-	-	-	28.5	13.5	5.5	5	900	130	90	TO-252 (D-PAK)
-	-	-	-	113	-	26	32	7,150	675	332	PDFN56
-	-	-	-	112	57	18	27	6,435	675	388	PDFN56
-	-	-	-	77	-	23	19	5,022	484	250	PDFN56
-	-	-	-	79	40	12	19	4,456	475	276	PDFN56
-	-	-	-	40	-	12	10	2,403	253	117	PDFN56
-	-	-	-	39	20	6	11	2,151	250	140	PDFN56
-	-	-	-	23	-	7	6	1,443	147	80	PDFN56
-	-	-	-	23	12	4	6	1,269	142	82	PDFN56
-	-	-	-	19	-	6	4	1,092	113	63	PDFN56
-	-	-	-	18	9	3	5	966	108	64	PDFN56
-	-	-	-	104	-	30	24	6,870	395	126	PDFN56
-	-	-	-	105	52	17	23	6,253	388	168	PDFN56
-	-	-	-	36	-	12	8	2,380	142	42	PDFN56
-	-	-	-	37	18	7	9	2,175	142	63	PDFN56
-	-	-	-	23	-	6.5	5.4	1,454	90	24	PDFN56
-	-	-	-	23	12	4	5	1,314	91	26	PDFN56
-	-	-	-	18	-	6	4	1,110	71	19	PDFN56
-	-	-	-	18	9	3	4	969	71	24	PDFN56
-	-	-	-	37	18	6	7.5	2,118	136	86	TO-252 (D-PAK)
-	-	-	-	90	45	16	23	6,119	304	116	PDFN56
-	-	-	-	-	12	4.4	3	975	38	27	SOT-23
-	-	-	-	9.3	-	2.1	1.8	1,480	480	35	SOT-223
-	-	-	-	9.3	-	2.1	1.8	1,480	480	35	TO-251S (I-PAK SL)
-	-	-	-	9.3	-	2.1	1.8	1,480	480	35	TO-252 (D-PAK)
-	-	-	-	73	36	17	15	4,431	158	45	PDFN56
-	-	-	-	8	-	2	2.7	332	20	1	SOT-26
-	-	-	-	37	-	9	12	1,783	94	18	SOP-8
-	-	-	-	36	-	10	12	1,829	94	65	PDFN56

TO-252 (D-PAK)



SOT-26



SOP-8



PDFN56 Single



## MOSFETS - N-CANNEL

Part Number	Technology	Type	V <sub>DS</sub> (V)	V <sub>GS</sub> ± (V)	I <sub>D</sub> Max. (A)	V <sub>GS(th)</sub>			R <sub>DS(ON)</sub>			
						Min. (V)	Typ. (V)	Max. (V)	@ 10V		@ 4.5V	
						Typ. (mΩ)	Max. (mΩ)	Typ. (mΩ)	Max. (mΩ)			
TSM600N25ECH	Planar	N-Channel	250	30	8	3	-	5	500	600	-	-
TSM600N25ECP	Planar	N-Channel	250	30	8	3	-	5	500	600	-	-
TSM4NC50CP	Planar	N-Channel	500	20	4	2	2.2	3	2,400	2,700	-	-
TSM5NC50CF	Planar	N-Channel	500	30	5	2.5	3.3	4.5	1,100	1,380	-	-
TSM5NC50CP	Planar	N-Channel	500	30	5	2.5	3.3	4.5	1,200	1,380	-	-
TSM5NC50CZ	Planar	N-Channel	500	30	5	2.5	3.3	4.5	1,200	1,380	-	-
TSM5ND50CI	Planar	N-Channel	500	30	5	2.5	3	3.8	1,160	1,500	-	-
TSM9ND50CI	Planar	N-Channel	500	30	9	2.5	2.8	3.8	600	900	-	-
TSM13ND50CI	Planar	N-Channel	500	30	13	2.5	3	3.8	370	480	-	-
TSM16ND50CI	Planar	N-Channel	500	30	16	2.5	4	4.5	300	350	-	-
TSM126CX	Planar	N-Channel	600	20	0.03	-2.7	-1.8	-1	400,000	800,000	-	-
TSM2N60SCW	Planar	N-Channel	600	30	0.6	2	-	4	3,600	5,000	-	-
TSM1NB60CH	Planar	N-Channel	600	30	1	2.5	-	4.5	8,000	10,000	-	-
TSM1NB60CP	Planar	N-Channel	600	30	1	2.5	-	4.5	8,000	10,000	-	-
TSM1NB60CW	Planar	N-Channel	600	30	1	2.5	-	4.5	8,000	10,000	-	-
TSM2N60ECH	Planar	N-Channel	600	30	2	3	-	5	3,200	4,000	-	-
TSM2N60ECP	Planar	N-Channel	600	30	2	3	-	5	3,200	4,000	-	-
TSM60NB1R4CH	Super Junction G2	N-Channel	600	30	3	2	3.3	4	1,000	1,400	-	-
TSM60NB1R4CP	Super Junction G2	N-Channel	600	30	3	2	3.3	4	1,000	1,400	-	-
TSM4ND60CI	Planar	N-Channel	600	30	4	2.5	3	3.8	1,700	2,200	-	-
TSM4NB60CH	Planar	N-Channel	600	30	4	2.5	3.5	4.5	2,200	2,500	-	-
TSM4NB60CI	Planar	N-Channel	600	30	4	2.5	-	4.5	2,200	2,500	-	-
TSM4NB60CP	Planar	N-Channel	600	30	4	2.5	-	4.5	2,200	2,500	-	-
TSM60NB900CH	Super Junction G2	N-Channel	600	30	4	2	3.3	4	690	900	-	-
TSM60NB900CP	Super Junction G2	N-Channel	600	30	4	2	3.3	4	690	900	-	-
TSM7ND60CI	Planar	N-Channel	600	30	7	2.5	2.8	3.8	900	1,200	-	-
TSM7NC60CF	Planar	N-Channel	600	30	7	2.5	3.5	4.5	1,070	1,200	-	-
TSM60NB600CH	Super Junction G2	N-Channel	600	30	7	2	3.4	4	450	600	-	-
TSM60NB600CP	Super Junction G2	N-Channel	600	30	7	2	3.4	4	450	600	-	-
TSM60NB600CF	Super Junction G2	N-Channel	600	30	8	2	3.3	4	440	600	-	-
TSM60NB380CH	Super Junction G2	N-Channel	600	30	9.5	2	3	4	260	380	-	-
TSM60NB380CP	Super Junction G2	N-Channel	600	30	9.5	2	3	4	260	380	-	-
TSM10NC60CF	Planar	N-Channel	600	30	10	2.5	3.4	4.5	670	750	-	-
TSM10ND60CI	Planar	N-Channel	600	30	10	2.5	2.9	3.8	510	600	-	-
TSM60NB380CF	Super Junction G2	N-Channel	600	30	11	2	3.3	4	280	380	-	-
TSM60NB260CI	Super Junction G2	N-Channel	600	30	13	2	3	4	190	260	-	-
TSM60NB190CI	Super Junction G2	N-Channel	600	30	18	2	3	4	170	190	-	-
TSM60NB190CZ	Super Junction G2	N-Channel	600	30	18	2	3	4	170	190	-	-

## MOSFETS - N-CANNEL

R <sub>DS(ON)</sub>				Q <sub>g</sub> (nC)		Q <sub>gs</sub>	Q <sub>gd</sub>	C <sub>iss</sub>	C <sub>oss</sub>	C <sub>rss</sub>	Package Description
@ 2.5V		@ 1.8V		@ 10V	@ 4.5V	(nC)	(nC)	(pF)	(pF)	(pF)	
Typ. (mΩ)	Max. (mΩ)	Typ. (mΩ)	Max. (mΩ)								
-	-	-	-	8.4	-	1.9	4	423	74	12	TO-251 (I-PAK)
-	-	-	-	8.4	-	1.9	4	423	74	12	TO-252 (D-PAK)
-	-	-	-	12	-	2.2	4.4	453	27	1	TO-252 (D-PAK)
-	-	-	-	15	-	4	7	586	45	1	ITO-220S
-	-	-	-	15	-	4	7	586	45	1	TO-252 (D-PAK)
-	-	-	-	15	-	4	7	856	45	1	TO-220
-	-	-	-	16	-	3.2	7.2	603	50	1	ITO-220
-	-	-	-	24.5	-	5	8.3	1,116	83	1	ITO-220
-	-	-	-	39	-	10	12	1,877	128	7	ITO-220
-	-	-	-	53	-	15.4	18.5	2,551	153	15	ITO-220
-	-	-	-	-	1.18	0.49	0.365	51.42	4.48	1.12	SOT-23
-	-	-	-	13	-	2	6	435	56	9.2	SOT-223
-	-	-	-	6.1	-	1.4	3.3	138	17.1	4.2	TO-251 (I-PAK)
-	-	-	-	6.1	-	1.4	3.3	138	17.1	4.2	TO-252 (D-PAK)
-	-	-	-	6.1	-	1.4	3.3	138	17.1	4.2	SOT-223
-	-	-	-	9.5	-	2.1	3.9	362	40	7.2	TO-251 (I-PAK)
-	-	-	-	9.5	-	2.1	3.9	362	40	7.2	TO-252 (D-PAK)
-	-	-	-	7.12	-	3.52	1.62	257.3	41.5	-	TO-251 (I-PAK)
-	-	-	-	7.12	-	3.52	1.62	257.3	41.5	-	TO-252 (D-PAK)
-	-	-	-	17.2	-	2.9	7.8	582	38	1	ITO-220
-	-	-	-	14.5	-	3.4	7	500	53.2	7	TO-251S (I-PAK SL)
-	-	-	-	14.5	-	3.4	7	500	53.2	7	ITO-220
-	-	-	-	14.5	-	3.4	7	500	53.2	7	TO-252 (D-PAK)
-	-	-	-	9.6	-	2	4.5	315	46.4	-	TO-251 (I-PAK)
-	-	-	-	9.6	-	2	4.5	315	46.4	-	TO-252 (D-PAK)
-	-	-	-	25	-	5.5	8.1	1,108	69	1	ITO-220
-	-	-	-	24	-	7.2	8.2	1,169	62	5	ITO-220S
-	-	-	-	13	-	3.36	5.56	516	55	-	TO-251 (I-PAK)
-	-	-	-	13	-	3.36	5.56	516	55	-	TO-252 (D-PAK)
-	-	-	-	16	-	4	8	528	31	1	ITO-220S
-	-	-	-	19.4	-	3.5	8.9	795	67	-	TO-251 (I-PAK)
-	-	-	-	19.4	-	3.5	8.9	795	67	-	TO-252 (D-PAK)
-	-	-	-	33	-	10	12	1,652	92	11	ITO-220S
-	-	-	-	38	-	9	11	1,928	114	10	ITO-220
-	-	-	-	21	-	5	9	810	39	1	ITO-220S
-	-	-	-	30	-	6.6	11.7	1,273	92	-	ITO-220
-	-	-	-	31	-	8	12.6	1,273	92	-	ITO-220
-	-	-	-	31	-	8	12.6	1,273	92	-	TO-220

SOT-223



SOT-23



TO-252 (D-PAK)



TO-251 (I-PAK)



## MOSFETS - N-CANNEL

Part Number	Technology	Type	V <sub>DS</sub> (V)	V <sub>GS</sub> ± (V)	I <sub>D</sub> Max. (A)	V <sub>GS(th)</sub>			R <sub>DS(ON)</sub>			
						Min. (V)	Typ. (V)	Max. (V)	@ 10V		@ 4.5V	
						Typ. (mΩ)	Max. (mΩ)	Typ. (mΩ)	Max. (mΩ)			
TSM60NB190CM2	Super Junction G2	N-Channel	600	30	18	2	3	4	170	190	-	-
TSM60NB190CF	Super Junction G2	N-Channel	600	30	18	2	3.2	4	170	190	-	-
TSM60NB190SDLL	Super Junction G2	N-Channel	600	30	18	2	3.2	4	340*	380*	-	-
TSM60NB150CF	Super Junction G2	N-Channel	600	30	24	2	3.2	4	124	150	-	-
TSM60NB099CZ	Super Junction G2	N-Channel	600	30	38	2	3	4	86	99	-	-
TSM60NB099CF	Super Junction G2	N-Channel	600	30	38	2	3	4	81	99	-	-
TSM60NB099PW	Super Junction G2	N-Channel	600	30	38	2	3	4	86	99	-	-
TSM60NB041PW	Super Junction G2	N-Channel	600	30	78	2	3	4	38	41	-	-
TSM4ND65CI	Planar	N-Channel	650	30	4	2.5	2.9	3.8	1,850	2,600	-	-
TSM7NC65CF	Planar	N-Channel	650	30	7	2.5	3.6	4.5	1,200	1,350	-	-
TSM7ND65CI	Planar	N-Channel	650	30	7	2.5	2.9	3.8	1,000	1,350	-	-
TSM10NC65CF	Planar	N-Channel	650	30	10	2.5	3.4	4.5	750	900	-	-
TSM10ND65CI	Planar	N-Channel	650	30	10	2.5	3	3.8	580	800	-	-
TSM70NB1R4CP	Super Junction G2	N-Channel	700	30	3	2	-	4	1,100	1,400	-	-
TSM70N900CP	Super Junction	N-Channel	700	30	4.5	2	3	4	830	900	-	-
TSM70N900CH	Super Junction	N-Channel	700	30	4.5	2	3	4	830	900	-	-
TSM70N900CI	Super Junction	N-Channel	700	30	4.5	2	3	4	850	900	-	-
TSM70N750CH	Super Junction	N-Channel	700	30	6	2	3	4	620	750	-	-
TSM70N750CP	Super Junction	N-Channel	700	30	6	2	3	4	620	750	-	-
TSM70N600CP	Super Junction	N-Channel	700	30	8	2	3	4	500	600	-	-
TSM70N600CH	Super Junction	N-Channel	700	30	8	2	3	4	500	600	-	-
TSM70N600CI	Super Junction	N-Channel	700	30	8	2	3	4	500	600	-	-
TSM70N600ACL	Super Junction	N-Channel	700	30	8	2	2.9	4	530	600	-	-
TSM70N380CP	Super Junction	N-Channel	700	30	11	2	3	4	330	380	-	-
TSM70N380CH	Super Junction	N-Channel	700	30	11	2	3	4	330	380	-	-
TSM70N380CI	Super Junction	N-Channel	700	30	11	2	3	4	330	380	-	-
TSM1N80CW	Planar	N-Channel	800	30	0.3	3	-	5	18,000	21,600	-	-
TSM3N80CH	Planar	N-Channel	800	30	3	2	-	4	3,300	4,200	-	-
TSM3N80CI	Planar	N-Channel	800	30	3	2	-	4	3,300	4,200	-	-
TSM3N80CP	Planar	N-Channel	800	30	3	2	-	4	3,300	4,200	-	-
TSM3N80CZ	Planar	N-Channel	800	30	3	2	-	4	3,300	4,200	-	-
TSM4N80CI	Planar	N-Channel	800	30	4	2	-	4	2,500	3,000	-	-
TSM4N80CZ	Planar	N-Channel	800	30	4	2	-	4	2,500	3,000	-	-
TSM80N1R2CH	Super Junction	N-Channel	800	30	5.5	2	-	4	900	1,200	-	-
TSM80N1R2CP	Super Junction	N-Channel	800	30	5.5	2	-	4	900	1,200	-	-
TSM80N1R2CL	Super Junction	N-Channel	800	30	5.5	2	-	4	900	1,200	-	-
TSM80N1R2CI	Super Junction	N-Channel	800	30	5.5	2	-	4	900	1,200	-	-
TSM80N950CH	Super Junction	N-Channel	800	30	6	2	-	4	800	950	-	-

Remark: The asterisk(\*) marked defining R<sub>DS(ON)</sub> parameter.

## MOSFETS - N-CANNEL

R <sub>DS(ON)</sub>				Q <sub>g</sub> (nC)		Q <sub>gs</sub>	Q <sub>gd</sub>	C <sub>iss</sub>	C <sub>oss</sub>	C <sub>rss</sub>	Package Description
@ 2.5V		@ 1.8V		@ 10V	@ 4.5V	(nC)	(nC)	(pF)	(pF)	(pF)	
Typ. (mΩ)	Max. (mΩ)	Typ. (mΩ)	Max. (mΩ)								
-	-	-	-	31	-	8	12.6	1,273	92	-	TO-263 (D <sup>2</sup> -PAK)
-	-	-	-	32	-	8	14	1,311	71	4	ITO-220S
-	-	-	-	32	-	10	14	1,311	80	4	PDFN1012 Dual
-	-	-	-	43	-	10	17	1,765	84	11	ITO-220S
-	-	-	-	62	-	17	25	2,587	123	20	TO-220
-	-	-	-	62	-	15	26	2,587	123	20	ITO-220S
-	-	-	-	62	-	17	25	2,587	123	20	TO-247
-	-	-	-	139	-	41	52	6,120	276	43	TO-247
-	-	-	-	16.8	-	2.7	7.6	596	38	1	ITO-220
-	-	-	-	24	-	7.6	9.4	1,169	59	5	ITO-220S
-	-	-	-	25	-	5.3	8.1	1,124	68	3	ITO-220
-	-	-	-	34	-	11	13	1,650	91	11	ITO-220S
-	-	-	-	39.6	-	8.1	12.5	1,863	108	9	ITO-220
-	-	-	-	7.4	-	1.8	2.4	317	42	-	TO-252 (D-PAK)
-	-	-	-	9.7	-	2.9	3.5	482	34	-	TO-252 (D-PAK)
-	-	-	-	9.7	-	2.9	3.5	482	34	-	TO-251 (I-PAK)
-	-	-	-	9.7	-	2.9	3.5	482	34	-	ITO-220
-	-	-	-	10.7	-	2.8	3.5	555	39	-	TO-251 (I-PAK)
-	-	-	-	10.7	-	2.8	3.5	555	39	-	TO-252 (D-PAK)
-	-	-	-	12.6	-	2.9	4.5	743	63	-	TO-252 (D-PAK)
-	-	-	-	12.6	-	2.9	4.5	743	63	-	TO-251 (I-PAK)
-	-	-	-	12.6	-	2.9	4.5	743	63	-	ITO-220
-	-	-	-	12.6	-	2.9	4.5	743	63	-	TO-262S (I <sup>2</sup> PAK SL)
-	-	-	-	18.8	-	3.7	5.6	981	58	-	TO-252 (D-PAK)
-	-	-	-	18.8	-	3.7	5.6	981	58	-	TO-251 (I-PAK)
-	-	-	-	18.8	-	3.7	5.6	981	58	-	ITO-220
-	-	-	-	6	-	1	2	155	20	2.7	SOT-223
-	-	-	-	19	-	4	7.6	696	65	10.2	TO-251 (I-PAK)
-	-	-	-	19	-	4	7.6	696	65	10.2	ITO-220
-	-	-	-	19	-	4	7.6	696	65	10.2	TO-252 (D-PAK)
-	-	-	-	19	-	4	7.6	696	65	10.2	TO-220
-	-	-	-	20	-	3.7	8.2	955	80	13	ITO-220
-	-	-	-	20	-	3.7	8.2	955	80	13	TO-220
-	-	-	-	19.4	-	3.4	9.6	685	62	-	TO-251 (I-PAK)
-	-	-	-	19.4	-	3.4	9.6	685	62	-	TO-252 (D-PAK)
-	-	-	-	19.4	-	3.4	9.6	685	62	-	TO-262 (I <sup>2</sup> PAK)
-	-	-	-	19.4	-	3.4	9.6	685	62	-	ITO-220
-	-	-	-	19.6	-	3.5	9.7	691	63	-	TO-251 (I-PAK)

PDFN1012



## MOSFETS - N-CANNEL

Part Number	Technology	Type	V <sub>DS</sub> (V)	V <sub>GS</sub> ± (V)	I <sub>D</sub> Max. (A)	V <sub>GS(th)</sub>			R <sub>DS(ON)</sub>			
						Min. (V)	Typ. (V)	Max. (V)	@ 10V		@ 4.5V	
									Typ. (mΩ)	Max. (mΩ)	Typ. (mΩ)	Max. (mΩ)
TSM80N950CP	Super Junction	N-Channel	800	30	6	2	-	4	800	950	-	-
TSM80N950CI	Super Junction	N-Channel	800	30	6	2	-	4	800	950	-	-
TSM8N80CI	Planar	N-Channel	800	30	8	2	-	4	1,100	1,400	-	-
TSM8N80CZ	Planar	N-Channel	800	30	8	2	-	4	1,100	1,400	-	-
TSM10N80CI	Planar	N-Channel	800	30	9.5	2	-	4	900	1,050	-	-
TSM10N80CZ	Planar	N-Channel	800	30	9.5	2	-	4	900	1,050	-	-
TSM80N400CF	Super Junction	N-Channel	800	30	12	2	3.3	4	300	400	-	-
TSM3N90CH	Planar	N-Channel	900	30	2.5	2	-	4	4,300	5,100	-	-
TSM3N90CI	Planar	N-Channel	900	30	2.5	2	-	4	4,300	5,100	-	-
TSM3N90CP	Planar	N-Channel	900	30	2.5	2	-	4	4,300	5,100	-	-
TSM3N90CZ	Planar	N-Channel	900	30	2.5	2	-	4	4,300	5,100	-	-
TSM4N90CI	Planar	N-Channel	900	30	4	2	-	4	3,200	4,000	-	-
TSM4N90CZ	Planar	N-Channel	900	30	4	2	-	4	3,200	4,000	-	-
TSM7N90CI	Planar	N-Channel	900	30	7	2	-	4	1,520	1,900	-	-
TSM7N90CZ	Planar	N-Channel	900	30	7	2	-	4	1,520	1,900	-	-
TSM9N90ECI	Planar	N-Channel	900	30	9	2	-	4	1,130	1,400	-	-
TSM9N90ECZ	Planar	N-Channel	900	30	9	2	-	4	1,130	1,400	-	-
TSM2N100CP	Planar	N-Channel	1,000	30	1.85	3.5	4.5	5.5	6,000	8,500	-	-
TSM2N100CH	Planar	N-Channel	1,000	30	1.85	3.5	4.5	5.5	6,000	8,500	-	-
TSM3N100CP	Planar	N-Channel	1,000	30	2.5	3.5	4.5	5.5	5,600	6,000	-	-

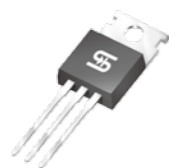
## MOSFETS - N-CANNEL

R <sub>DS(ON)</sub>				Q <sub>g</sub> (nC)		Q <sub>gs</sub> (nC)	Q <sub>gd</sub> (nC)	C <sub>iss</sub> (pF)	C <sub>oss</sub> (pF)	C <sub>rss</sub> (pF)	Package Description
@ 2.5V		@ 1.8V		@ 10V	@ 4.5V						
Typ. (mΩ)	Max. (mΩ)	Typ. (mΩ)	Max. (mΩ)								
-	-	-	-	19.6	-	3.5	9.7	691	63	-	TO-252 (D-PAK)
-	-	-	-	19.6	-	3.5	9.7	691	63	-	ITO-220
-	-	-	-	41	-	10	11	1,921	146	12	ITO-220
-	-	-	-	41	-	10	11	1,921	146	12	TO-220
-	-	-	-	53	-	10	23	2,336	214	29	ITO-220
-	-	-	-	53	-	10	23	2,336	214	29	TO-220
-	-	-	-	51	-	10	24	1,848	90	-	ITO-220S
-	-	-	-	17	-	2.4	6.6	748	55	8.7	TO-251 (I-PAK)
-	-	-	-	17	-	2.4	6.6	748	55	8.7	ITO-220
-	-	-	-	17	-	2.4	6.6	748	55	8.7	TO-252 (D-PAK)
-	-	-	-	17	-	2.4	6.6	748	55	8.7	TO-220
-	-	-	-	25	-	4.8	10.2	955	80	13	ITO-220
-	-	-	-	25	-	4.8	10.2	955	80	13	TO-220
-	-	-	-	49	-	7	20	1,969	133	11	ITO-220
-	-	-	-	49	-	7	20	1,969	133	11	TO-220
-	-	-	-	72	-	11	31	2,470	192	27	ITO-220
-	-	-	-	72	-	11	31	2,470	192	27	TO-220
-	-	-	-	17	-	5	9	625	38	15	TO-252 (D-PAK)
-	-	-	-	17	-	5	9	625	38	15	TO-251 (I-PAK)
-	-	-	-	19	-	6	10	664	40	17	TO-252 (D-PAK)

ITO-220



TO-220



TO-251 (IPAK)



TO-252 (DPAK)



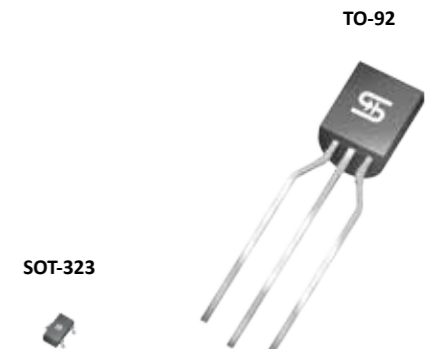
## BIPOLAR TRANSISTORS - NPN

(T<sub>A</sub>=25°C unless otherwise noted)

Part Number	Polarity	V <sub>CEO</sub>	V <sub>CBO</sub>	V <sub>EBO</sub>	I <sub>C</sub>	DC Current Gain (Min.)	DC Current Gain (Max.)	V <sub>CE</sub> (Sat.)	P <sub>D</sub>	T <sub>J</sub> Max.	Package Description
		(V)			(A)	h <sub>FE</sub>		(V)	(W)	(°C)	
BC338-16	NPN	25	30	5	0.8	100	250	0.7	0.625	150	TO-92
BC338-25	NPN	25	30	5	0.8	160	400	0.7	0.625	150	TO-92
BC338-40	NPN	25	30	5	0.8	250	630	0.7	0.625	150	TO-92
BC548A	NPN	30	30	6	0.1	110	220	-	0.5	150	TO-92
BC548B	NPN	30	30	6	0.1	200	450	-	0.5	150	TO-92
BC548C	NPN	30	30	6	0.1	420	800	-	0.5	150	TO-92
BC549A	NPN	30	30	6	0.1	110	220	-	0.5	150	TO-92
BC549B	NPN	30	30	6	0.1	200	450	-	0.5	150	TO-92
BC549C	NPN	30	30	6	0.1	420	800	-	0.5	150	TO-92
BC848A	NPN	30	30	5	0.1	110	220	0.5	0.2	150	SOT-23
BC848AW	NPN	30	30	5	0.1	110	220	0.77	0.2	150	SOT-323
BC848B	NPN	30	30	5	0.1	200	450	0.5	0.2	150	SOT-23
BC848BW	NPN	30	30	5	0.1	200	450	0.77	0.2	150	SOT-323
BC848C	NPN	30	30	5	0.1	420	800	0.5	0.2	150	SOT-23
BC848CW	NPN	30	30	5	0.1	420	800	0.77	0.2	150	SOT-323
BC849AW	NPN	30	30	5	0.1	110	220	0.77	0.2	150	SOT-323
BC849BW	NPN	30	30	5	0.1	200	450	0.77	0.2	150	SOT-323
BC849CW	NPN	30	30	5	0.1	420	800	0.77	0.2	150	SOT-323
MMBT3904	NPN	40	60	6	0.2	100	400	0.3	0.3	150	SOT-23
MMBT3904L	NPN	40	60	6	0.2	100	400	0.3	0.3	150	SOT-23
MMBT2222A	NPN	40	75	6	0.6	50	300	1	0.3	150	SOT-23
BC550A	NPN	45	50	6	0.1	110	220	-	0.5	150	TO-92
BC550B	NPN	45	50	6	0.1	200	450	-	0.5	150	TO-92
BC550C	NPN	45	50	6	0.1	420	800	-	0.5	150	TO-92
BC337-16	NPN	45	50	5	0.8	100	250	0.7	0.625	150	TO-92
BC337-25	NPN	45	50	5	0.8	160	400	0.7	0.625	150	TO-92
BC337-40	NPN	45	50	5	0.8	250	630	0.7	0.625	150	TO-92
BC547A	NPN	45	50	6	0.1	110	220	-	0.5	150	TO-92
BC547B	NPN	45	50	6	0.1	200	450	-	0.5	150	TO-92
BC547C	NPN	45	50	6	0.1	420	800	-	0.5	150	TO-92
BC817-16	NPN	45	50	5	0.5	100	250	0.7	0.3	150	SOT-23
BC817-16W	NPN	45	50	5	0.5	100	250	0.7	0.2	150	SOT-323
BC817-25	NPN	45	50	5	0.5	160	400	0.7	0.3	150	SOT-23
BC817-25W	NPN	45	50	5	0.5	160	400	0.7	0.2	150	SOT-323
BC817-40	NPN	45	50	5	0.5	250	600	0.7	0.3	150	SOT-23
BC817-40W	NPN	45	50	5	0.5	250	600	0.7	0.2	150	SOT-323
BC847A	NPN	45	50	6	0.1	110	220	0.5	0.2	150	SOT-23
BC847AW	NPN	45	50	6	0.1	110	220	0.77	0.2	150	SOT-323
BC847B	NPN	45	50	6	0.1	200	450	0.5	0.2	150	SOT-23
BC847BW	NPN	45	50	6	0.1	200	450	0.77	0.2	150	SOT-323
BC847C	NPN	45	50	6	0.1	420	800	0.5	0.2	150	SOT-23
BC847CW	NPN	45	50	6	0.1	420	800	0.77	0.2	150	SOT-323
BC850AW	NPN	45	50	5	0.1	110	220	0.77	0.2	150	SOT-323
BC850BW	NPN	45	50	5	0.1	200	450	0.77	0.2	150	SOT-323
BC850CW	NPN	45	50	5	0.1	420	800	0.77	0.2	150	SOT-323
KTC3198-BL	NPN	50	60	5	0.15	25-70	700	0.25	0.5	150	TO-92

## BIPOLAR TRANSISTORS - NPN

Part Number	Polarity	V <sub>CEO</sub>	V <sub>CBO</sub>	V <sub>EBO</sub>	I <sub>C</sub>	DC Current Gain (Min.)	DC Current Gain (Max.)	V <sub>CE</sub> (Sat.)	P <sub>D</sub>	T <sub>J</sub> Max.	Package Description
		(V)			(A)	h <sub>FE</sub>		(V)	(W)	(°C)	
KTC3198-GR	NPN	50	60	5	0.15	25-70	700	0.25	0.5	150	TO-92
KTC3198-O	NPN	50	60	5	0.15	25-70	700	0.25	0.5	150	TO-92
KTC3198-Y	NPN	50	60	5	0.15	25-70	700	0.25	0.5	150	TO-92
BC546A	NPN	65	80	6	0.1	110	220	-	0.5	150	TO-92
BC546B	NPN	65	80	6	0.1	200	450	-	0.5	150	TO-92
BC546C	NPN	65	80	6	0.1	420	800	-	0.5	150	TO-92
BC846A	NPN	65	80	6	0.1	110	220	0.5	0.2	150	SOT-23
BC846AW	NPN	65	80	6	0.1	110	220	0.77	0.2	150	SOT-323
BC846B	NPN	65	80	6	0.1	200	450	0.5	0.2	150	SOT-23
BC846BW	NPN	65	80	6	0.1	200	450	0.77	0.2	150	SOT-323
BC846CW	NPN	65	80	6	0.1	420	800	0.77	0.2	150	SOT-323
TSC497CX	NPN	300	300	5	500	20	300	0.2	0.5	150	SOT-23
TSC4505CX	NPN	400	400	6	0.3	100	270	0.5	-	-	SOT-23
TSC873CW	NPN	400	600	7	0.3	80	-	0.5	-	-	SOT-223
TSC966CW	NPN	400	600	7	0.3	100	300	0.5	-	-	SOT-223
TSC5304EDCP	NPN	400	700	9	4	8	25	3	-	-	TO-252 (D-PAK)
TSC5804DCH	NPN	450	1,050	15	5	25	100	2	-	-	TO-251 (I-PAK)
TSC5804DCP	NPN	450	1,050	15	5	25	100	2	-	-	TO-252 (D-PAK)



## BIPOLAR TRANSISTORS - PNP

(T<sub>A</sub>=25°C unless otherwise noted)

Part Number	Polarity	V <sub>CEO</sub>	V <sub>CBO</sub>	V <sub>EBO</sub>	I <sub>C</sub>	DC Current Gain (Min.)	DC Current Gain (Max.)	V <sub>CE (Sat.)</sub>	P <sub>D</sub>	T <sub>J</sub> Max.	Package Description
		(V)			(A)	h <sub>FE</sub>		(V)	(W)	(°C)	
BC858A	PNP	-30	-30	-5	-0.1	125	250	-0.65	0.2	150	SOT-23
BC858B	PNP	-30	-30	-5	-0.1	220	475	-0.65	0.2	150	SOT-23
BC858C	PNP	-30	-30	-5	-0.1	420	800	-0.65	0.2	150	SOT-23
TSA1036CX	PNP	-30	-40	-5	-0.6	82	560	-0.5	-	-	SOT-23
MMBT3906	PNP	-40	-40	-5	-0.2	100	300	-0.4	0.35	150	SOT-23
MMBT3906L	PNP	-40	-40	-5	-0.2	100	300	-0.4	0.35	150	SOT-23
BC807-16	PNP	-45	-50	-5	-0.5	100	250	-0.7	0.3	150	SOT-23
BC807-25	PNP	-45	-50	-5	-0.5	160	400	-0.7	0.3	150	SOT-23
BC807-40	PNP	-45	-50	-5	-0.5	250	600	-0.7	0.3	150	SOT-23
BC857A	PNP	-45	-50	-5	-0.1	125	250	-0.65	0.2	150	SOT-23
BC857B	PNP	-45	-50	-5	-0.1	220	475	-0.65	0.2	150	SOT-23
BC857C	PNP	-45	-50	-5	-0.1	420	800	-0.65	0.2	150	SOT-23
BC807-16W	PNP	-45	-50	-5	0.5	100	250	0.7	0.2	150	SOT-323
BC807-25W	PNP	-45	-50	-5	0.5	160	400	0.7	0.2	150	SOT-323
BC807-40W	PNP	-45	-50	-5	0.5	250	600	0.7	0.2	150	SOT-323
MMBT2907A	PNP	-60	-60	-5	-0.6	50	300	-0.4	0.35	150	SOT-23
BC856A	PNP	-65	-80	-5	-0.1	125	250	-0.65	0.2	150	SOT-23
BC856B	PNP	-65	-80	-5	-0.1	220	475	-0.65	0.2	150	SOT-23
TSA874CW	PNP	-500	-500	-5	-0.15	100	300	-0.5	-	-	SOT-223
TSA884CX	PNP	-500	-500	-5	-0.15	100	300	-0.5	-	-	SOT-23
TSA1765CW	PNP	-600	-560	-7	-0.15	80	300	-0.5	-	-	SOT-223

## DIGITAL TRANSISTOR - COMPLEX

(T<sub>A</sub>=25°C unless otherwise noted)

Part Number	Polarity	R <sub>1</sub>	R <sub>2</sub>	P <sub>D</sub>	I <sub>O</sub>	V <sub>CBO</sub>	V <sub>CEO</sub>	V <sub>EBO</sub>	G <sub>i</sub>	G <sub>o</sub>	GI @ IO	f <sub>T</sub> (Typ.)	T <sub>J</sub> Max.	Package Description
		(kΩ)		(mW)	(mA)	(V)			(Min.)	(Max.)	(mA)	(MHz)	(°C)	
UMH11N	NPN+NPN	13	1.2	150	50	-	-	-	30	-	5	250	150	SOT-363

SOT-223



SOT-23



SOT-363



## THYRISTORS

(T<sub>A</sub>=25°C unless otherwise noted)

Part Number	V <sub>DRM</sub> & V <sub>RRM</sub>	I <sub>TSM</sub>	P <sub>GM</sub>	V <sub>GRM</sub>	I <sub>DRM</sub> & I <sub>RRM</sub>	V <sub>TM</sub>	I <sub>GFM</sub>	Arrays	Packages Description
	(V)	(A)	(W)	(V)	(μA)	(V)	(A)		
MCR100-3	100	10	0.1	5	10	1.7	1	KGA	TO-92
MCR100-4	200	10	0.1	5	10	1.7	1	KGA	TO-92
MCR100-5	300	10	0.1	5	10	1.7	1	KGA	TO-92
MCR100-6	400	10	0.1	5	10	1.7	1	KGA	TO-92
MCR100-7	500	10	0.1	5	10	1.7	1	KGA	TO-92
MCR100-8	600	10	0.1	5	10	1.7	1	KGA	TO-92

## AMPLIFIERS

(T<sub>A</sub>=25°C unless otherwise noted)

Part Number	Channel	Supply Voltage (V <sub>CC</sub> )		Supply Current per Channel (V <sub>CC</sub> )		Input Offset Voltage		Input Bias Current		Gain Bandwidth Product	Slew Rate	Output Current Source (Typ.)	Package Description
		(Min.)	(Max.)	(Min.)	(Max.)	(Min.)	(Max.)	(Min.)	(Max.)				
		(V)	(V)	(mA)	(mA)	(mV)	(mV)	(nA)	(nA)	(MHz)	(V/μs)	(mA)	
TS321CX5	1	-	32	0.7	1.2	2	7	45	50	1	0.4	40	SOT-25
TS358CD	2	-	32	0.7	1.2	2	7	-45	-250	1	0.4	40	DIP-8
TS358CS	2	-	32	0.7	1.2	2	7	-45	-250	1	0.4	40	SOP-8
TS34119CS	1	2	16	-	-	-	-	-200	-	1.5	-	-	SOP-8
TS34118CS28	1	3.5	6.5	5.5	8	-	-	-40	-	1	-	-	SOP-28

## COMPARATORS

(T<sub>A</sub>=25°C unless otherwise noted)

Part Number	Channel	Supply Voltage (V <sub>CC</sub> )		Supply Current per Channel (V <sub>CC</sub> )		Input Offset Voltage		Input Bias Current (Typ.)		Response Time	Input Common Mode Voltage Range		Package Description
		(Min.)	(Max.)	(Min.)	(Max.)	(Min.)	(Max.)	(Min.)	(Max.)				
		(V)	(V)	(mA)	(mA)	(mV)	(mV)	(nA)	(nA)	(μs)	(V)	(V)	
TS331CX5	1	-	36	0.4	1	2	5	-	250	1.3	-	1.5	SOT-25
TS393CD	2	-	36	0.4	1	2	5	-	250	1.3	-	1.5	DIP-8
TS393CS	2	-	36	0.4	1	2	5	-	250	1.3	0.4	40	SOP-8

SOT-25



SOP-8



DIP-8



SOP-28





## ANALOG ICS - RESET IC

(T<sub>A</sub>=25°C unless otherwise noted)

Part Number	Supply Voltage (V <sub>cc</sub> )		Reset Output Type	Reset Threshold Voltage V <sub>th</sub> (Typ.)	Supply Current I <sub>cc</sub>	Accuracy of Reset Threshold Voltage V <sub>th</sub>	Package Description
	(Min.)	(Max.)					
	(V)						
TS3809CXD	1	6	Active-Low, Push-pull	3.08	25	2	SOT-23
TS3809CXE	1	6	Active-Low, Push-pull	2.93	25	2	SOT-23
TS3809CXF	1	6	Active-Low, Push-pull	2.63	25	2	SOT-23

## HALL EFFECT SENSORS

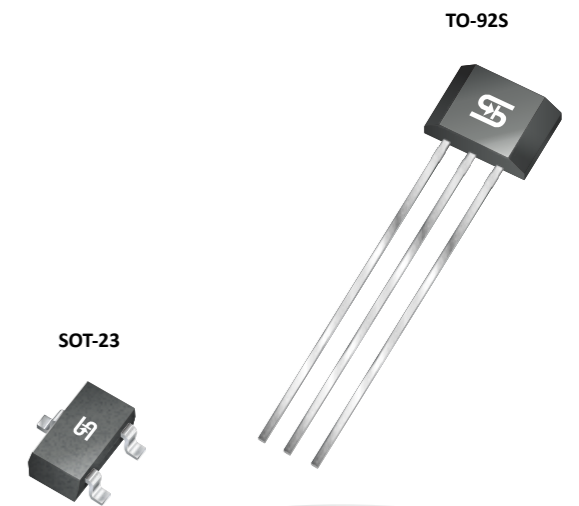
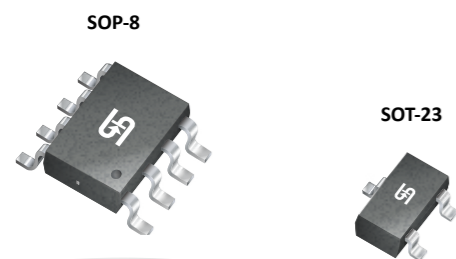
(T<sub>A</sub>=25°C unless otherwise noted)

Part Number	Type	Supply Voltage (V <sub>cc</sub> )		Output Current	Supply Current	Magnetic Field Operating Point (B <sub>op</sub> )		Magnetic Field Release Point (B <sub>rp</sub> )		Package Description
		Min. (V)	Max. (V)			Min. (G)	Max. (G)	Min. (G)	Max. (G)	
		(mA)				(mA)		(G)		
TSH251CT	Omni-Polar	1.65	3.5	1	1.4	-55	55	10	-10	TO-92S
TSH251CX	Omni-Polar	1.65	3.5	1	1.4	-55	55	10	-10	TSOT-23
TSH253CT	Omni-Polar	1.8	6	1	2.6	-60	60	5	-5	TO-92S
TSH253CX	Omni-Polar	1.8	6	1	2.6	-60	60	5	-5	SOT-23
TSH248CX	Omni-Polar	2.5	3.5	2	2.5	6	60	5	59	TSOT-23
TSH282CT	Unipolar	3	24	50	2.5	45	100	25	70	TO-92S
TSH282CX	Unipolar	3	24	50	2.5	45	100	25	70	SOT-23
TSH193CT	Latch	2.5	16	13	-	5	25	-25	-5	TO-92S
TSH193CX	Latch	2.5	16	13	-	5	25	-25	-5	SOT-23
TSH181CT	Latch	3.5	20	25	4	5	90	-90	-5	TO-92S
TSH190CT	Latch	4	30	25	3	10	110	-110	-10	TO-92S
TSH190CX	Latch	4	30	25	3	10	110	-110	-10	SOT-23
TSH188CT	Latch	2.5	24	50	5	5	25	-25	-5	TO-92S
TSH188CX	Latch	2.5	24	50	5	5	25	-25	-5	SOT-23
TSH481CT	Linear	3	6.5	10	2.5	-800	800	-	-	TO-92S

## ANALOG ICS - AMPLIFIER AND VOLTAGE REFERENCE

(T<sub>A</sub>=25°C unless otherwise noted)

Part Number	Supply Voltage (V <sub>cc</sub> )		Input Offset Voltage	Reference Voltage V <sub>ref</sub>	Accuracy of Reference Voltage V <sub>ref</sub>	Package Description
	(Min.)	(Max.)				
	(V)					
TS103ACS	3	18	2	2.5	1	SOP-8



## LED DRIVERS

(T<sub>A</sub>=25°C unless otherwise noted)

★ =AEC-Q100 qualified

Part Number	Topology	Active PFC	Supply Voltage (V <sub>cc</sub> )		Switch Output Current I <sub>sw</sub> (Typ.)		Dimming			Switching Frequency		Package Description
			(Min.)	(Max.)	A	PWM	LINEAR	TRIAC	(Min.)	(Max.)		
			(V)						(kHz)			
TS19375CS	Boost (Step-up)	-	3	24	-	External N-MOS	YES	-	-	400	600	SOP-8
TS19371CX6	Boost (Step-up)	-	2.5	18	0.65	-	YES	-	-	800	1,600	SOT-26
TS19501CB10	Boost, Buck-Boost, SEPIC	-	4.5	42	-	External N-MOS	YES	-	-	70	700	MSOP-10EP
TS19501CB10H ★	Boost, Buck-Boost, SEPIC	-	4.5	42	-	External N-MOS	YES	-	-	70	700	MSOP-10EP
TS19451CY	Buck (Step-down)	-	20	475	0.05	-	-	-	-	-	-	SOT-89
TS19452CS	Buck (Step-down)	-	20	475	0.1	-	-	-	-	-	-	SOP-8
TS19720CX6	Buck (Step-down)	Yes	8.0	40	-	External N-MOS	-	-	-	30	200	SOT-26
TS19721ACS	Buck (Step-down)	Yes	8.0	40	-	-	-	-	-	30	200	SOP-8
TS19721DCS	Buck (Step-down)	Yes	8.0	40	-	-	-	-	-	30	200	SOP-8
TS19751ACS	Buck (Step-down)	-	8.0	40	-	-	-	-	-	30	200	SOP-8
TS19377CS	Buck (Step-down)	-	3.6	23	2	-	-	-	-	-	330	SOP-8
TS19378CS	Buck (Step-down)	-	8	40	2	-	YES	-	-	-	300	SOP-8
TS19376CY5	Buck (Step-down)	-	8	32	1	-	YES	-	-	-	1,000	SOT-89-5L
TS19450CS	Buck (Step-down)	-	8	450	-	External N-MOS	YES	YES	-	-	-	SOP-8
TS19460CS	Buck (Step-down)	-	8	450	-	External N-MOS	YES	YES	-	-	-	SOP-8
TS19820CS	Buck (Step-down)	Yes	9.5	30.5	-	External N-MOS	YES	YES	-	30	200	SOP-8
TS19730CX6	Buck-Boost	Yes	8.0	40	-	External N-MOS	-	-	-	30	200	SOT-26
TS19830CS	Buck-Boost	Yes	8.0	40	-	-	-	-	YES	30	200	SOP-8
TSCR400CX6	Linear	-	-	40	0.1-65	-	-	-	-	-	-	SOT-26
TSCR402CX6	Linear	-	-	40	20-65	-	-	-	-	-	-	SOT-26
TSCR420CX6	Linear	-	-	40	10-300	-	-	-	-	-	-	SOT-26
TSCR420CX6H ★	Linear	-	-	40	10-300	-	-	-	-	-	-	SOT-26
TSCR400CX6H ★	Linear	-	-	40	0.1-65	-	-	-	-	-	-	SOT-26
TSCR402CX6H ★	Linear	-	-	40	20-65	-	-	-	-	-	-	SOT-26
TS19601CP5	Linear	-	5	50	-	Adj~700	YES	-	-	-	-	TO-252-5L (PPAK)
TS19603CS	Linear	-	5	50	-	Adj~400	YES	-	-	-	-	SOP-8EP
TSCR421CX6	Linear	-	-	4.5	10-300	-	YES	-	-	-	-	SOT-26
TSCR421CX6H ★	Linear	-	-	4.5	10-300	-	YES	-	-	-	-	SOT-26
TS19705CX6	PSR FlyBack/Buck-Boost	Yes	7.8	40	-	External N-MOS	-	-	-	30	200	SOT-26
TS19706CS	PSR FlyBack/Buck-Boost	Yes	7.8	40	-	-	-	-	-	30	200	SOP-8
TS19320CS	PSR FlyBack/Buck-Boost	Yes	7.8	40	-	External N-MOS	-	-	YES	30	200	SOP-8
TS19340CS14	Secondary Side Controller	-	7.6	38	-	-	YES	YES	-	-	-	SOP-14

## LINEAR VOLTAGE REGULATORS

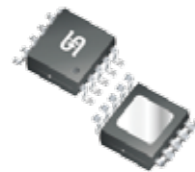
(T<sub>A</sub>=25°C unless otherwise noted)

Part Number	Supply Voltage (V <sub>cc</sub> )		Output Voltage (V <sub>out</sub> )	Adjustable	Reference Voltage V <sub>ref</sub>	Output Current I <sub>out</sub> (Typ.)	Dropout Voltage V <sub>drop</sub> (Typ.)	Quiescent Current I <sub>q</sub> (Typ.)	Output Voltage Accuracy	Package Description
	(Min.)	(Max.)								
	(V)		(V)	(V)	(V)	(A)	(μA)	(± %)		
TS1117BCP	-	15	-	Yes	1.25	1	1.3	5,000	2	TO-252 (D-PAK)
TS1117BCP33	-	15	3.3	-	-	1	1.3	5,000	2	TO-252 (D-PAK)
TS1117BCP50	-	15	5	-	-	1	1.3	5,000	2	TO-252 (D-PAK)
TS1117BCW	-	15	-	Yes	1.25	1	1.3	5,000	2	SOT-223
TS1117BCW12	-	15	1.2	-	-	1	1.3	5,000	2	SOT-223
TS1117BCW25	-	15	2.5	-	-	1	1.3	5,000	2	SOT-223
TS1117BCW33	-	15	3.3	-	-	1	1.3	5,000	2	SOT-223
TS1117BCW50	-	15	5	-	-	1	1.3	5,000	2	SOT-223
TS2937CM33	-	26	3.3	-	-	0.5	0.6	2,500	2	TO-263AB (D <sup>2</sup> -PAK)
TS2937CM50	-	26	5	-	-	0.5	0.6	2,500	2	TO-263AB (D <sup>2</sup> -PAK)
TS2937CP33	-	26	3.3	-	-	0.5	0.6	2,500	2	TO-252 (D-PAK)
TS2937CP50	-	26	5	-	-	0.5	0.6	2,500	2	TO-252 (D-PAK)
TS2937CW33	-	26	3.3	-	-	0.5	0.6	2,500	2	SOT-223
TS2937CW50	-	26	5	-	-	0.5	0.6	2,500	2	SOT-223
TS2937CZ33	-	26	3.3	-	-	0.5	0.6	2,500	2	TO-220
TS2937CZ50	-	26	5	-	-	0.5	0.6	2,500	2	TO-220
TS2938CS33	-	26	3.3	-	-	0.5	0.5	2,500	2	SOP-8
TS2938CS50	-	26	5	-	-	0.5	0.5	2,500	2	SOP-8
TS2940CM33	-	26	3.3	-	-	1	0.6	7,500	2	TO-263AB (D <sup>2</sup> -PAK)
TS2940CM50	-	26	5	-	-	1	0.6	7,500	2	TO-263AB (D <sup>2</sup> -PAK)
TS2940CP33	-	26	3.3	-	-	1	0.6	7,500	2	TO-252 (D-PAK)
TS2940CP50	-	26	5	-	-	1	0.6	7,500	2	TO-252 (D-PAK)
TS2940CW33	-	26	3.3	-	-	1	0.6	7,500	2	SOT-223
TS2940CW50	-	26	5	-	-	1	0.6	7,500	2	SOT-223
TS2940CZ33	-	26	3.3	-	-	1	0.6	7,500	2	TO-220
TS2940CZ50	-	26	5	-	-	1	0.6	7,500	2	TO-220
TS2951CS30	-	30	3.0	-	-	0.15	0.38	8,000	1.5	SOP-8
TS2951CS33	-	30	3.3	-	-	0.15	0.38	8,000	1.5	SOP-8
TS2951CS50	-	30	5	-	-	0.15	0.38	8,000	1.5	SOP-8
TS317CM	-	40	-	Yes	1.25	1	2	-	4	TO-263AB (D <sup>2</sup> -PAK)
TS317CP	-	40	-	Yes	1.25	0.5	2	-	4	TO-252 (D-PAK)
TS317CW	-	40	-	Yes	1.25	0.5	2	-	4	SOT-223
TS317CZ	-	40	-	Yes	1.25	1	2	-	4	TO-220
TS317LCS	-	40	-	Yes	1.25	0.1	2	-	4	SOP-8
TS3480CX33	-	30	3.3	-	-	0.1	0.95	3,000	2	SOT-23
TS3480CX50	-	30	5	-	-	0.1	0.95	3,000	2	SOT-23
TS39104CS	-	20	-	Yes	1.25	1	0.4	1,700	2	SOP-8
TS4264CW50	-	45	5	-	-	0.15	0.25	10,000	2	SOT-223
TS4264GCW50	-	45	5	-	-	0.15	0.25	1,700	2	SOT-223
TS5204CQ33	-	20	3.3	-	-	0.08	0.3	2,600	3	DFN 22
TS5204CX33	-	20	3.3	-	-	0.08	0.3	2,600	4	SOT-23
TS5204CX50	-	20	5	-	-	0.08	0.3	2,600	4	SOT-23
TS5204CY50	-	20	5	-	-	0.08	0.3	2,600	4	SOT-89
TS5205CX5	-	20	-	Yes	1.25	0.15	0.165	1,300	2	SOT-25

SOP-14



MSOP-10EP



SOT-26



## LINEAR VOLTAGE REGULATORS

Part Number	Supply Voltage (V <sub>cc</sub> )		Output Voltage (V <sub>out</sub> )	Adjustable	Reference Voltage V <sub>ref</sub>	Output Current I <sub>out</sub> (Typ.)	Dropout Voltage V <sub>drop</sub> (Typ.)	Quiescent Current I <sub>q</sub> (Typ.)	Output Voltage Accuracy	Package Description
	(Min.)	(Max.)								
(V)		(V)	(V)	(V)	(A)	(V)	(μA)	(± %)		
TS5205CX525	-	20	2.5	-	-	0.15	0.165	1,300	2	SOT-25
TS5205CX533	-	20	3.3	-	-	0.15	0.165	1,300	2	SOT-25
TS5205CX550	-	20	5	-	-	0.15	0.165	1,300	2	SOT-25
TS5213CX533	-	20	3.3	-	-	0.08	0.32	1,800	3	SOT-25
TS5213CX550	-	20	5	-	-	0.08	0.32	1,800	3	SOT-25
TS7805CZ	-	35	5	-	-	1	2	4,300	4	TO-220
TS7809CZ	-	35	9	-	-	1	2	4,300	4	TO-220
TS7812CZ	-	35	12	-	-	1	2	4,300	4	TO-220
TS7824CZ	-	40	24	-	-	1	2	4,300	4	TO-220
TS78L03ACY	-	30	3.0	-	-	0.1	2	3,000	4	SOT-89
TS78L03CS	-	30	3.0	-	-	0.1	2	3,000	4	SOP-8
TS78L03CX	-	30	3.0	-	-	0.1	2	3,000	4	SOT-23
TS78L05ACY	-	35	5	-	-	0.1	2	3,000	4	SOT-89
TS78L05CS	-	35	5	-	-	0.1	2	3,000	4	SOP-8
TS78L05CX	-	35	5	-	-	0.1	2	3,000	4	SOT-23
TS78L09ACY	-	35	9	-	-	0.1	2	3,000	4	SOT-89
TS78L09CS	-	35	9	-	-	0.1	2	3,000	4	SOP-8
TS78L09CX	-	35	9	-	-	0.1	2	3,000	4	SOT-23
TS78L12ACY	-	35	12	-	-	0.1	2	3,000	4	SOT-89
TS78L12CS	-	35	12	-	-	0.1	2	3,000	4	SOP-8
TS78L15ACY	-	35	15	-	-	0.1	2	3,000	4	SOT-89
TS78L15CS	-	35	15	-	-	0.1	2	3,000	4	SOP-8
TS78L24CS	-	40	24	-	-	0.1	2	3,000	4	SOP-8
TS78M05ACP	-	35	5	-	-	0.5	2	3,000	2	TO-252 (D-PAK)
TS78M05CP	-	35	5	-	-	0.5	2	3,000	4	TO-252 (D-PAK)
TS78M12CP	-	35	12	-	-	0.5	2	3,000	4	TO-252 (D-PAK)
TS79L05CY	-	-35	-5	-	-	1	2	4,000	4	SOT-89
TS79M05CP	-	-35	-5	-	-	0.5	2	4,000	4	TO-252 (D-PAK)
TS79M12CP	-	-35	-12	-	-	0.5	2	4,000	4	TO-252 (D-PAK)
TS90115CX	-	12	5	-	-	0.25	0.4	2	2	SOT-23
TS90115CY	-	12	5	-	-	0.25	0.4	2	2	SOT-89
TS9011DCX	-	12	1.8	-	-	0.25	0.4	2	2	SOT-23
TS9011DCY	-	12	1.8	-	-	0.25	0.4	2	2	SOT-89
TS9011KCX	-	12	2.5	-	-	0.25	0.4	2	2	SOT-23
TS9011KCY	-	12	2.5	-	-	0.25	0.4	2	2	SOT-89
TS9011SCX	-	12	3.3	-	-	0.25	0.4	2	2	SOT-23
TS9011SCY	-	12	3.3	-	-	0.25	0.4	2	2	SOT-89
TS90135CW	-	12	5	-	-	0.5	0.3	15	2	SOT-223
TS9013KCW	-	12	2.5	-	-	0.5	0.6	15	2	SOT-223
TS9013SCW	-	12	3.3	-	-	0.5	0.5	15	2	SOT-223
TS9013SCY	-	12	3.3	-	-	0.5	0.5	15	2	SOT-89
TS9015CX5	2	7	-	Yes	0.9	0.3	0.3	50	2	SOT-25

## SWITCHING REGULATORS

(T<sub>A</sub>=25°C unless otherwise noted)

Part Number	Topology	Synchronous Rectification	Supply Voltage (V <sub>cc</sub> )		Fixed Output Voltage (V <sub>out</sub> )	Adjustable Output Voltage (V <sub>out</sub> )	Switch Output Current I <sub>SW</sub> (Typ.)		Switching Frequency		Quiescent Current (Typ.)	Package Description
			(Min.)	(Max.)			(A)	(A)	(Min.)	(Max.)		
			(V)	(V)	(V)	(V)	(kHz)	(mA)				
TS1935BCX5	Boost (Step-up)	No	2.7	5.5	-	Adj (1.238V Vref)	1.9	-	-	1,200	0.15	SOT-25
TS2509CS	Buck (Step-down)	No	4.5	23	-	Adj (0.8V Vref)	3	-	-	500	3	SOP-8
TS2581CS	Buck (Step-down)	No	4.5	40	-	Adj (1V Vref)	-	External P-MOS	-	100	3	SOP-8
TS2596CM5	Buck (Step-down)	No	4.5	40	-	Adj (1.23V Vref)	3	-	-	150	5	TO-263-5L (D <sup>2</sup> -PAK)
TS2596CM533	Buck (Step-down)	No	4.5	40	3.3	-	3	-	-	150	5	TO-263-5L (D <sup>2</sup> -PAK)
TS2596CM550	Buck (Step-down)	No	4.5	40	5.0	-	3	-	-	150	5	TO-263-5L (D <sup>2</sup> -PAK)
TS2596SCS	Buck (Step-down)	No	4.5	24	-	Adj (1.23V Vref)	2	-	-	150	4	SOP-8
TS2596SCS50	Buck (Step-down)	No	4.5	24	5.0	-	2	-	-	150	4	SOP-8
TS34063CS	Buck (Step-down)	No	3	40	-	Adj (1.25V Vref)	1.5	-	0.1	100	3	SOP-8
TS3410CX5	Buck (Step-down)	Yes	2.5	6	-	Adj (0.6V Vref)	1	-	-	1,400	0.25	SOT-25
TS3552CS	Buck (Step-down)	Yes	4.75	23	-	Adj (0.925V Vref)	2	-	-	350	-	SOP-8



## VOLTAGE REFERENCES

(T<sub>A</sub>=25°C unless otherwise noted)

Part Number	Supply Voltage (V <sub>cc</sub> )		Reference Voltage V <sub>ref</sub>	Accuracy of Reference Voltage V <sub>ref</sub>	Operating Cathode Current I <sub>ka</sub>		Operating Temperature T <sub>j</sub>		Package Description
	(Min.)	(Max.)			(Typ.)	(Max.)	(Min.)	(Max.)	
	(V)				(mA)		(°C)		
TS432BCX	-	18	1.24	0.5	0.02	0.08	0	70	SOT-23
TS432BIX	-	18	1.24	0.5	0.02	0.08	-40	85	SOT-23
TS431BCS	-	37	2.495	0.5	0.4	0.60	0	70	SOP-8
TS431BCX	-	37	2.495	0.5	0.4	0.60	0	70	SOT-23
TS431BRIX-Z	-	36	2.495	0.5	0.2	0.50	-40	125	SOT-23
TS432ACX	-	18	1.24	1	0.02	0.08	0	70	SOT-23
TS432AIX	-	18	1.24	1	0.02	0.08	-40	105	SOT-23
TS431ACS	-	37	2.495	1	0.4	0.60	0	70	SOP-8
TS431ACX	-	37	2.495	1	0.4	0.60	0	70	SOT-23
TS431ARCX-Z	-	36	2.495	1	0.2	0.50	-20	85	SOT-23
TS431ARIX-Z	-	36	2.495	1	0.2	0.50	-40	125	SOT-23

## TUBE PACKING

Outline (Package)	Tube (pc)	Inner Box (pc)	Carton (pc)	Carton Size (mm)	Gross Weight (kg/Carton)	Packing Code
D3K	25	1,500	6,000	411x340x214	15.8	C2
DBL	50	5,000	20,000	482x350x335	18.8	C1
DBL	50	2,500	10,000	490x295x175	8.2	CB
DBLS	50	10,000	40,000	482x350x335	28.2	C1
DIP-14	25	1,000	10,000	560x310x275	19.84	C4
DIP-16	25	5,000	10,000	580x345x250	21	C4
DIP-4	100	2,500	30,000	545x372x210	16	C9
DIP-4M	100	2,500	30,000	545x372x210	16	C9
DIP-8	50	2,000	20,000	560x310x275	19.42	C3
GBL	25	1,200	2,400	580x193x205	10.2	C2
GBL	25	1,200	2,400	580x193x205	10.2	D2
GBL	25	1,000	2,000	540x165x210	9.1	X0
GBU	20	1,000	2,000	501x195x260	13.6	C2
GBU	20	1,000	2,000	501x195x260	13.6	D2
GBU	20	1,000	2,000	501x195x260	12.6	X0
I <sup>2</sup> PAK	50	3,000	6,000	565x178x185	13	C1
I <sup>2</sup> PAK	50	2,000	4,000	565x175x185	10.4	C0
ITO-220	50	2,000	4,000	565x178x185	11.53	C0
ITO-220-4L	50	2,000	8,000	628x355x230	21.8	C0
ITO-220AB	50	2,000	4,000	580x193x205	11.5	C0
ITO-220AB	50	2,000	4,000	580x193x205	11.5	D0
ITO-220AC	50	2,000	4,000	580x193x205	11.5	C0
ITO-220AC	50	2,000	4,000	580x193x205	11.5	D0
ITO-220PB	50	2,000	4,000	565x175x185	10.85	C0
ITO-220PB	50	2,000	8,000	585x308x175	19.9	CA
ITO-220S	50	2,000	8,000	600x350x195	21.6	C0
KBJ	20	1,000	2,000	570x219x227	13.5	D3
KBJ	20	1,000	2,000	555x312x165	12.4	X0
KBJL	20	1,000	2,000	565x200x185	11.2	D3
KBP	25	1,000	4,000	420x305x195	12.4	C2
KBP	25	1,000	4,000	420x305x195	12.2	X0
KBP	25	1,000	4,000	420x305x195	12.2	X0
KBPF	35	2,100	4,200	570x300x110	10	C8
SOP-28	25	1,500	15,000	420x305x195	28.4	C8
TO-126	50	2,000	20,000	420x230x365	16	C0
TO-220	50	2,000	8,000	630x355x230	28	C0
TO-220-5L	50	2,000	8,000	630x355x233	26	C0
TO-220-7L	50	2,000	8,000	630x355x230	28	C0
TO-220AB	50	2,000	4,000	580x193x205	11.6	C0
TO-220AB	50	2,000	4,000	565x175x185	11.6	D0
TO-220ABC	50	2,000	4,000	565x175x185	11.65	C0
TO-220AC	50	2,000	4,000	580x193x205	11.6	C0
TO-220AC	50	2,000	4,000	565x175x185	11.6	D0
TO-247	25	500	2,000	465x427x108	17.22	C1
TO-247AC Modified	30	900	1,800	540x161x250	15	C0
TO-247AD (TO-3P)	30	900	1,800	540x161x250	15.2	C0

SOP-8



SOT-23



## PACKING CODE LIST

Outline (Package)	Tube (pc)	Inner Box (pc)	Carton (pc)	Carton Size (mm)	Gross Weight (kg/Carton)	Packing Code
TO-251 (I-PAK)	75	3,750	30,000	585x350x315	15	C5
TO-251S (I-PAK SL)	75	3,750	30,000	585x350x315	15	X0
TO-251uS (I-PAK uSL)	75	3,750	30,000	585x350x315	15	X1
TO-262 (I <sup>2</sup> PAK)	50	2,000	4,000	565x178x185	8.3	C0
TO-262S	50	2,000	4,000	565x178x185	8.3	X0
TO-263AB (D <sup>2</sup> -PAK)	50	2,000	4,000	565x178x185	11.3	C0
TS4B	20	1,000	2,000	570x219x227	14	C2
TS4B	20	1,000	2,000	570x219x227	14	D2
TS4B	20	1,000	2,000	570x219x227	12.64	X0
TS4K	20	1,000	2,000	570x219x227	13.5	D3
TS4K	20	1,000	2,000	555x312x165	12.4	X0
TS-6P	15	1,200	1,200	505x195x200	12.8	C2
TS-6P	15	1,200	1,200	505x195x200	12.8	D2
TS-6P	15	750	1,500	505x315x150	17.5	C7
TS-6P	15	1,200	1,200	505x195x200	13	X0
TS-6PL	15	750	1,500	500x265x137	11	C6

Remark :

All the dimensions and weights mentioned above are described for your reference only; The actual measurement is subject to final confirmation.

## PACKING CODE LIST

### REEL PACKING

Outline (Package)	Reel (pc)	Inner Box (pc)	Carton (pc)	Carton Size (mm)	Gross Weight (kg/Carton)	Reel Size (inch)	Packing Code
0503	4,000	20,000	120,000	397x216x232	3.6	7	RG
0603	4,000	20,000	120,000	397x216x232	3.7	7	RG
0805	10,000	20,000	100,000	380x360x260	4.7	13	RB
0805	5,000	30,000	150,000	395x220x235	7	7	RY
1005	4,000	20,000	120,000	397x216x232	4	7	RW
1206	10,000	20,000	100,000	380x360x260	5.0	13	RA
1206	5,000	30,000	150,000	395x220x235	7.5	7	RX
0603 (Ceramics)	10,000	20,000	100,000	380x360x260	6.4	13	RC
0603 (Ceramics)	5,000	30,000	150,000	395x220x235	5.7	7	RZ
0603-B	4,000	20,000	120,000	397x216x232	3.7	7	RG
0805 (Ceramics)	10,000	20,000	100,000	380x360x260	6.7	13	RB
0805 (Ceramics)	5,000	30,000	150,000	395x220x235	6.2	7	RY
1206 (Ceramics)	10,000	20,000	100,000	380x360x260	7.1	13	RA
1206 (Ceramics)	5,000	30,000	150,000	395x220x235	6.6	7	RX
2510P10 (DSON10)	3,000	18,000	108,000	385x270x217	5	7	RD
A-405	5,000	-	20,000	355x355x363	7.7	13	R0
ABF	4,000	8,000	64,000	365x365x360	13.2	13	RB
ABS	1,000	4,000	20,000	385x210x230	6	7	RE
ABS	5,000	10,000	50,000	360x355x245	13	13	RG
ABS-L	1,000	4,000	20,000	385x210x230	5.7	7	RE
ABS-L	5,000	10,000	50,000	360x355x245	12.2	13	RG
Clip SMA	7,500	15,000	75,000	360x356x230	11.1	13	E2
Clip SMA	1,800	7,200	36,000	390x210x230	6	7	E3
DBLS	1,500	3,000	21,000	380x355x383	16.6	13	RD
DFN1006 (0402)	5,000	30,000	180,000	385x270x217	4	7	RJ
DFN1006L	5,000	30,000	180,000	385x270x217	4	7	RJ
DFN22	3,000	12,000	144,000	485x410x355	10	7	RF
DO-201	1,250	-	5,000	355x355x363	7.7	13	R0
DO-201AD	1,250	-	5,000	355x355x363	8.8	13	R0
DO-204AC (DO-15)	3,500	-	14,000	355x355x363	8.7	13	R0
DO-204AL (DO-41)	5,000	-	20,000	355x355x363	10	13	R0
DO-204AL (DO-41)	5,000	-	20,000	355x355x363	10	13	R1
DO-204AL (DO-41)	5,000	5,000	25,000	375x375x425	9.6	14	R0
DO-214AA (SMB)	3,000	6,000	30,000	360x355x245	8.2	13	M4
DO-214AA (SMB)	3,000	6,000	30,000	360x355x245	8.4	13	R4
DO-214AA (SMB)	850	3,400	17,000	385x210x230	5	7	R5
DO-214AB (SMC)	3,000	6,000	30,000	360x355x245	13.2	13	M6
DO-214AB (SMC)	3,000	6,000	30,000	360x355x245	13.4	13	R6
DO-214AB (SMC)	850	3,400	17,000	385x210x230	7.5	7	R7
DO-214AC (SMA)	7,500	15,000	75,000	360x355x245	10.8	13	M2
DO-214AC (SMA)	7,500	15,000	75,000	360x355x245	11.1	13	R2
DO-214AC (SMA)	1,800	7,200	36,000	385x210x230	6	7	R3
DO-218AB	750	750	3,750	360x355x245	13	13	MA
DO-34	10,000	10,000	50,000	375x375x425	9.26	14	R0
DO-35	10,000	10,000	50,000	375x375x425	9.56	14	R0
Folded SMA	7,500	15,000	75,000	360x355x245	11.1	13	F2

## PACKING CODE LIST

Outline (Package)	Reel (pc)	Inner Box (pc)	Carton (pc)	Carton Size (mm)	Gross Weight (kg/Carton)	Reel Size (inch)	Packing Code
Folded SMA	1,800	7,200	36,000	385x210x230	6	7	F3
Folded SMA	7,500	15,000	75,000	360x355x245	10.9	13	F4
Matrix SMC	3,000	6,000	30,000	360x355x245	13.2	13	V6
Matrix SMC	850	3,400	17,000	385x210x230	7.5	7	V7
MBS	3,000	6,000	48,000	355x355x363	17.7	13	RC
MBS	3,000	6,000	48,000	355x355x363	17.7	13	MC
MELF	5,000	10,000	30,000	360x355x233	11	13	L0
MELF (Plastic)	5,000	10,000	50,000	360x356x230	12	13	L0
Micro SMA	3,000	18,000	90,000	390x210x230	4.3	7	RS
Micro SMA	12,000	24,000	120,000	360x356x230	5.66	13	MS
MMELF	2,500	15,000	90,000	385x270x217	5.79	7	L1
MMELF	10,000	30,000	150,000	360x355x233	9.94	13	L0
MSOP-08	1,000	5,000	30,000	385x270x217	4.5	7	RM
MSOP-10	1,000	5,000	30,000	385x270x217	4.5	7	RO
MSOP-10EP	5,000	5,000	45,000	385x375x390	7.83	13	RB
P2500	800	-	3,200	355x355x363	10.46	13	R0
PDFN1012 Dual	1,500	1,500	13,500	385x375x390	13.2	13	RA
PDFN33	5,000	10,000	50,000	475x400x200	9	13	RG
PDFN33 Dual	5,000	10,000	50,000	475x400x200	9	13	RG
PDFN56	2,500	5,000	25,000	390x380x305	7.9	13	RL
PDFN56	1,500	6,000	30,000	390x210x230	6.4	7	S3
PDFN56	6,000	12,000	60,000	360x356x230	12.7	13	S4
PDFN56 Asymmetric Dual	2,500	5,000	25,000	390x380x305	7.9	13	RL
PDFN56 Dual	2,500	5,000	25,000	390x380x305	7.9	13	RL
QMMELF	10,000	30,000	150,000	360x355x233	10.6	13	L0
QMMELF	2,500	15,000	90,000	385x270x217	6.256	7	L1
R-6	1,000	-	4,000	355x355x363	9.5	13	R0
SMAF	7,500	15,000	75,000	360x355x245	7.3	13	M2
SMAF	7,500	15,000	75,000	360x355x245	7	13	R2
SMAF	1,800	7,200	36,000	385x210x230	4.1	7	R3
SMPC4.0	1,500	6,000	30,000	390x210x230	6.4	7	S1
SMPC4.0	6,000	12,000	60,000	360x356x230	12.7	13	S2
SMPC4.6U	1,500	6,000	30,000	390x210x230	6.6	7	S1
SMPC4.6U	6,000	12,000	60,000	360x356x230	13.11	13	S2
SOD-123	3,000	45,000	180,000	440x440x230	8.1	7	RH
SOD-123	3,000	30,000	120,000	438x438x220	8.3	7	RI
SOD-123F	3,000	18,000	108,000	385x270x217	4.69	7	RH
SOD-123FL	10,000	20,000	100,000	360x355x200	6.08	13	RQ
SOD-123FL	3,000	12,000	60,000	385x210x200	3.19	7	RV
SOD-123HE	10,000	20,000	100,000	360x355x200	3.5	13	RQ
SOD-123HE	3,000	12,000	60,000	385x210x200	2.1	7	RV
SOD-123W	10,000	20,000	100,000	360x355x200	3.5	13	RQ
SOD-123W	3,000	12,000	60,000	385x210x200	2.1	7	RV
SOD-128	3,500	14,000	70,000	385x210x230	5	7	MW
SOD-128	14,000	28,000	140,000	360x355x245	9	13	MX
SOD-323	3,000	30,000	120,000	440x440x230	6.8	7	RI

## PACKING CODE LIST

Outline (Package)	Reel (pc)	Inner Box (pc)	Carton (pc)	Carton Size (mm)	Gross Weight (kg/Carton)	Reel Size (inch)	Packing Code
SOD-323	3,000	45,000	180,000	438x438x220	9	7	RQ
SOD-323	3,000	45,000	180,000	440x440x230	6.94	7	RR
SOD-323	3,000	45,000	180,000	440x440x230	6.94	7	RV
SOD-323F	10,000	30,000	150,000	360x355x233	6.427	13	R9
SOD-323F	3,000	18,000	108,000	385x270x217	4.098	7	RR
SOD-523F	8,000	48,000	288,000	385x270x217	4.39	7	RJ
SOD-523F	3,000	18,000	108,000	385x270x217	3.674	7	RK
SOD-523F	8,000	120,000	480,000	438x438x220	8.8	7	RS
SOD-523F	3,000	45,000	180,000	440x440x230	6.33	7	RU
SOD-723F	5,000	40,000	200,000	545x202x202	4.089	7	RL
SOD80C	10,000	20,000	60,000	365x365x180	5.7	13	L0
SOD-923F	8,000	80,000	320,000	438x438x220	8	7	RD
SOD-923F	8,000	120,000	480,000	438x438x220	10	7	RT
SOP-14	2,500	5,000	25,000	390x380x305	7.9	13	RL
SOP-28	1,500	1,500	12,000	420x355x365	10.5	13	RD
SOP-4	2,000	4,000	20,000	400x295x370	12	13	RA
SOP-8	2,500	5,000	25,000	360x355x270	7.6	13	RL
SOP-8	3,000	6,000	30,000	375x285x360	9	13	RV
SOP-8EP	2,500	5,000	25,000	390x310x370	8	13	RL
SOT-143	3,000	45,000	180,000	438x438x220	8	7	RS
SOT-143	3,000	18,000	108,000	390x280x210	5	7	RB
SOT-223	2,500	5,000	25,000	390x370x290	8.6	13	RP
SOT-23	10,000	30,000	150,000	360x355x233	7.6	13	R5
SOT-23	3,000	45,000	180,000	438x438x220	8.45	7	RU
SOT-23	3,000	30,000	120,000	438x438x220	8	7	RI
SOT-23	3,000	12,000	144,000	380x320x390	8.35	7	RF
SOT-23	3,000	30,000	120,000	395x295x225	5.25	7	RF
SOT-23	10,000	20,000	100,000	380x328x390	9.5	13	RK
SOT-23	3,000	18,000	108,000	385x270x217	4.487	7	RF
SOT-25	3,000	18,000	108,000	385x270x217	5	7	RF
SOT-25	3,000	12,000	144,000	380x320x390	9.5	7	RF
SOT-26	3,000	45,000	180,000	438x438x220	8	7	RP
SOT-26	3,000	18,000	108,000	385x270x217	5.8	7	RF
SOT-26	3,000	12,000	144,000	380x320x390	9.5	7	RF
SOT-26	10,000	20,000	100,000	380x320x390	9.5	13	RK
SOT-323	3,000	45,000	180,000	438x438x220	8.17	7	RV
SOT-323	3,000	18,000	108,000	385x270x217	4.28	7	RF
SOT-363	3,000	45,000	180,000	438x438x220	8.14	7	RE
SOT-363	3,000	45,000	180,000	440x440x230	7.6	7	RF
SOT-363	3,000	18,000	108,000	385x270x217	3.705	7	RF
SOT-523	3,000	45,000	180,000	438x438x220	9	7	RS
SOT-563	3,000	45,000	180,000	438x438x220	8	7	RS
SOT-723	8,000	80,000	320,000	438x438x220	7.68	7	RD
SOT-89	1,000	4,000	48,000	390x290x380	8.5	7	RM
SOT-89-5L	1,000	4,000	48,000	390x290x380	8.5	7	RM
Sub SMA	7,500	15,000	75,000	360x355x245	7.4	13	M2

## PACKING CODE LIST

Outline (Package)	Reel (pc)	Inner Box (pc)	Carton (pc)	Carton Size (mm)	Gross Weight (kg/Carton)	Reel Size (inch)	Packing Code
Sub SMA	10,000	20,000	100,000	360x355x245	8	13	MH
Sub SMA	10,000	20,000	100,000	360x355x200	7.6	13	MQ
Sub SMA	7,500	15,000	75,000	360x355x200	6.8	13	MT
Sub SMA	7,500	15,000	75,000	360x355x245	7.6	13	R2
Sub SMA	1,800	7,200	36,000	385x210x230	4.3	7	R3
Sub SMA	3,000	12,000	60,000	385x210x230	4.8	7	RF
Sub SMA	10,000	20,000	100,000	360x355x245	8.2	13	RH
Sub SMA	10,000	20,000	100,000	360x355x200	7.8	13	RQ
Sub SMA	7,500	15,000	75,000	360x355x200	7	13	RT
Sub SMA	1,800	7,200	36,000	385x210x200	4	7	RU
Sub SMA	3,000	12,000	60,000	385x210x200	4.5	7	RV
TBS	1,800	3,600	25,200	363x363x368	11.21	13	M1
TDFN 2x2	3,000	12,000	144,000	403x387x293	9	7	RF
Thin SMA	3,500	14,000	70,000	385x210x230	4.9	7	MW
Thin SMA	14,000	28,000	140,000	360x355x245	8.8	13	MX
TMB	5,000	10,000	50,000	400x370x295	8	13	R7
TO-252 (D-PAK)	2,500	5,000	25,000	370x370x290	13.2	13	RO
TO-252-5L (D-PAK)	2,500	5,000	25,000	370x370x290	13.2	13	RO
TO-263 (D <sup>2</sup> -PAK)	800	800	4,000	390x360x280	10	13	RN
TO-263-2L	800	800	4,000	390x360x280	10	13	RN
TO-263-5L (D <sup>2</sup> -PAK)	800	800	4,000	390x360x280	10	13	RN
TO-263AB (D <sup>2</sup> -PAK)	800	800	6,400	365x355x370	14.5	13	MN
TO-263AB (D <sup>2</sup> -PAK)	800	800	6,400	365x355x370	14.5	13	RN
TO-277A (SMPC)	1,500	6,000	30,000	390x210x230	6.4	7	S1
TO-277A (SMPC)	6,000	12,000	60,000	360x356x230	12.7	13	S2
TS-1	5,000	-	20,000	355x355x363	7.1	13	R0
TSOT-23	3,000	12,000	144,000	380x320x390	9.5	7	RF
TSSOP-8	3,000	6,000	30,000	383x360x300	9	13	RV
YBS	3,000	6,000	42,000	363x363x368	12.75	13	RA

Remark :

All the dimensions and weights mentioned above are described for your reference only; The actual measurement is subject to final confirmation.

## PACKING CODE LIST

### AMMO BOX PACKING

Outline (Package)	Inner Box (pc)	Carton (pc)	Carton Size (mm)	Gross Weight (kg/Carton)	Packing Code
A-405	3,000	30,000	410x270x247	10.60	A0
A-405	3,000	60,000	595x290x245	16.50	A1
DO-201	500	10,000	413x273x325	16.20	A0
DO-201AD	500	10,000	413x273x325	16.20	A0
DO-204AC (DO-15)	1,500	15,000	410x270x225	8.80	A0
DO-204AL (DO-41)	3,000	30,000	410x270x247	13.10	A0
DO-204AL (DO-41)	3,000	30,000	400x265x195	8.80	A0
DO-204AL (DO-41)	3,000	60,000	595x290x245	20.80	A1
DO-34	5,000	50,000	400x265x195	6.45	A0
DO-34	5,000	50,000	280x276x190	6.45	A2
DO-35	5,000	50,000	400x265x195	7.00	A0
P2500	500	2,500	440x290x205	8.05	A0
R-6	700	3,500	440x290x205	7.45	A0
TO-92	4,000	20,000	360x355x233	6.98	A1
TO-92	2,000	20,000	505x405x240	7.00	A2
TO-92	2,000	20,000	460x340x175	7.40	A3
TO-92S	3,000	30,000	505x405x240	8.00	A3
TS-1	3,000	30,000	410x270x247	9.70	A0
TS-1	3,000	60,000	595x290x245	12.60	A1
TS-1	2,000	24,000	340x340x343	8.20	P0

Remark :

All the dimensions and weights mentioned above are described for your reference only; The actual measurement is subject to final confirmation.

## PACKING CODE LIST

### BULK PACKING

Outline (Package)	Inner Box (pc)	Carton (pc)	Carton Size (mm)	Gross Weight (kg/Carton)	Packing Code
A-405	1000	50,000	460x230x275	14	B0
AR	1000	10,000	322x200x275	20.25	B0
ARS	1000	10,000	322x200x275	18.2	B0
DO-15	1,000	40,000	460x230x275	18	B0
DO-201	500	15,000	415x328x285	17	B0
DO-201AD	500	15,000	415x328x285	20.8	B0
DO-201AD	500	15,000	415x328x285	17.2	X0
DO-204AL (DO-41)	1,000	50,000	460x230x275	13.1	B0
KBP	500	5,000	357x265x170	15.25	X0
R-6	400	12,000	415x328x285	23.1	B0
TO-126	2,500	25,000	520x370x270	18	B0
TO-92	5,000	50,000	585x190x180	11.1	B1
TO-92	10,000	100,000	525x375x270	24	B2
TO-92	10,000	100,000	520x360x245	24	B0
TO-92S	10,000	100,000	525x375x270	20	B3
TO-92S	10,000	100,000	480x330x400	15.7	B0
TS-1	1,000	50,000	460x230x275	12.5	B0
TS-6P	100	2,000	315x290x210	16.2	X0

Remark :

All the dimensions and weights mentioned above are described for your reference only; The actual measurement is subject to final confirmation.

## PACKING CODE LIST

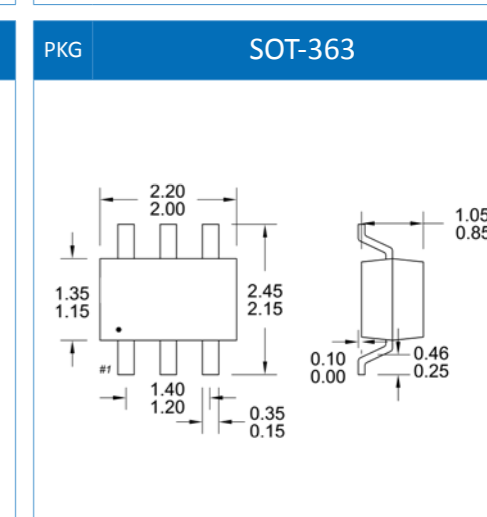
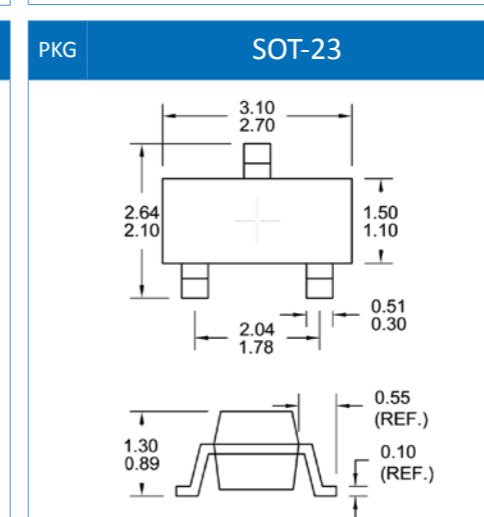
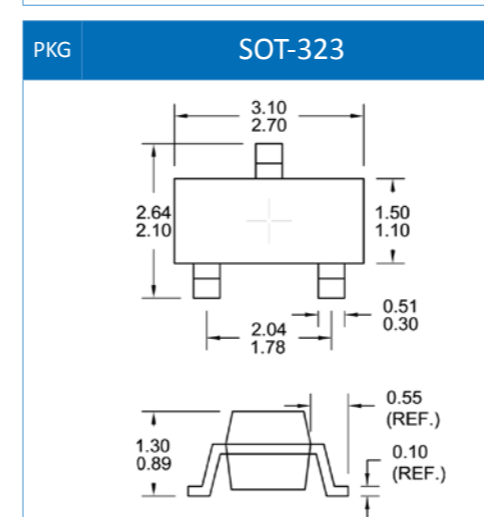
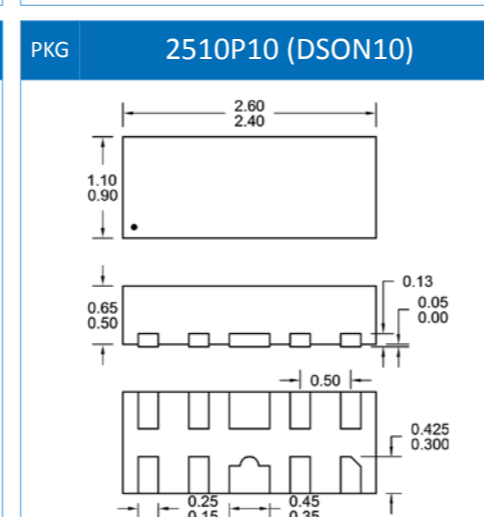
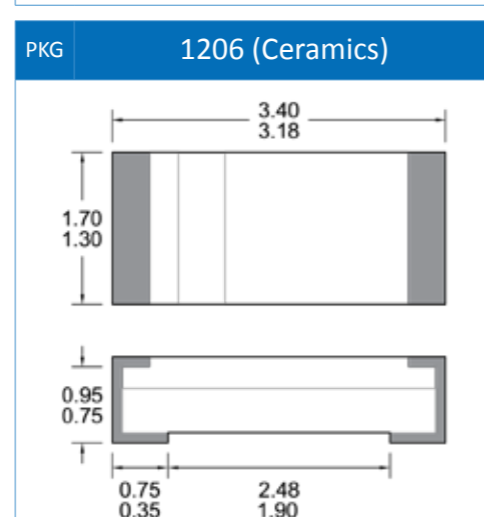
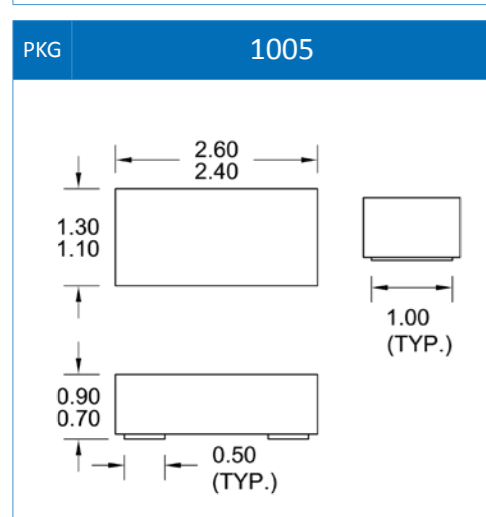
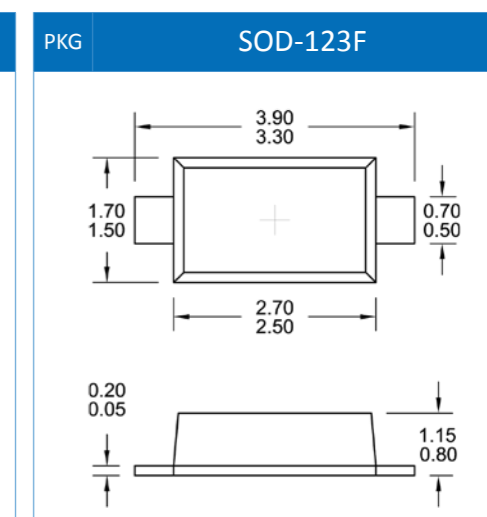
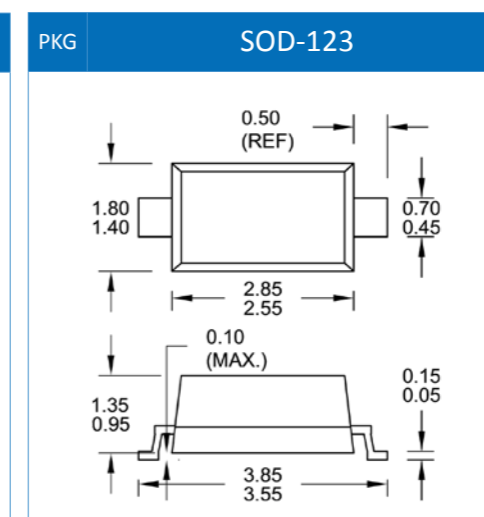
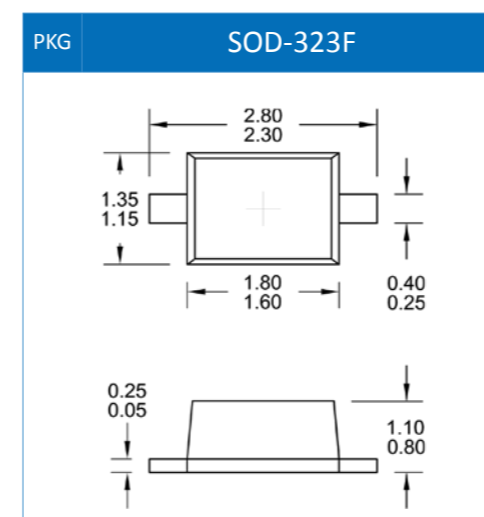
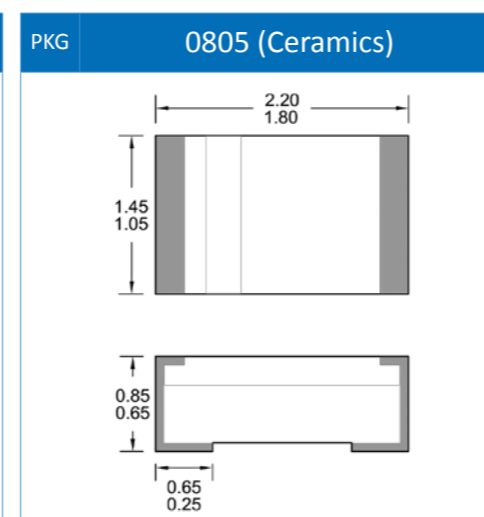
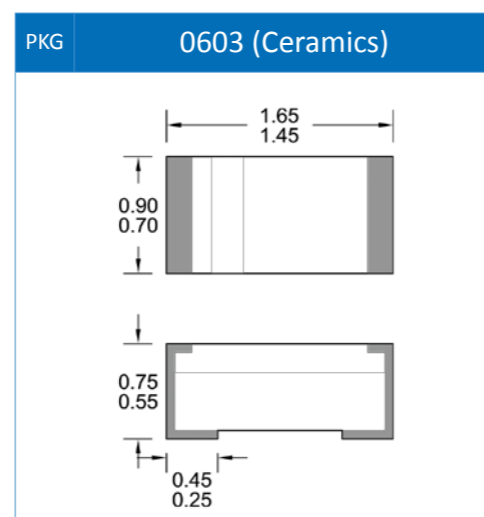
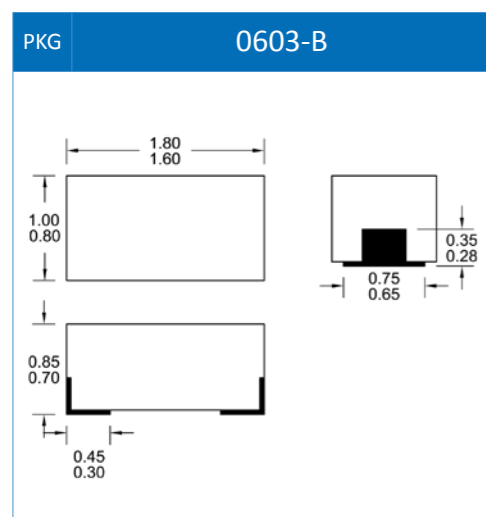
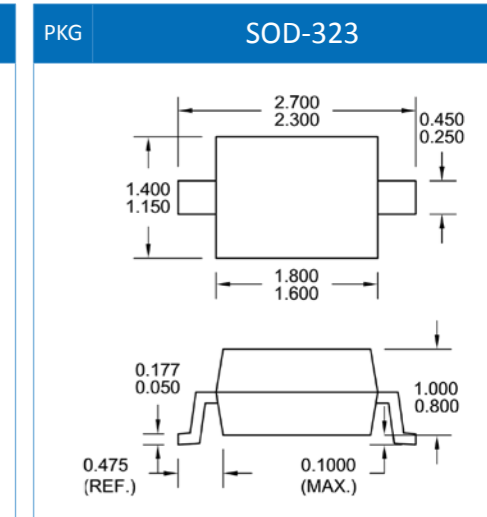
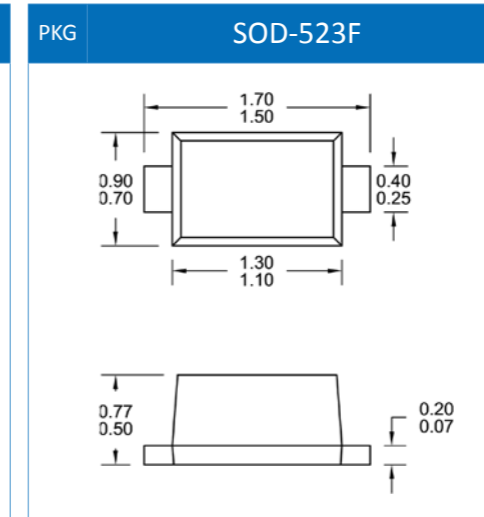
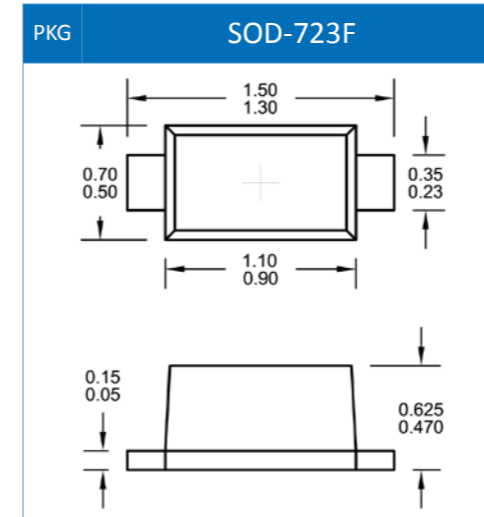
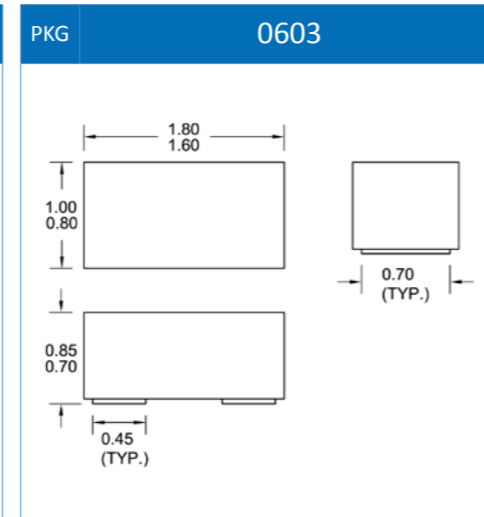
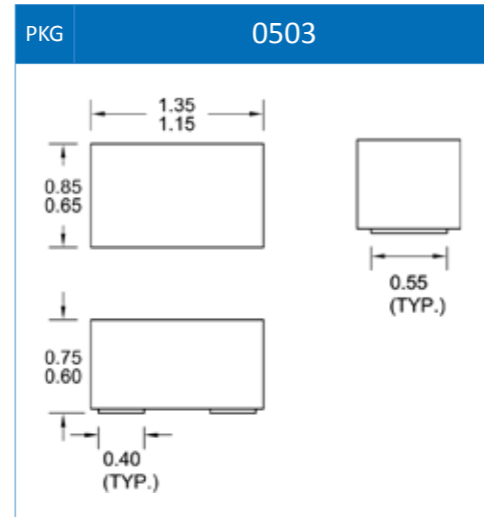
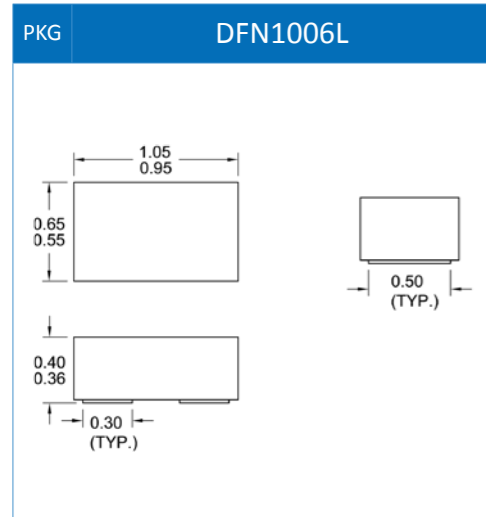
### TRAY PACKING

Outline (Package)	Tray (pc)	Box (pc)	Carton (pc)	Carton Size (mm)	Gross Weight (kg/Carton)	Packing Code
GBPC	50	100	500	360x230x400	11.8	T0
GBPC40	50	100	500	360x230x400	11.8	T0
GBPC40-M	50	100	500	360x230x400	11.8	T0
GBPC-M	50	100	500	360x230x400	11.8	T0
GBPC-MT	50	100	500	360x230x400	12.5	T0
GBPC-W	50	100	500	360x230x400	13.5	T0
KBL	100	1,000	2,000	325x315x295	14.2	T0
KBL Cutting	100	1,000	2,000	325x315x295	14.2	X0
KBU	100	500	2,000	360x355x245	18	T0
KBU Cutting	100	500	2,000	360x355x245	18	X0
KBU Forming	100	500	2,000	360x355x245	18	X0

Remark :

All the dimensions and weights mentioned above are described for your reference only; The actual measurement is subject to final confirmation.



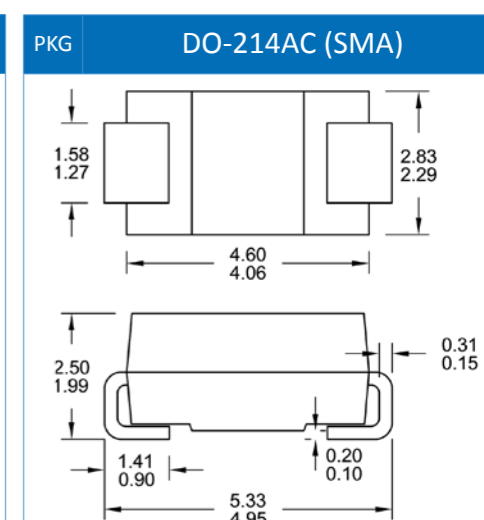
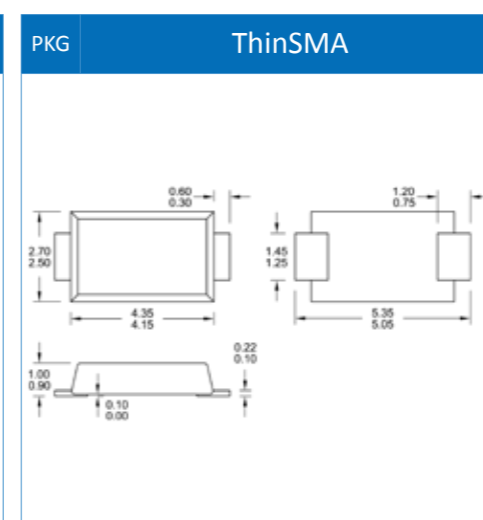
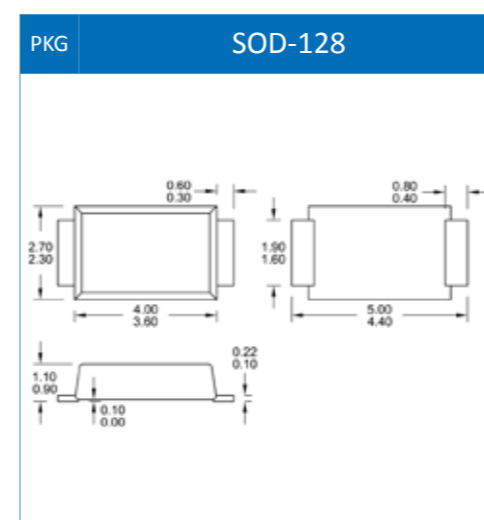
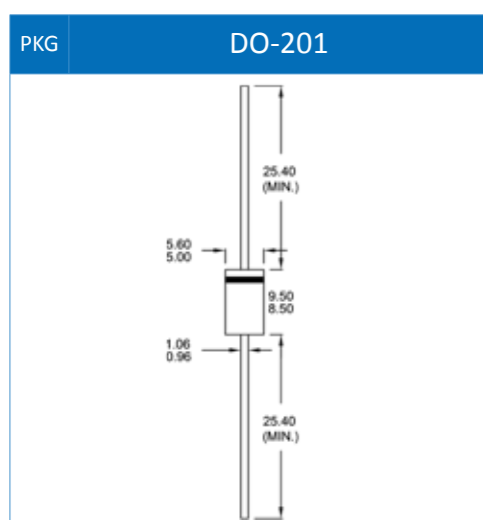
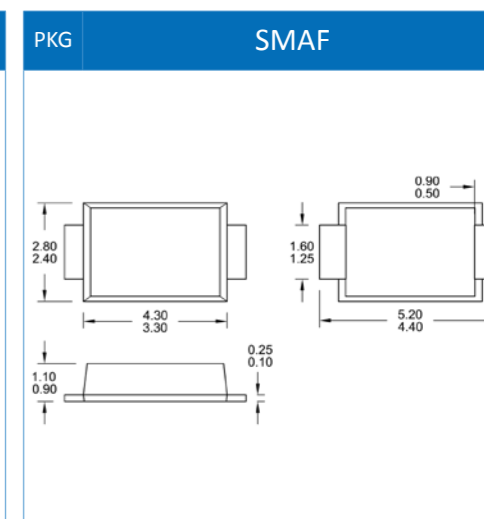
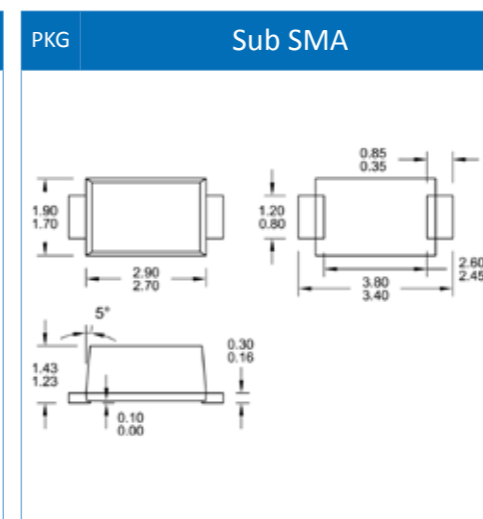
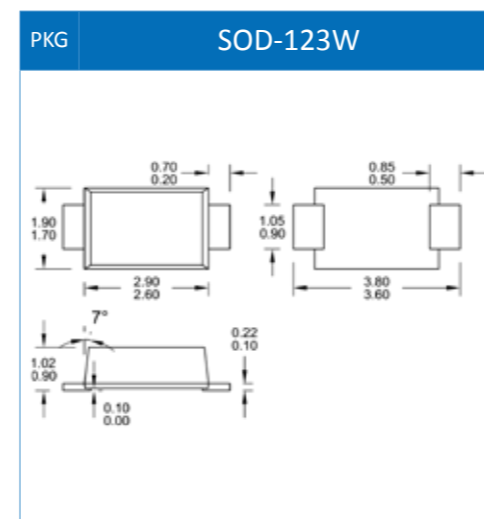
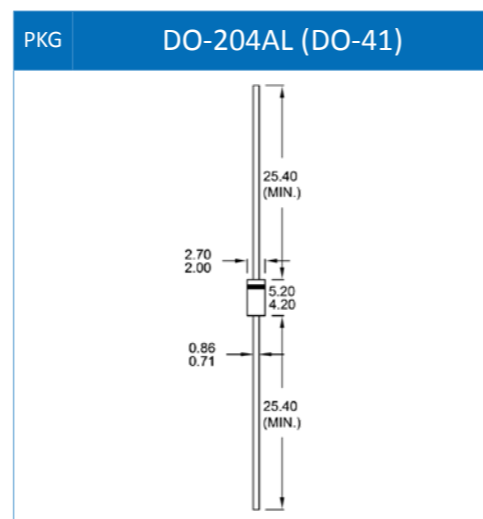
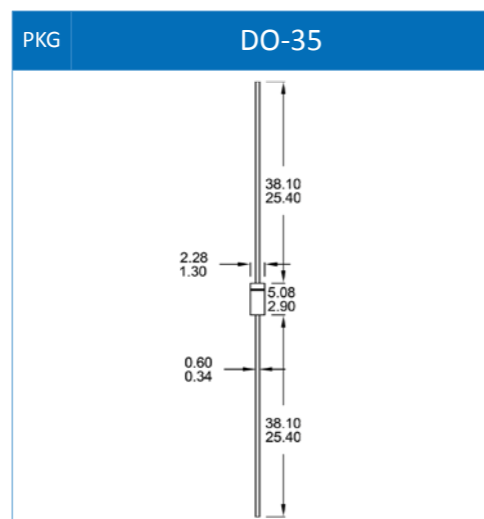
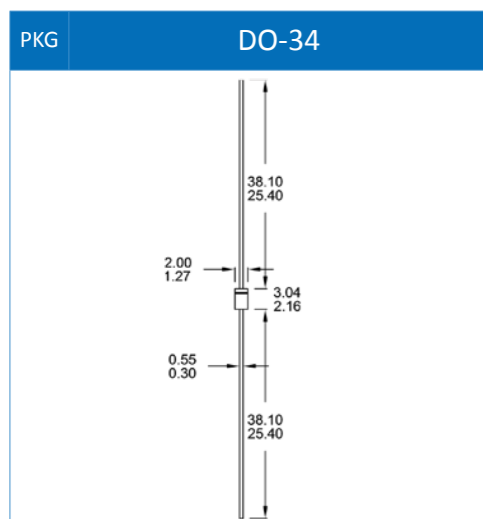
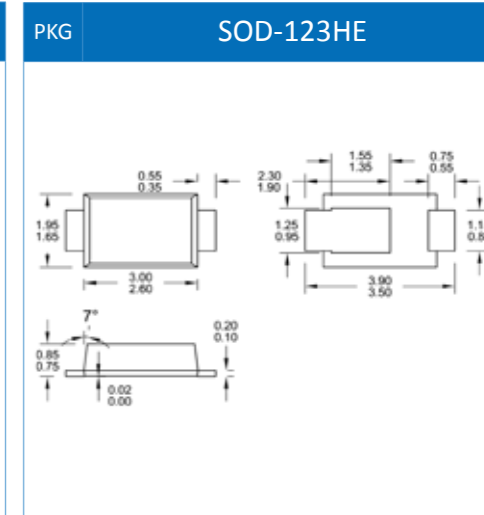
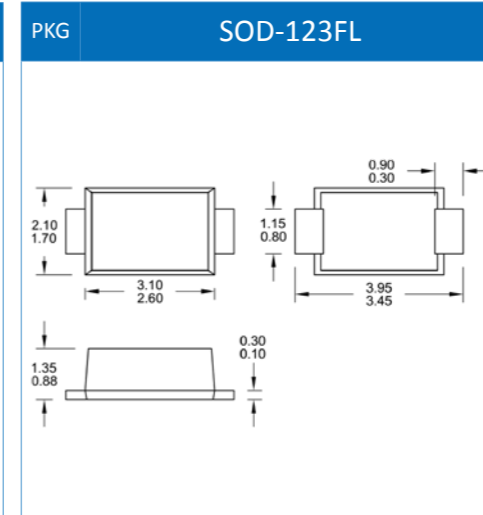
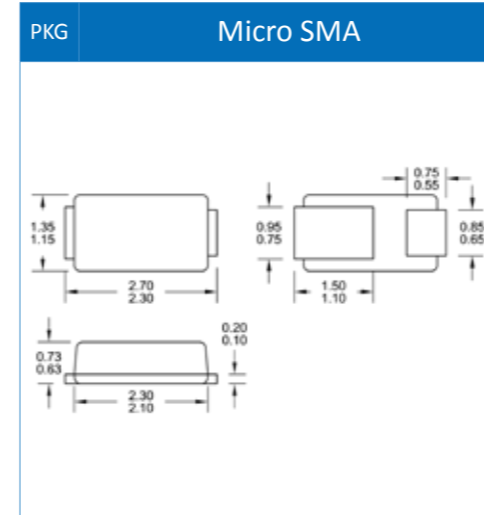
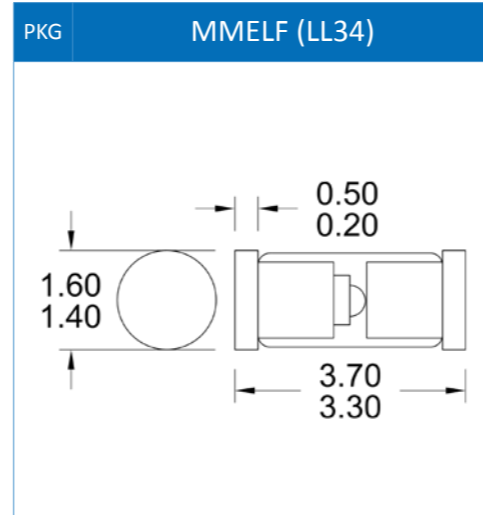
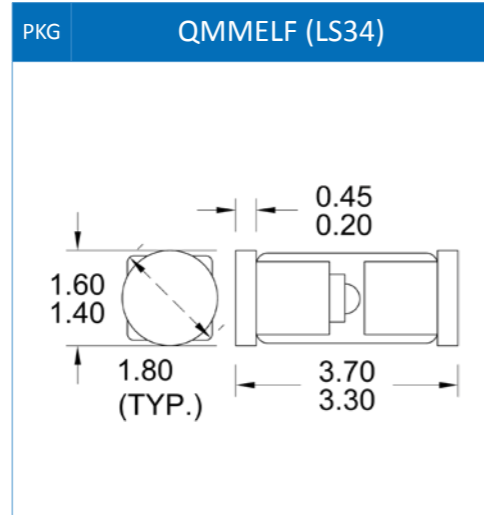
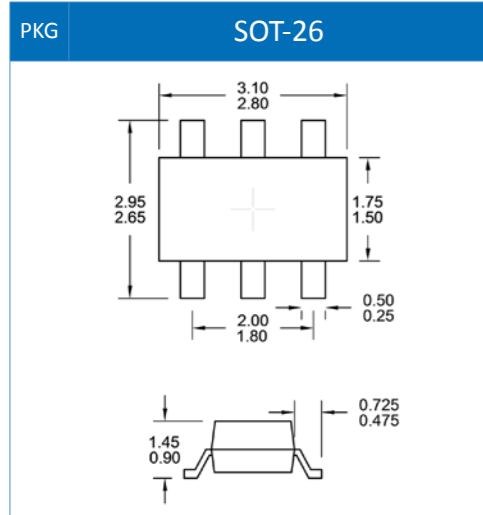


Unit: millimeter

Unit: millimeter

# OUTLINE DRAWINGS - DIODE

# OUTLINE DRAWINGS - RECTIFIER

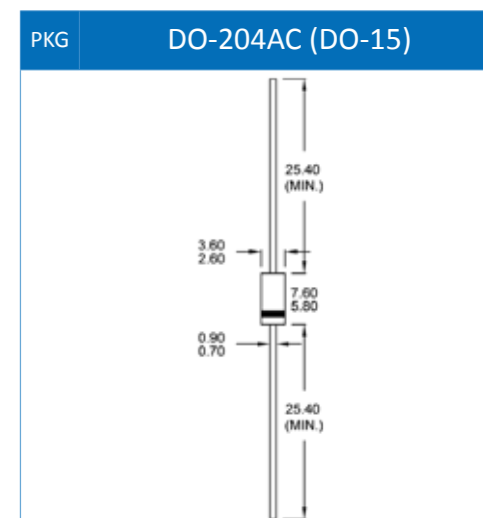
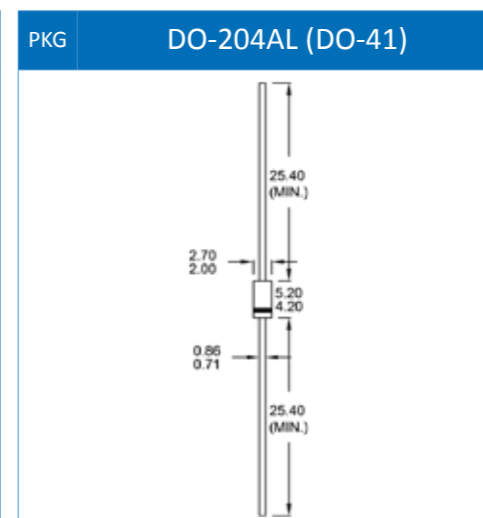
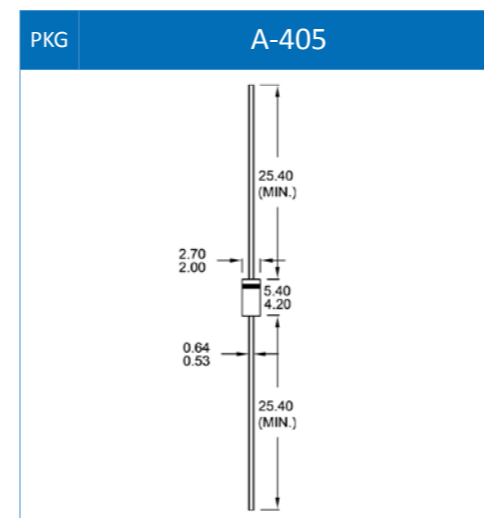
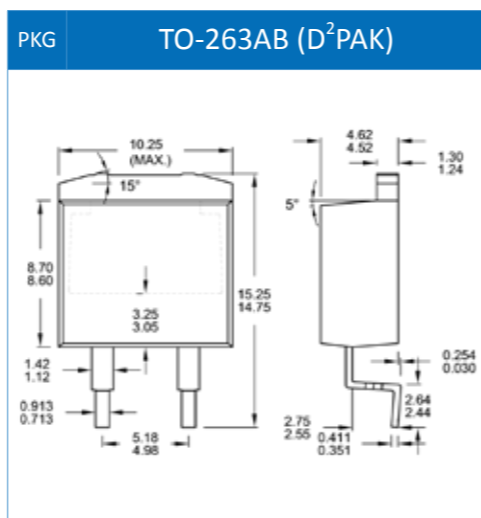
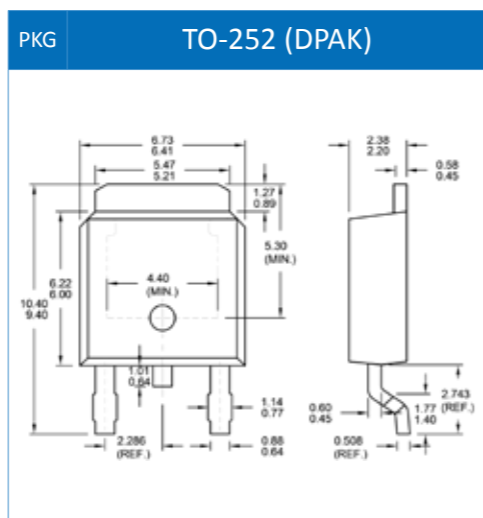
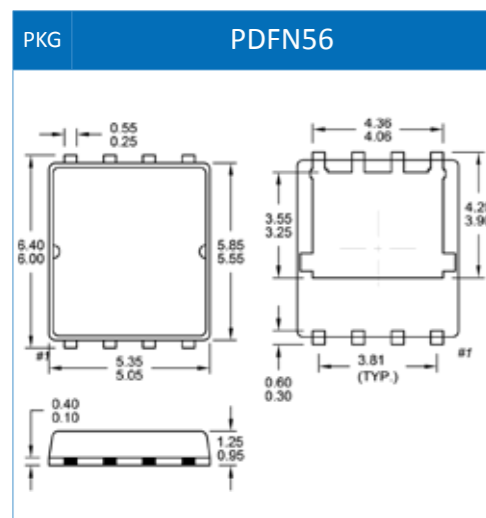
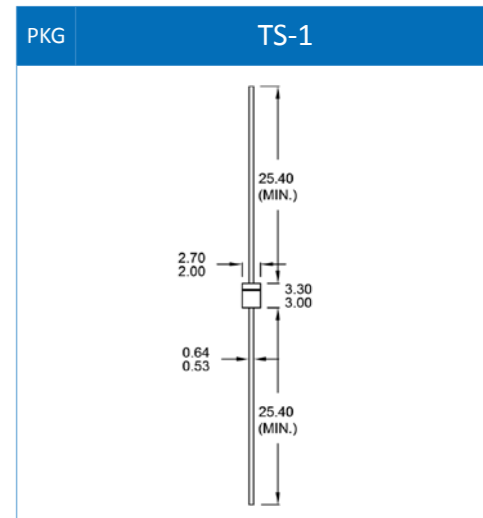
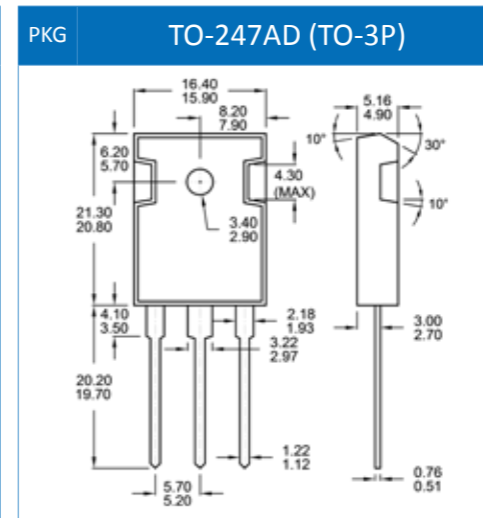
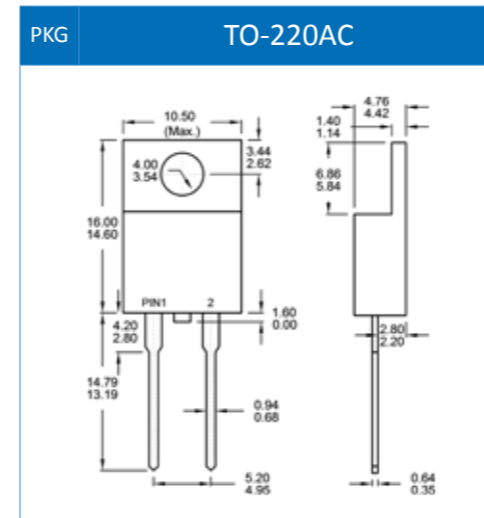
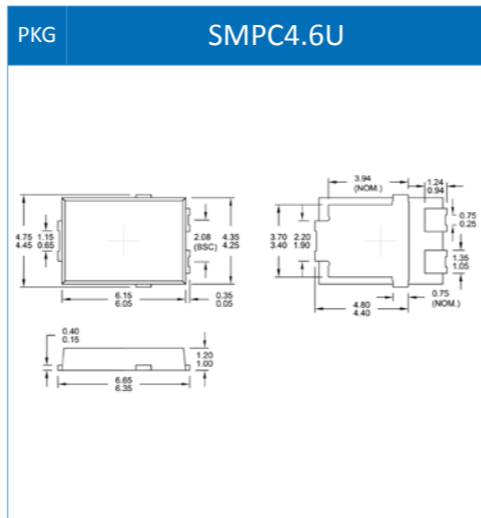
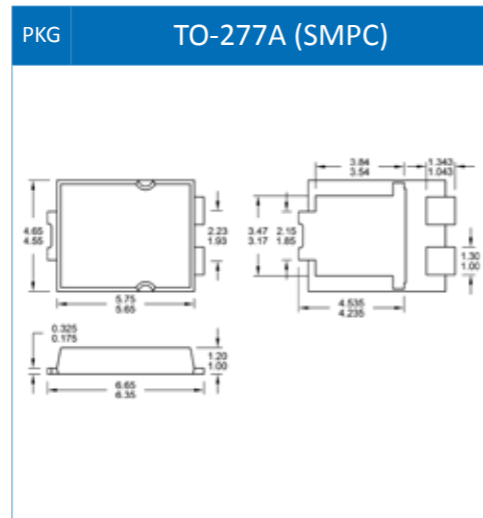
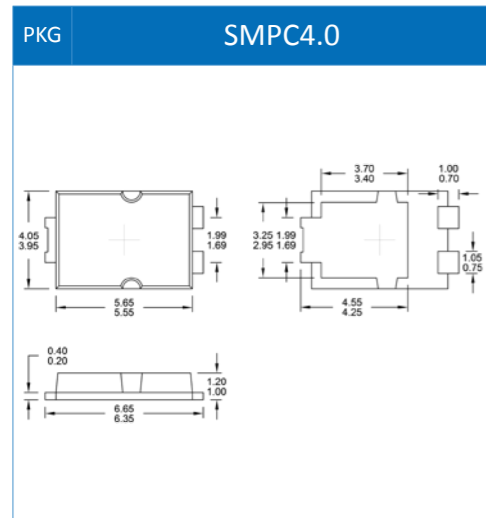
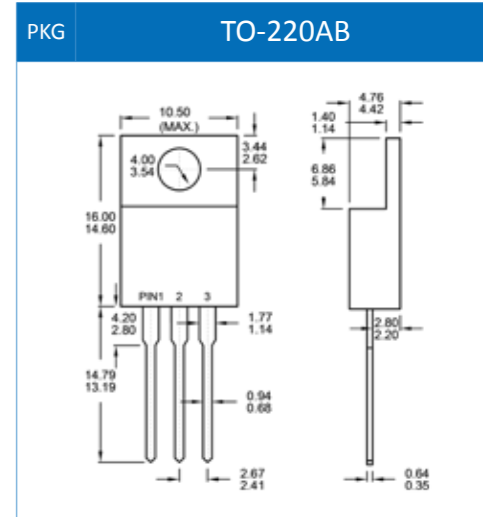
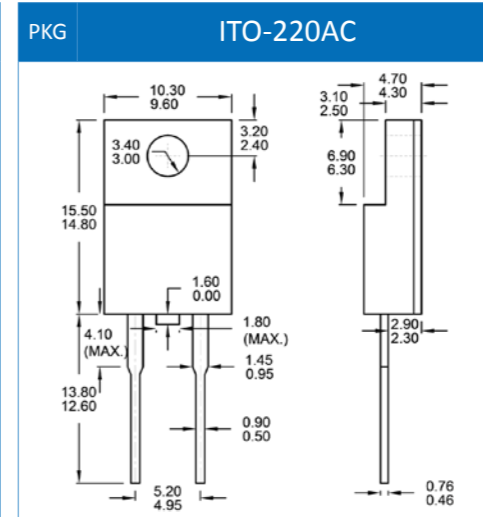
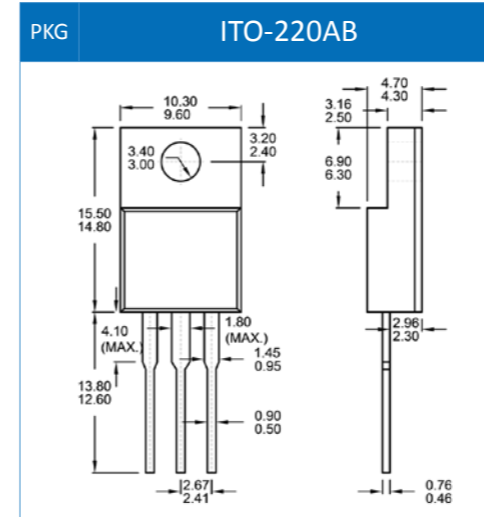
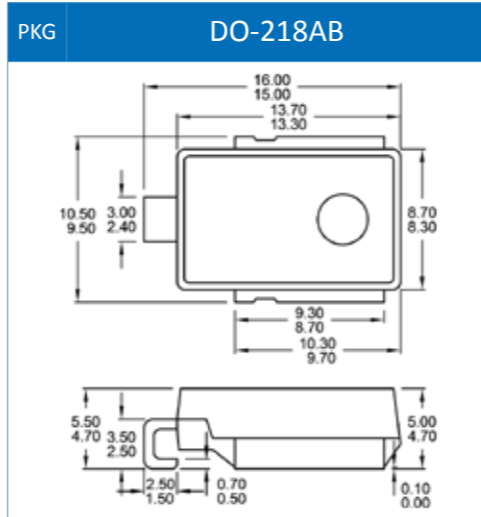
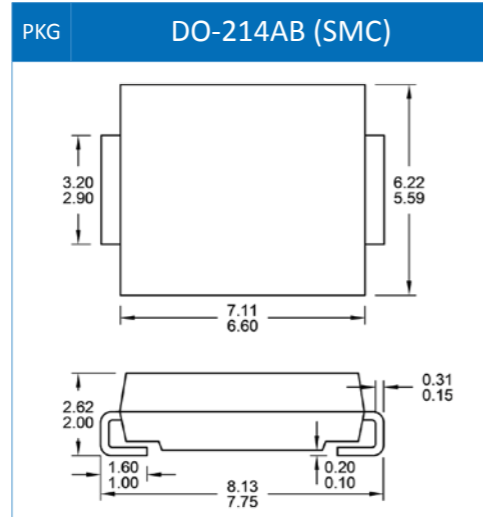
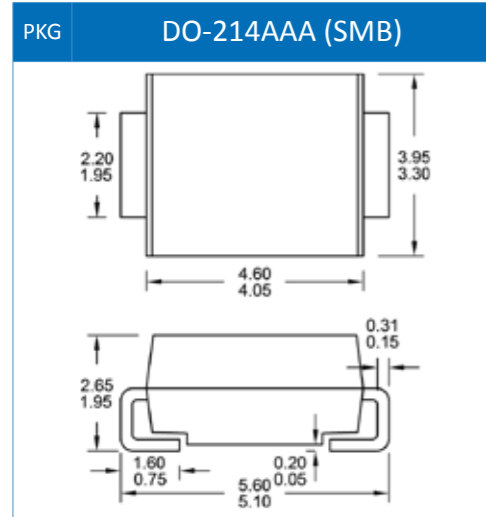


Unit: millimeter

Unit: millimeter

# OUTLINE DRAWINGS - RECTIFIER

# OUTLINE DRAWINGS - RECTIFIER

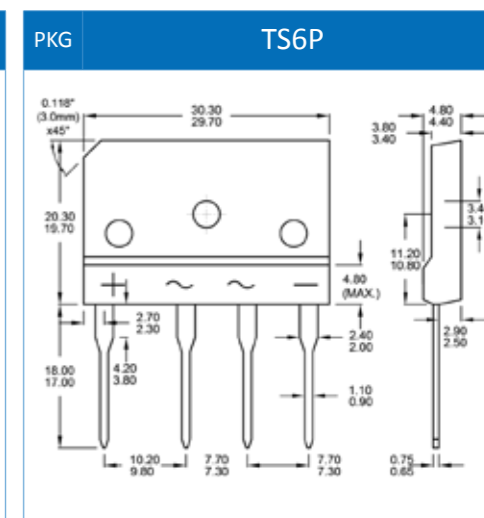
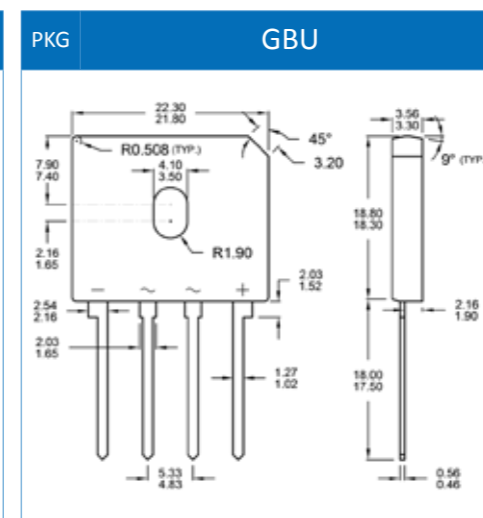
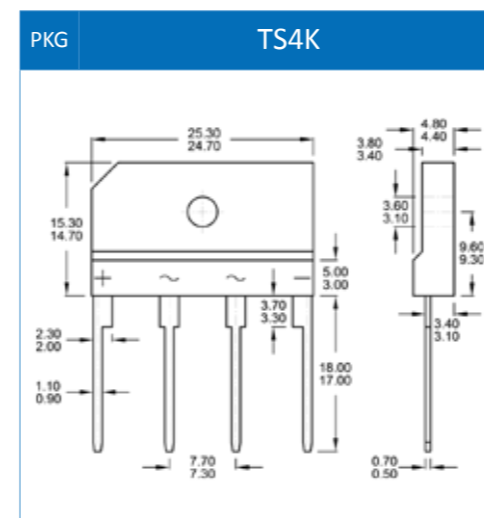
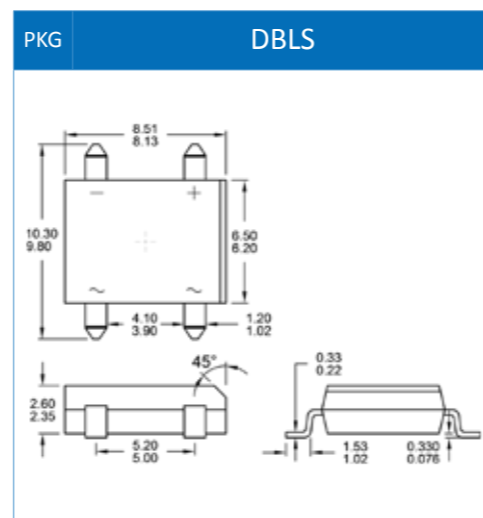
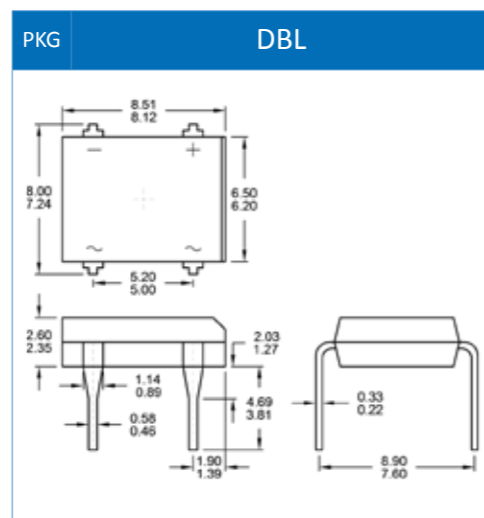
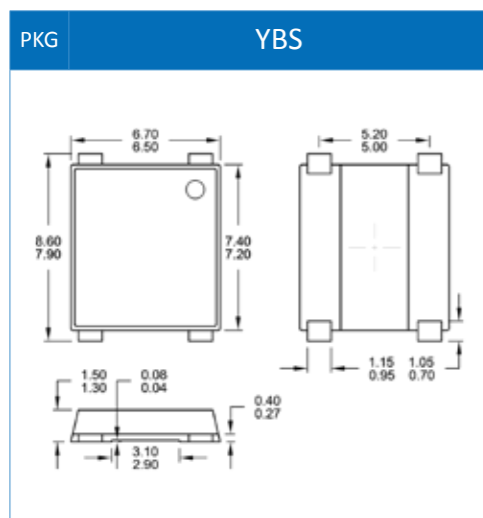
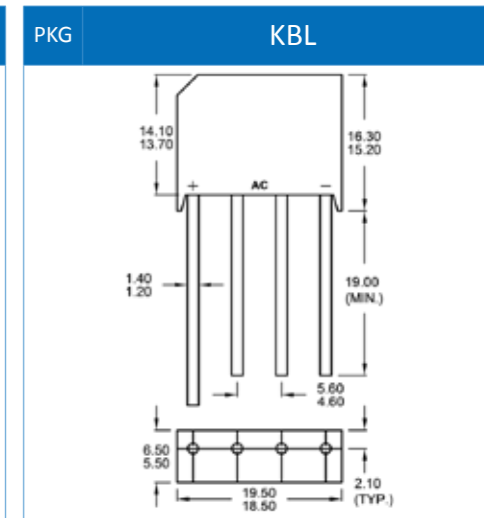
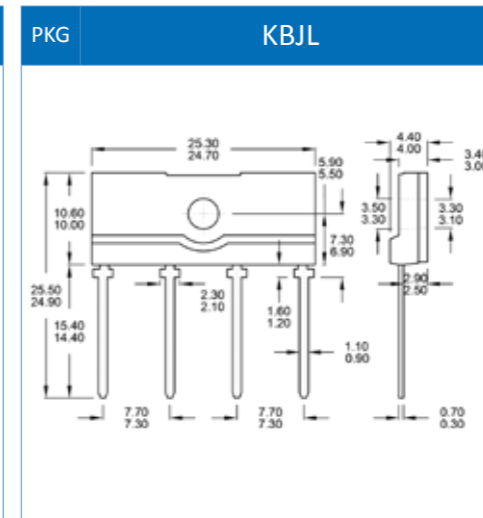
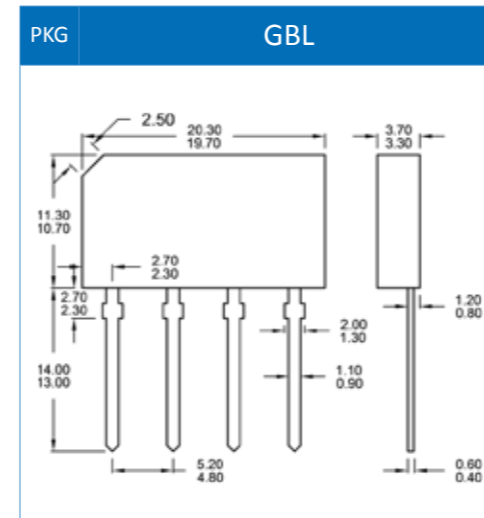
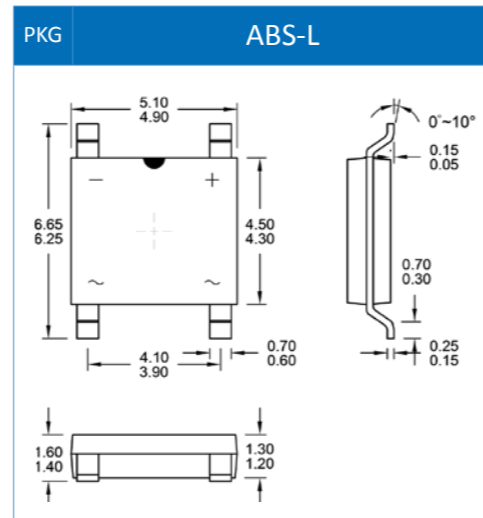
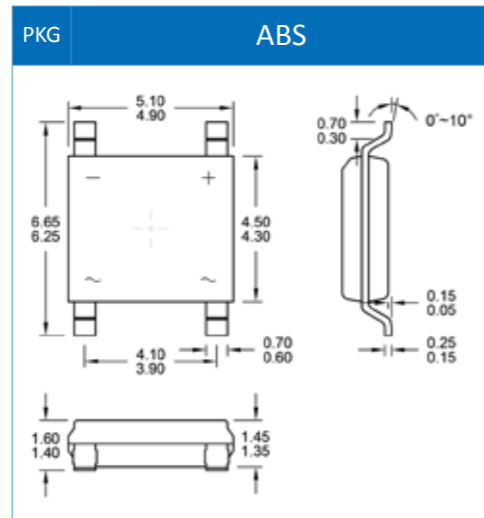
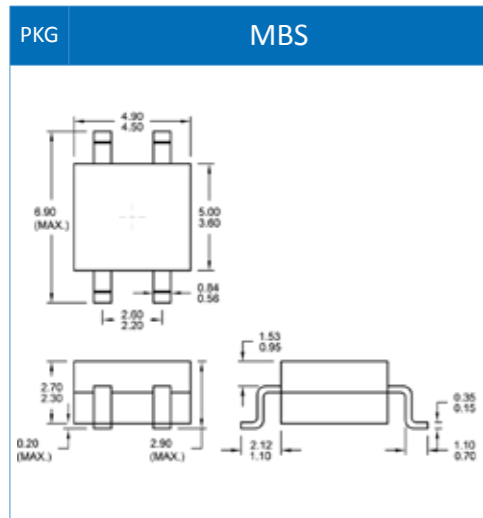
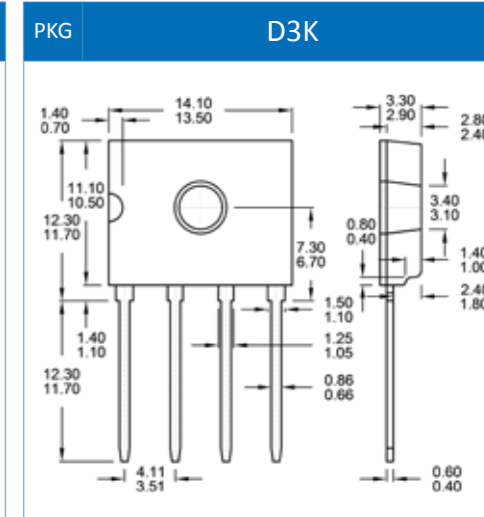
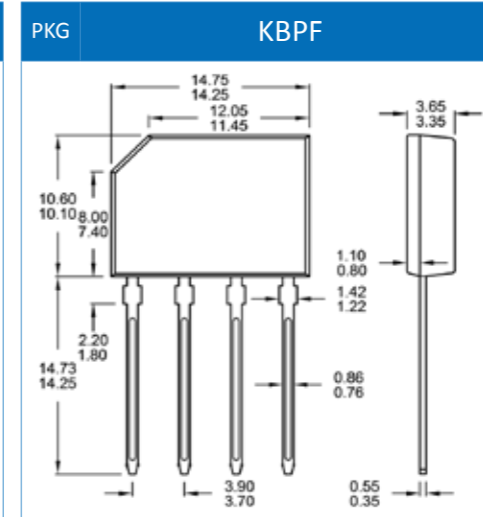
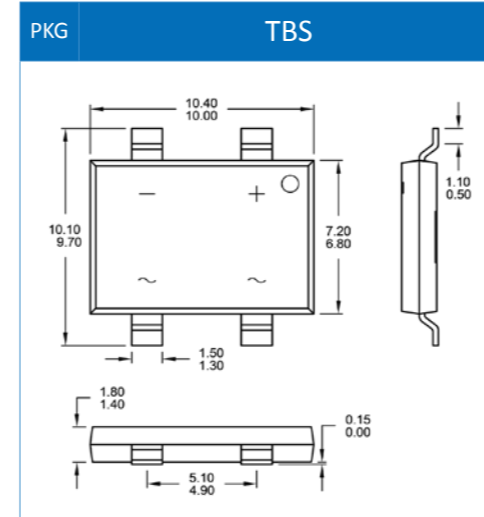
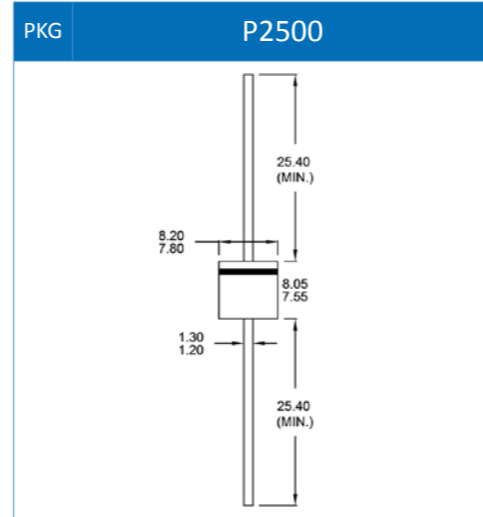
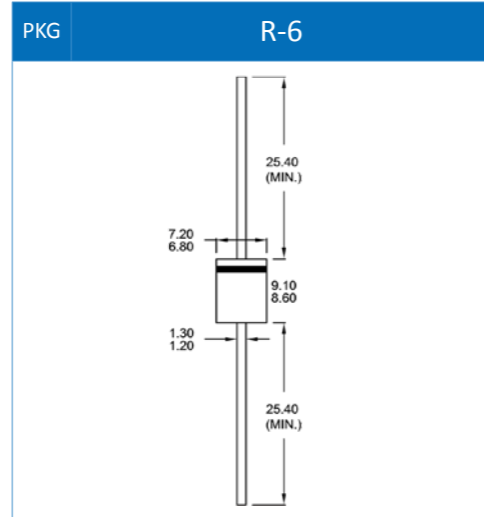
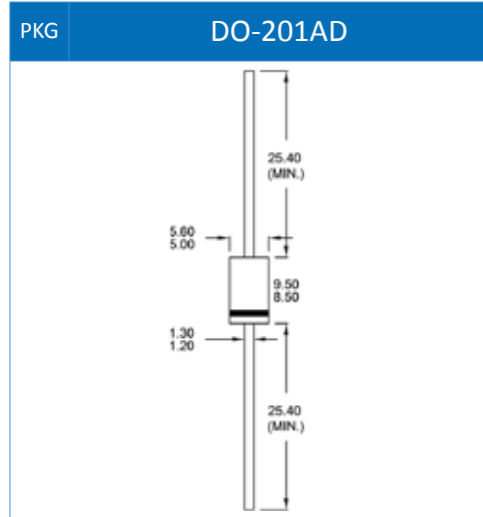


Unit: millimeter

Unit: millimeter

# OUTLINE DRAWINGS - RECTIFIER

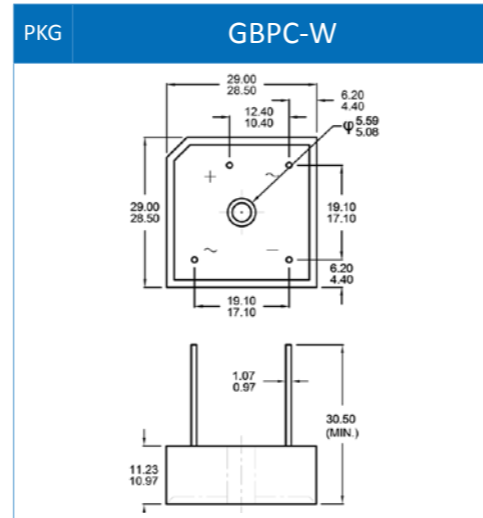
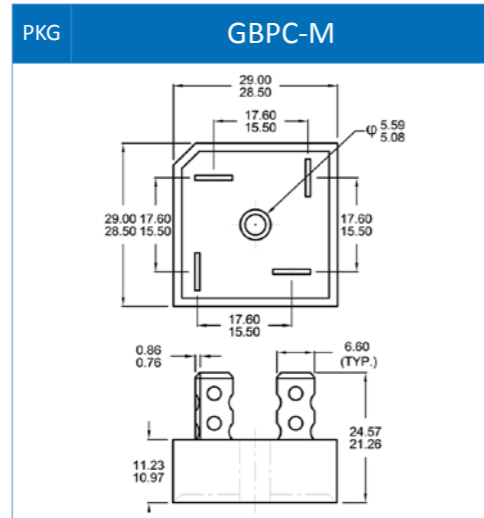
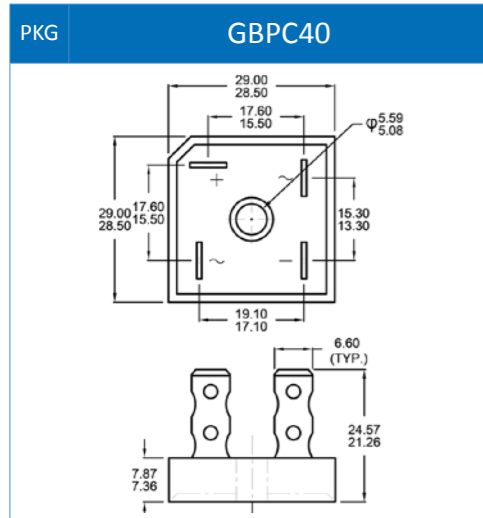
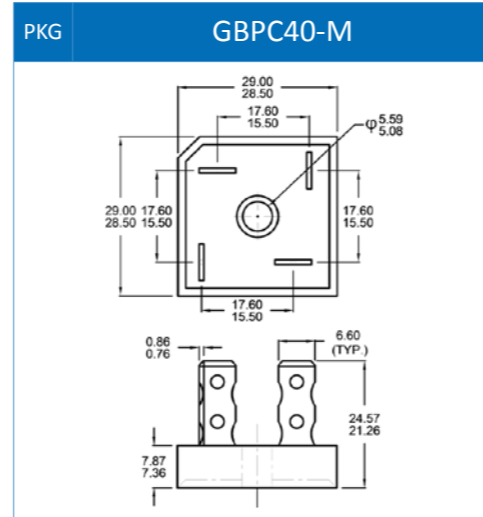
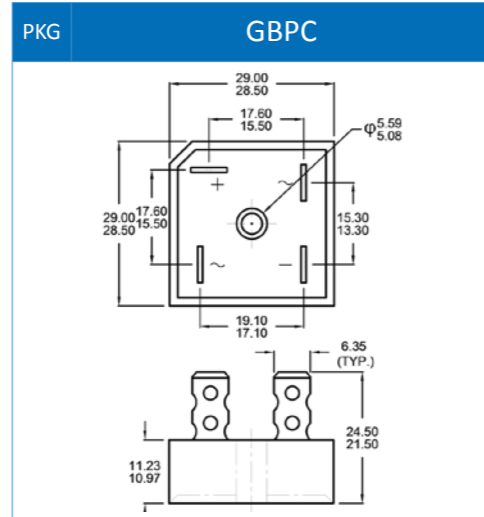
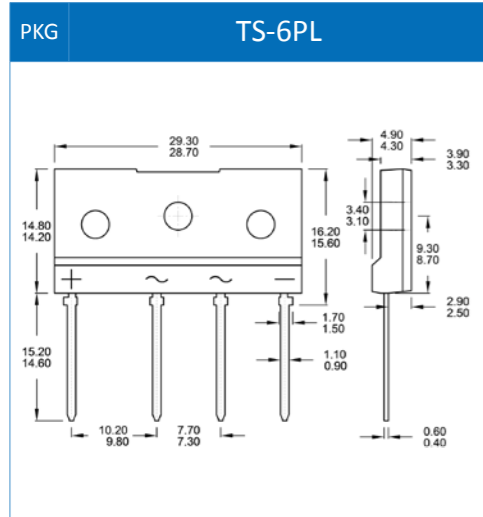
# OUTLINE DRAWINGS - RECTIFIER



Unit: millimeter

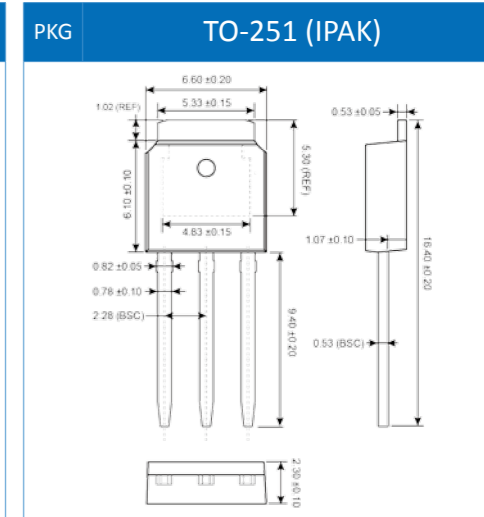
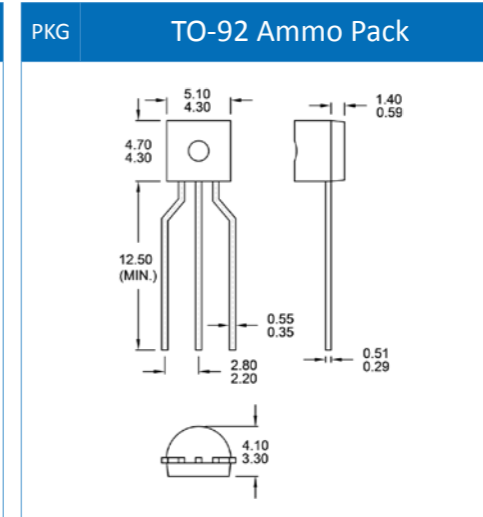
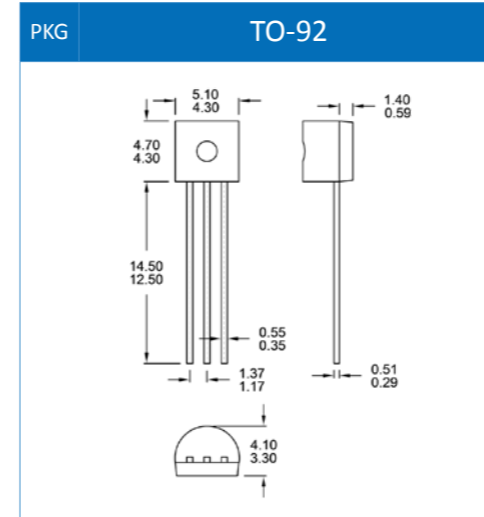
Unit: millimeter

# OUTLINE DRAWINGS - RECTIFIER



Unit: millimeter

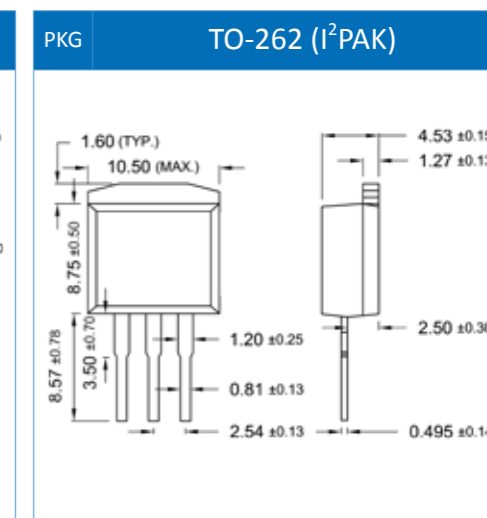
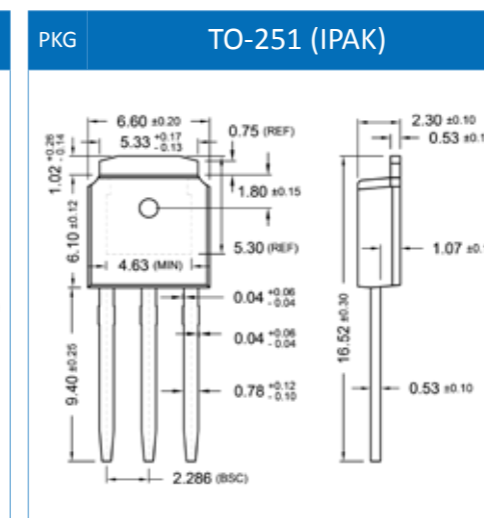
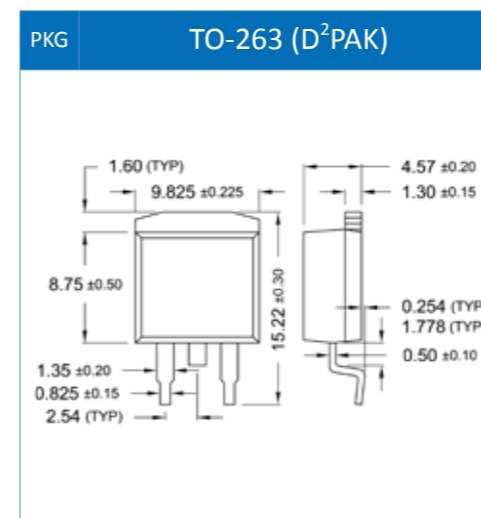
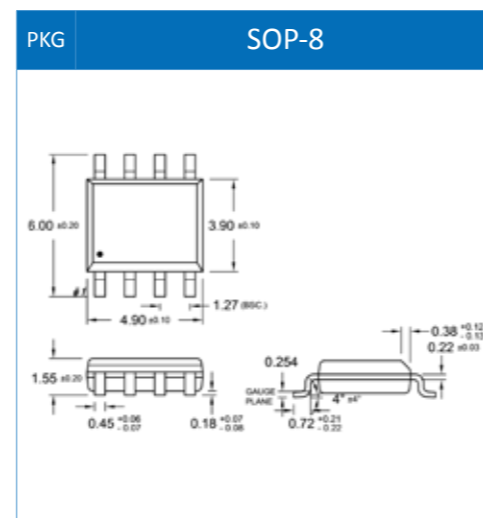
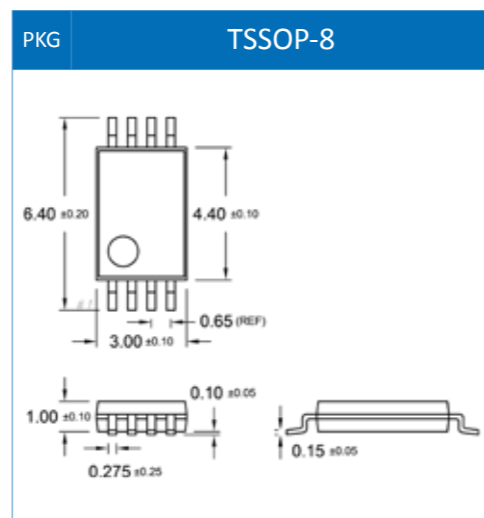
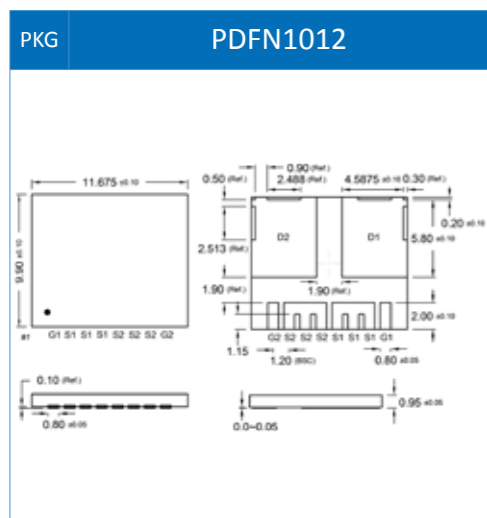
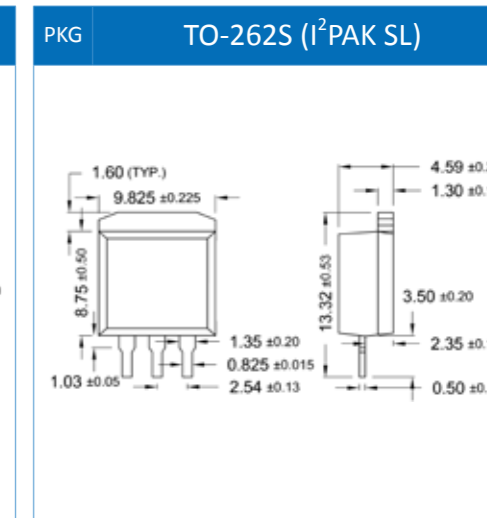
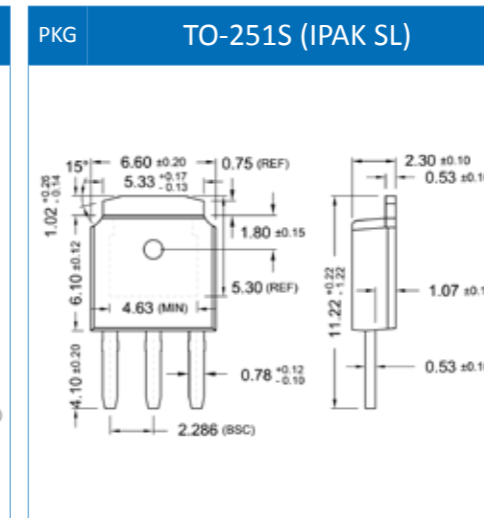
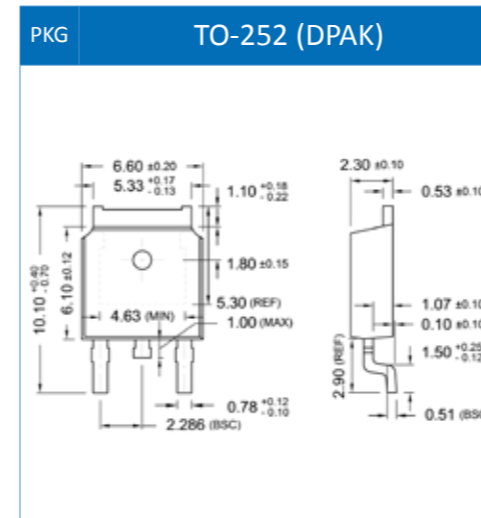
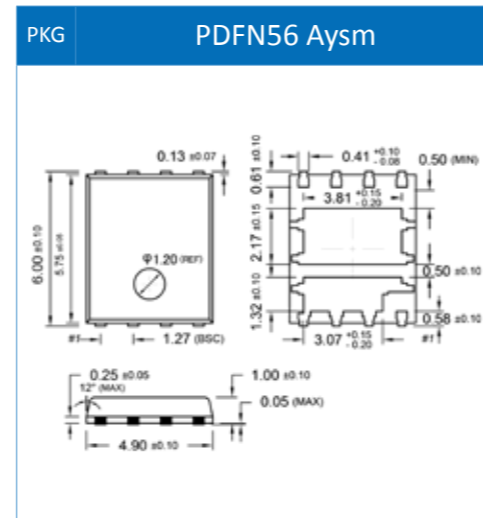
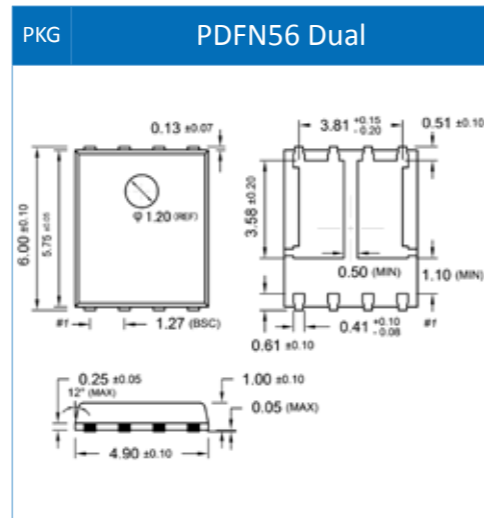
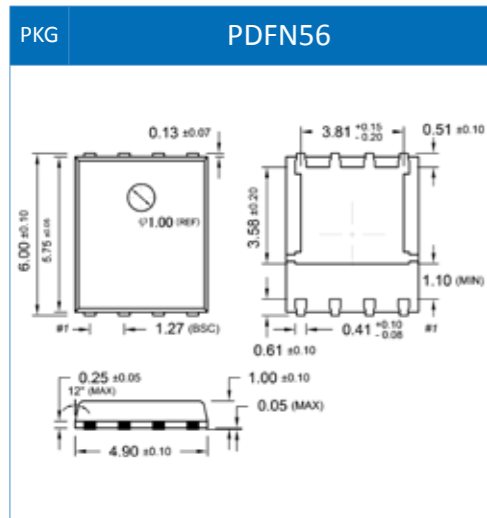
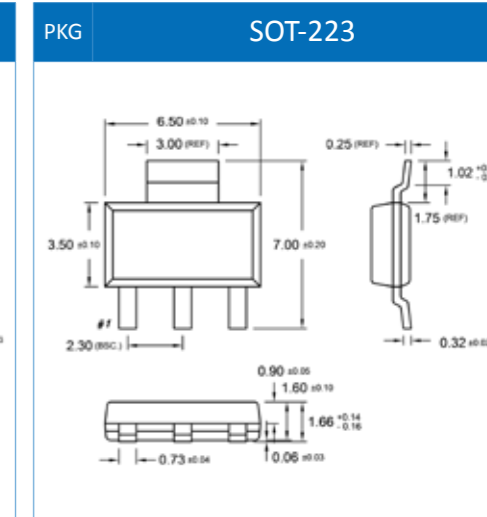
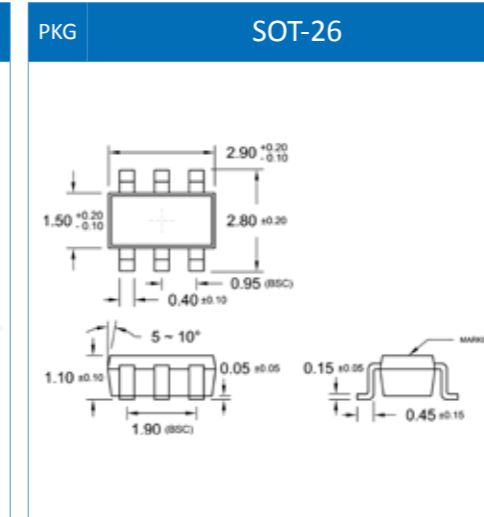
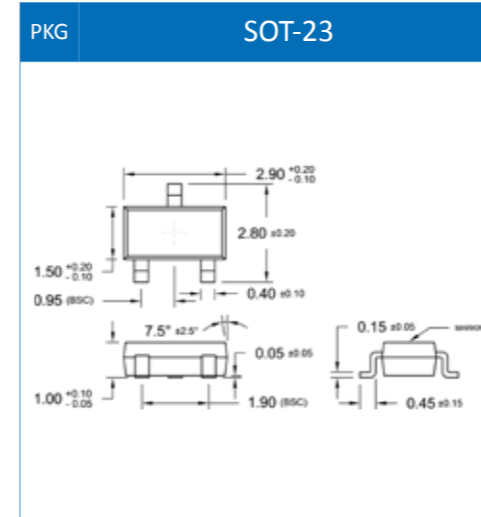
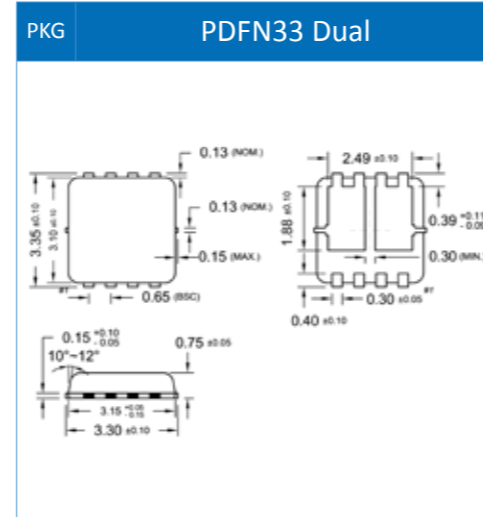
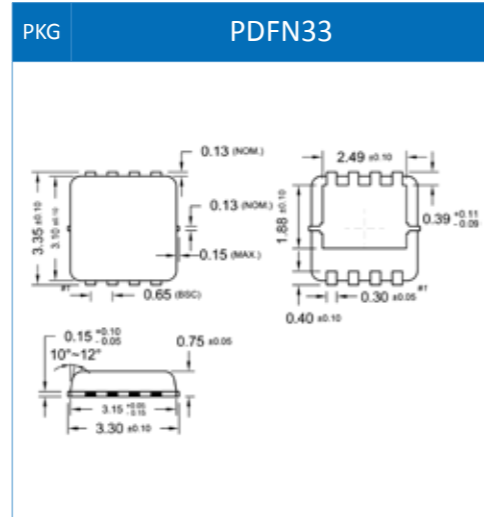
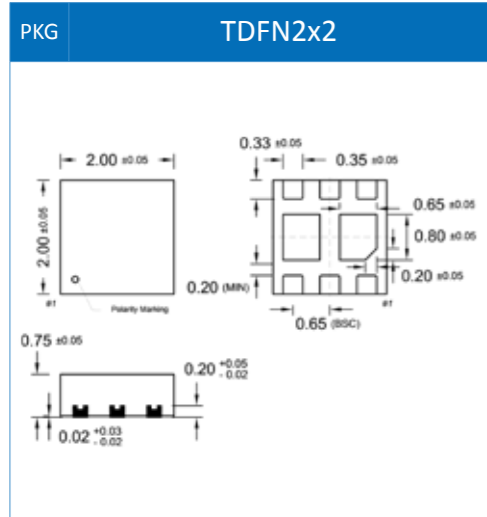
# OUTLINE DRAWINGS - TRANSISTOR



Unit: millimeter

# OUTLINE DRAWINGS - MOSFET

# OUTLINE DRAWINGS - MOSFET

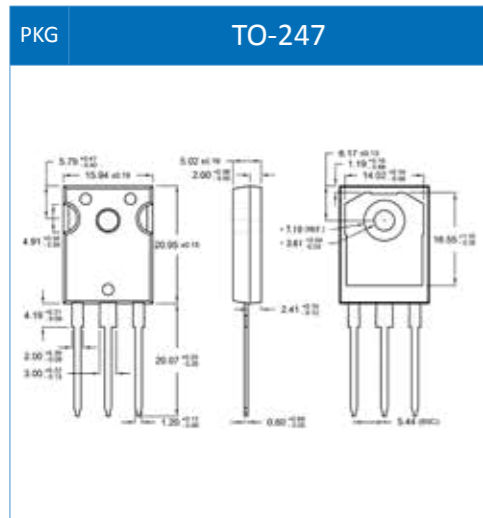
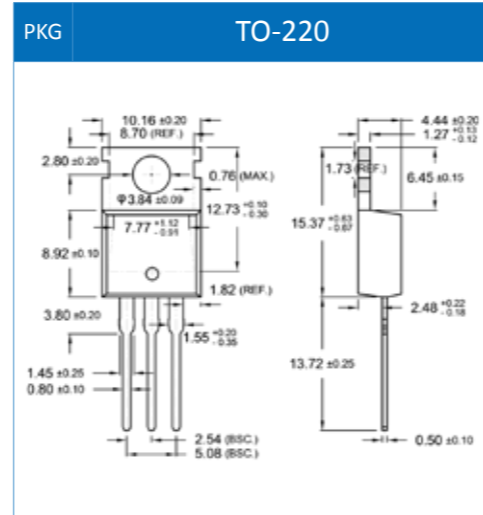
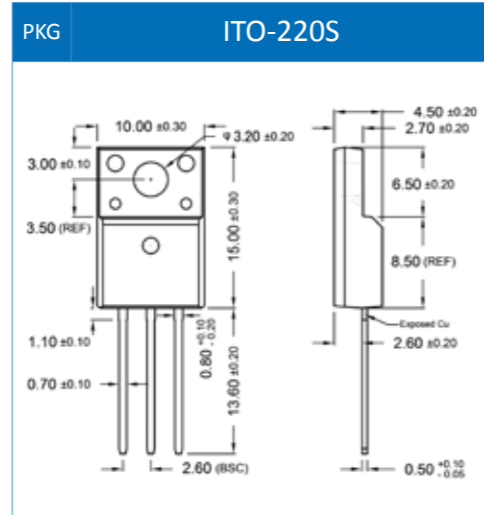
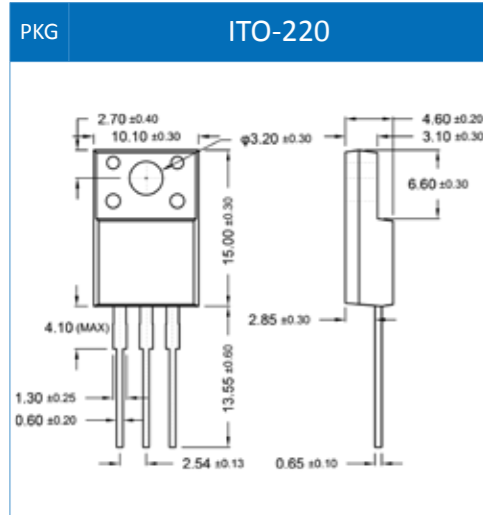


Unit: millimeter

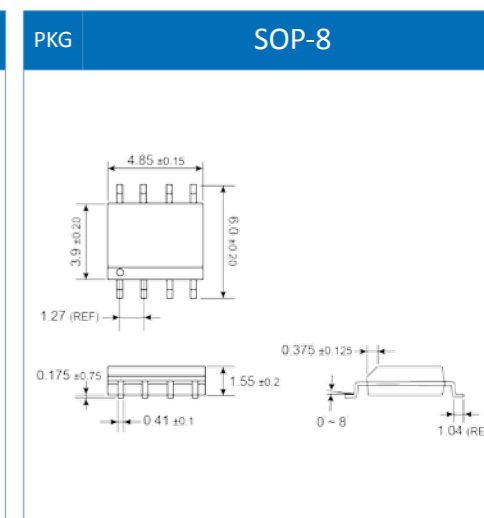
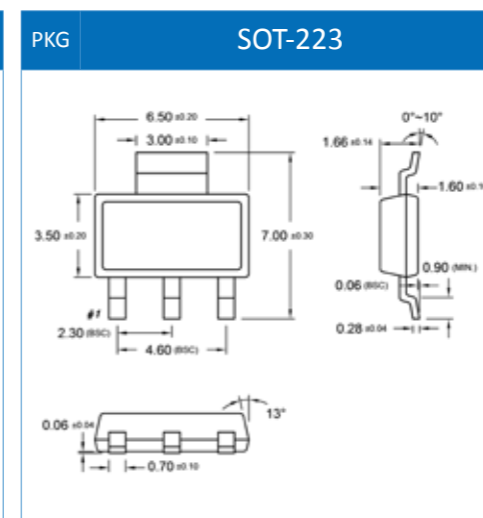
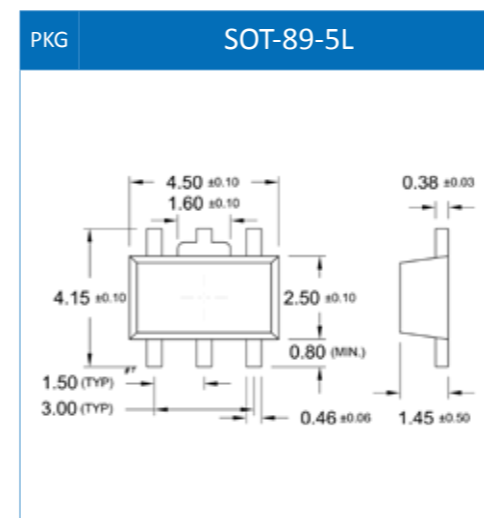
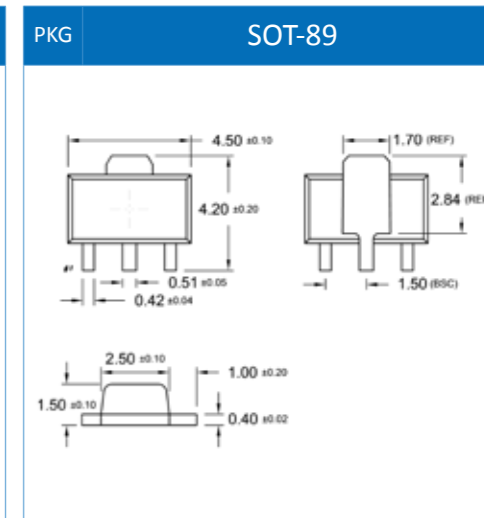
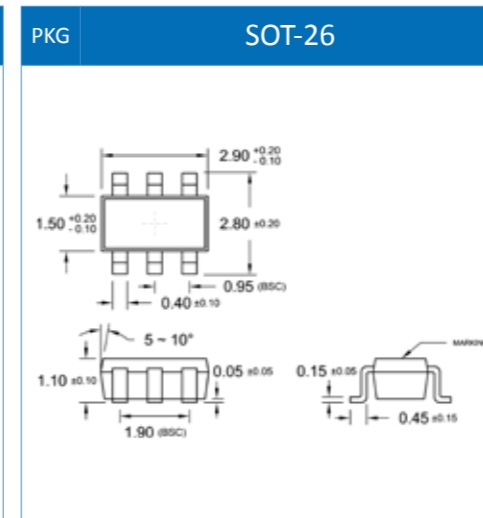
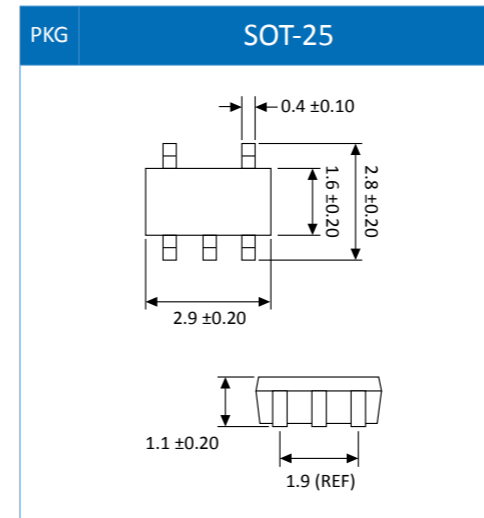
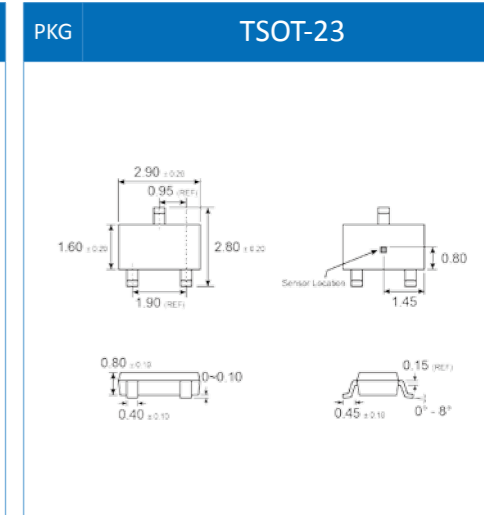
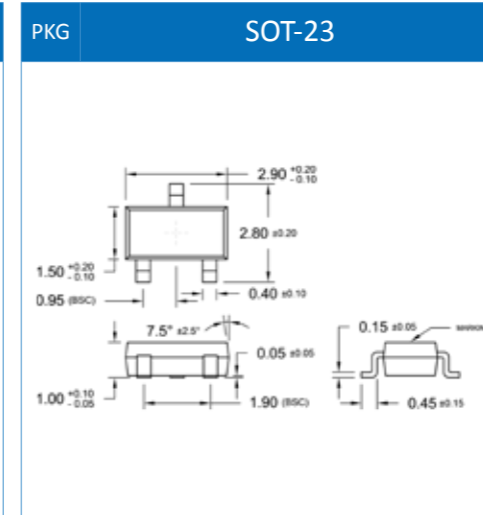
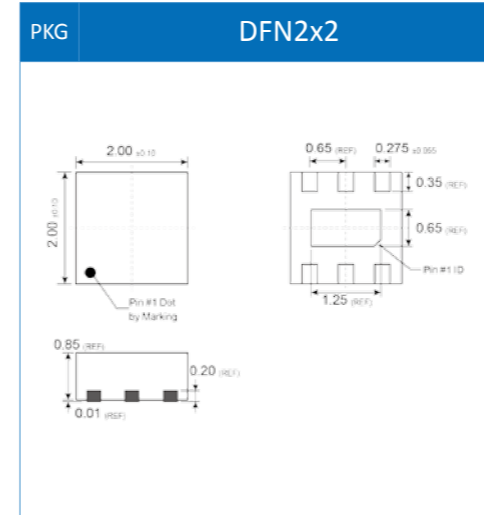
Unit: millimeter

# OUTLINE DRAWINGS - MOSFET

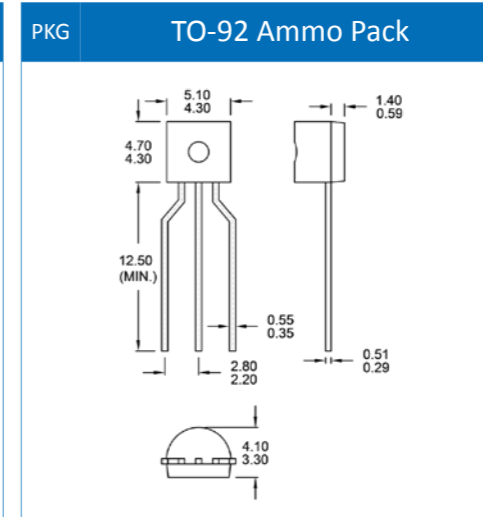
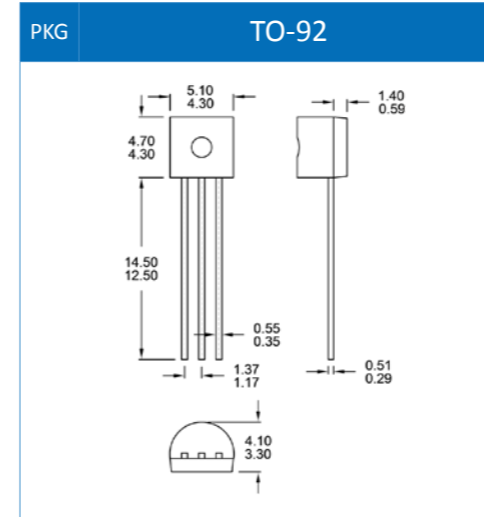
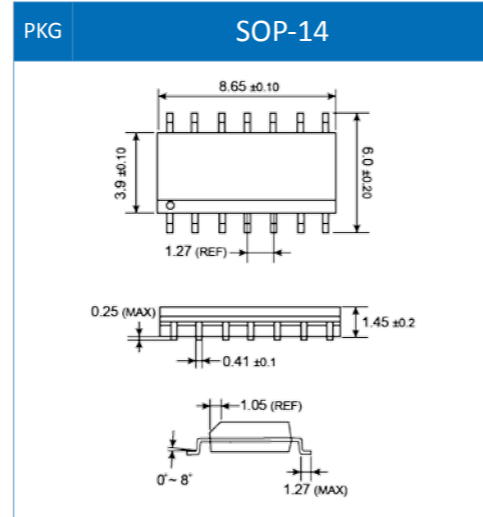
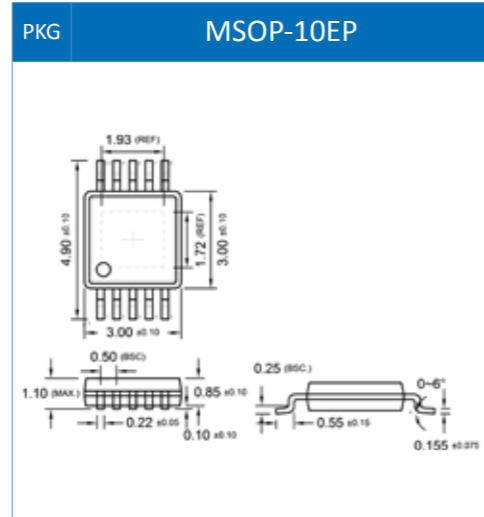
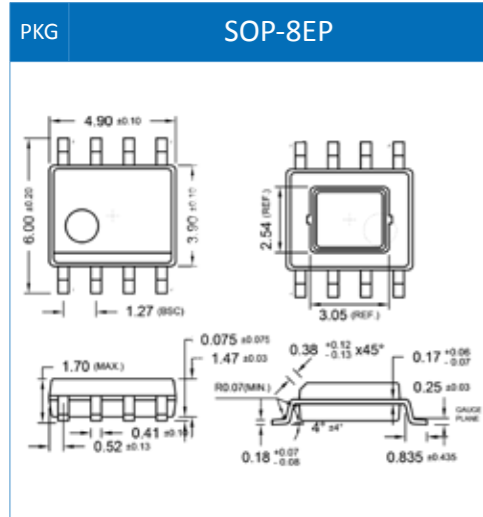
# OUTLINE DRAWINGS - IC



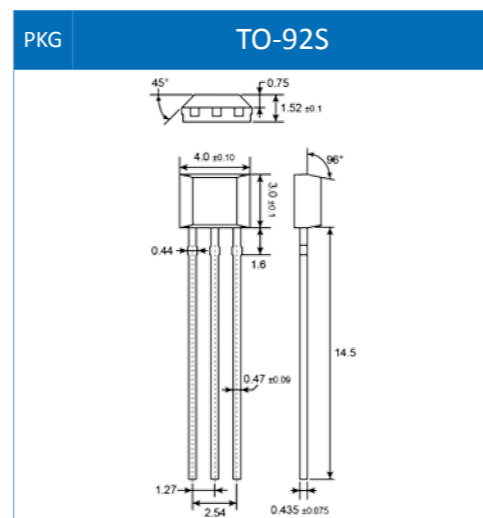
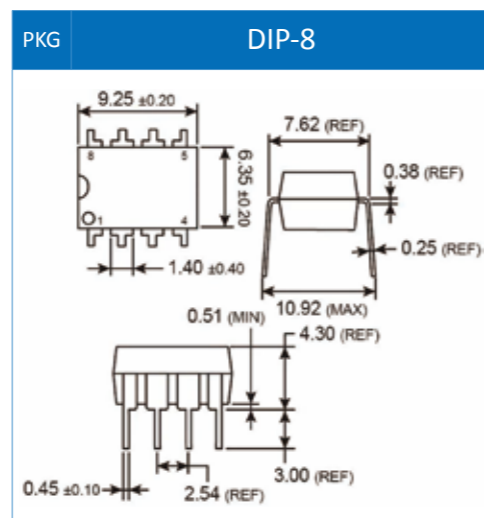
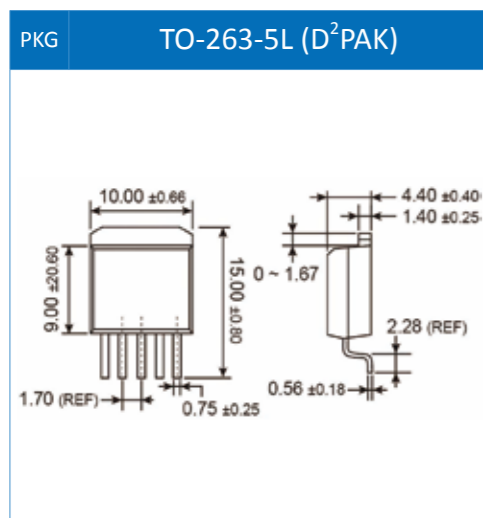
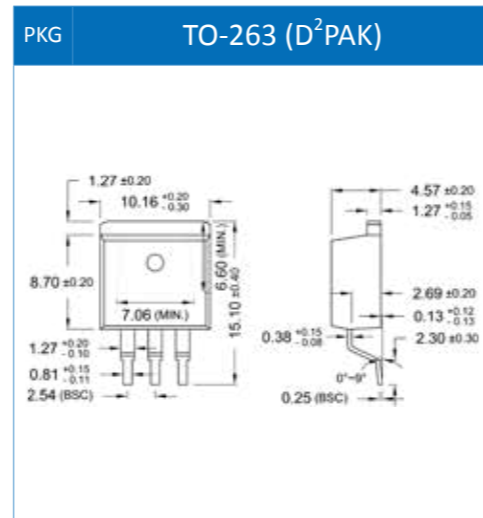
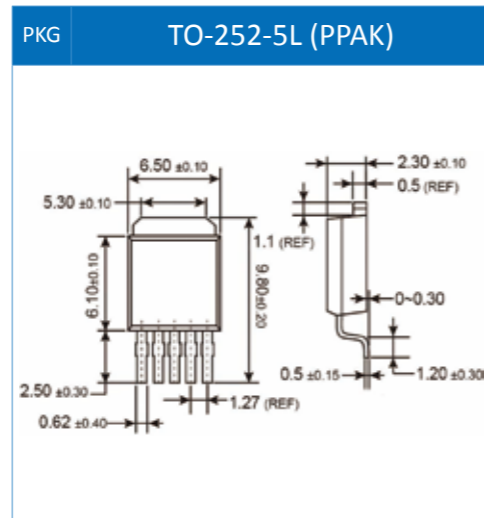
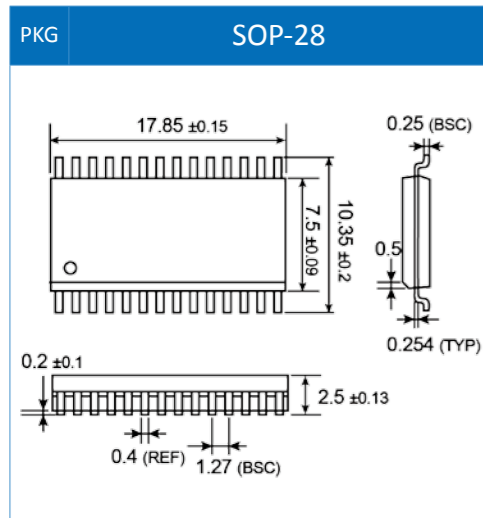
Unit: millimeter



Unit: millimeter



Unit: millimeter



Unit: millimeter







# MEMO

# QUALITY COMPANY, QUALITY PRODUCTS

Taiwan Semiconductor Co., Ltd (TSC) was established in 1979 at Taipei, Taiwan. Recognized for more than 40 years for its core competence in Power Rectifiers, TSC has expanded its product portfolio to include Trench Schottkys, MOSFETs, Power Transistors, LED Driver ICs, Analog ICs and ESD Protection Devices, and now provides a complete solution. TSC products are used in a vast array of applications in the electronics industry, including automotive, computer, consumer, industrial, telecom and photovoltaic. TSC's production facilities are fully compliant to current automotive and environmental standards such as IATF16949, ISO9001 and ISO14001. TSC is committed to being the right choice for a successful and lasting business relationship.



## ASIA PACIFIC

<b>Taiwan</b> Taiwan Semiconductor Co., Ltd. 11F, No.205, Sec.3, Beishin Rd., Xindian District, New Taipei City, 23143, Taiwan, R.O.C. Tel: +886-2-8913-1588 Fax: +886-2-8913-1788 +886-2-8913-1800 E-mail: marketing@mail.ts.com.tw	<b>Korea</b> Taiwan Semiconductor Co., Ltd. Korea Room 315, Songnam Bldg., 1358-6, Seocho-Dong, Seocho-Gu, Seoul, Korea Tel: +82-2-598-3336 Fax: +82-2-598-3351 E-mail: sales@tsckr.com	<b>Japan</b> Taiwan Semiconductor Co., Ltd. Tokyo Yuasa Bldg. 3F, 2-13-10, Hongo Bunkyo-ku, Tokyo 113-0033, Japan Tel: +81-3-5840-6381 Fax: +81-3-5840-6382 E-mail: sales@tscej.jp	Taiwan Semiconductor Co., Ltd. Osaka Marumiya Bldg. 6F, 4-7-18, Nishinakajima, Yodokawa-ku, Osaka 532-0011, Japan Tel: +81-6-6829-7115 Email: sales@tsclj.jp
<b>China</b> Taiwan Semiconductor Co., Ltd. Shenzhen Room 2501, 25F, New World Center, 6009 Yitian Road, Futian District, Shenzhen City, China Zip: 518026 Tel: +86-755-8328-9100 Fax: +86-755-8328-3749 E-mail: sales_china@mail.ts.com.tw	Taiwan Semiconductor Co., Ltd. Shanghai Room 2909, 29F, Enterprise Square, No.228, MeiYuan Rd., Jingan Area, Shanghai, China Zip: 200070 Tel: +86-21-6876-5776 Fax: +86-21-6876-5775 E-mail: sales_china@mail.ts.com.tw	Taiwan Semiconductor Co., Ltd. Suzhou Room 2808, No. 33, Xing Gui street, Suzhou Industrial Park, Suzhou, Jiangsu, China Zip: 215011 Tel: +86-512-6299-8266 Fax: +86-512-6299-8166 E-mail: sales_china@mail.ts.com.tw	Taiwan Semiconductor Co., Ltd. Tianjin No.165, Huanghai Rd., Tianjin Economic Development Area, China Zip: 300457 Tel: +86-22-5981-6699 Fax: +86-22-5981-5331 E-mail: sales_china@mail.ts.com.tw
Taiwan Semiconductor Co., Ltd. Beijing Room 902-12, 9F, Longsheng Building, Rongchang East Street, Yizhuang Economic and Technology Development Zone, Daxing District, Beijing, China Zip:100176 Tel: +86-21-6876-5776 Email: sales_china@mail.ts.com.tw	<b>Hong Kong</b> Taiwan Semiconductor Co., Ltd. Hong Kong 5F, Meeco Industrial Building, 53-55, Au Pui Wan Street, Fo Tan, Shatin, New Territories, Hong Kong Tel: +852-2790-8881 Fax: +852-2790-3939 E-mail: sales@taiwansemi.com.hk	<b>India</b> JA-323, 3rd Floor DLF Tower A, Jasola, New Delhi, India Zip: 110025 Tel: +91-11-45730473 Email: vivek@tsclnd.in	

## AMERICA

**Brea, CA**  
 TSC America Inc.  
 3040 Saturn Street, suite 200  
 Brea, CA 92821, USA  
 Tel: +1-657-258-0800  
 Fax: +1-657-258-0801  
 E-mail: sales@tscus.com

## EUROPE

**Germany**  
 Taiwan Semiconductor Europe GmbH  
 Georg-Wimmer-Ring 8b  
 85604 Zorneding, Germany  
 Tel: +49-8106-9963-660  
 Fax: +49-8106-9963-663  
 E-mail: munich@tsceu.com

**France**  
 Taiwan Semiconductor Europe GmbH  
 80 avenue du General de Gaulle  
 91170 Viry-Chatillon, France  
 Tel: +33-6-0706-3223  
 Fax: +49-8106-996363  
 E-mail: infoparis@tsceu.com

**United Kingdom**  
 Taiwan Semiconductor Europe GmbH  
 15, Cheltenham Drive,  
 Stafford Staffordshire, ST17 4TX, England  
 Tel: +44-1785-660440  
 Fax: +44-5601-148406  
 E-mail: pat.howard@tsceu.com



[www.taiwansemi.com](http://www.taiwansemi.com)

Taiwan Semiconductor Co., Ltd.

11F, No. 205, Sec. 3, Beishin Rd., Xindian Dist., New Taipei City, 23143, Taiwan, R.O.C