



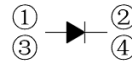
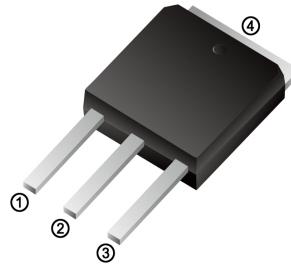
G501 THRU G510

Surface Mount Standard Rectifiers

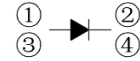
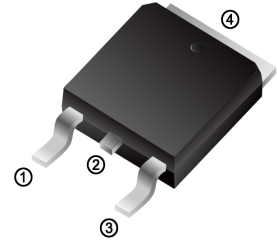
FEATURES

- High current capability
- Low forward voltage drop
- Low power loss, high efficiency
- High surge capability
- High temperature soldering guaranteed
- Mounting position: any

TO-251(I-PAK)



TO-252(D-PAK)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

CHARACTERISTICS	TO-251	G501VS	G502VS	G504VS	G506VS	G508VS	G510VS	UNIT
	TO-252	G501DS	G502DS	G504DS	G506DS	G508DS	G510DS	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	I _(AV)	5.0						A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I _{FSM}	150						A
Maximum Forward Voltage at 5.0A DC	V _F	1.1						V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	5.0 500						uA
Typical Junction Capacitance Per Element (Note1)	C _J	50						pF
Typical Thermal Resistance (Note2)	R _{θJC}	25						°C/W
Operating Temperature Range	T _J	-55 to +150						°C
Storage Temperature Range	T _{STG}	-55 to +150						°C

NOTES: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Mounted on 10cm x 10cm x 1mm copper pad area



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

FIG.1- FORWARD CURRENT DERATING CURVE

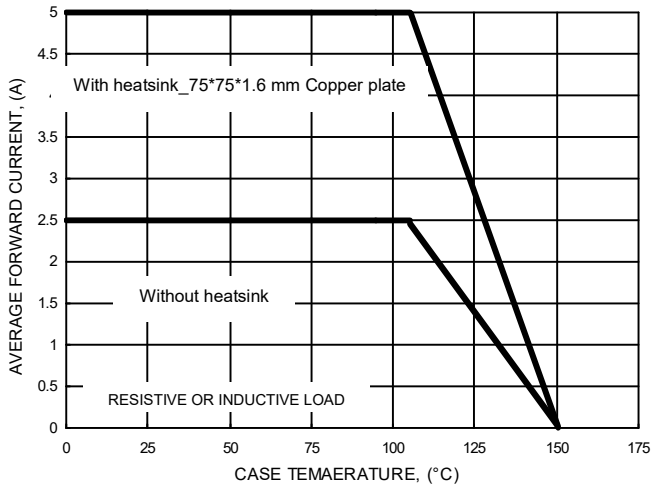


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

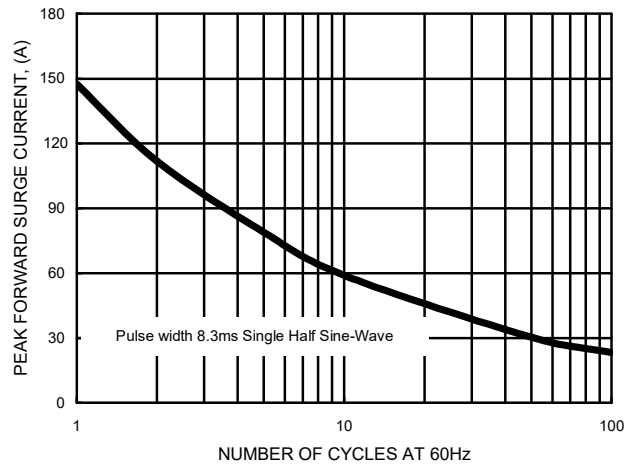


FIG.3- TYPICAL JUNCTION CAPACITANCE

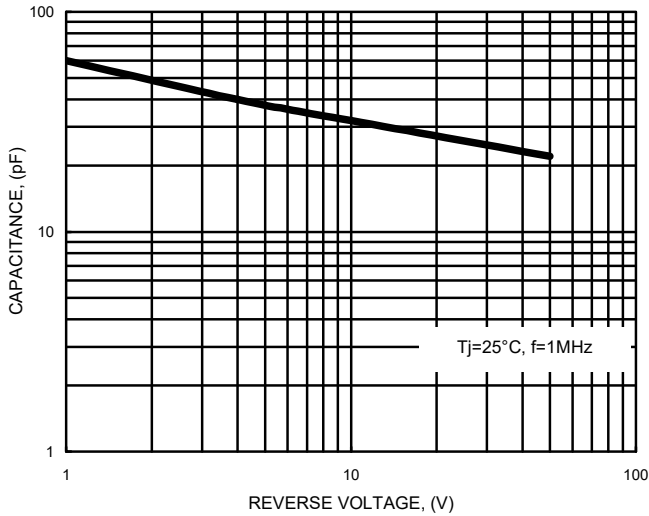


FIG.4- TYPICAL FORWARD CHARACTERISTICS

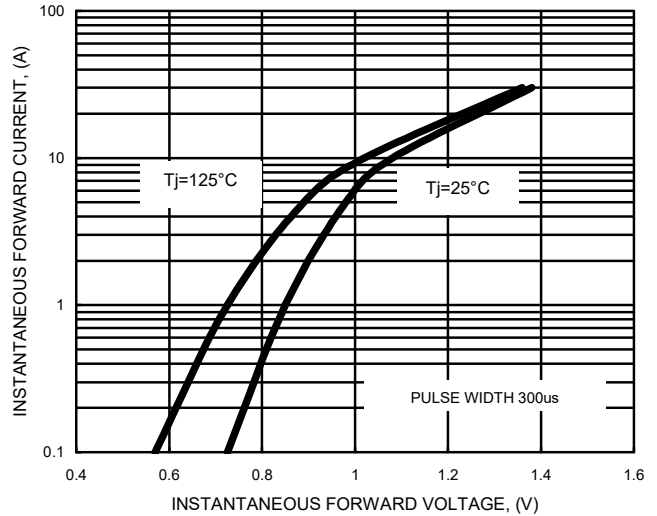
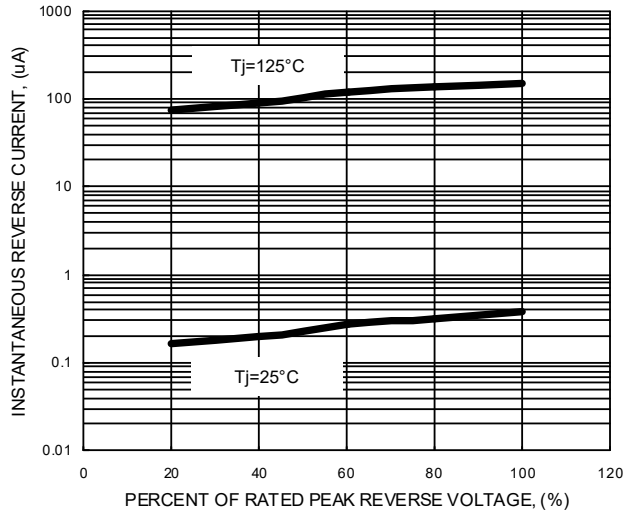


FIG.5- TYPICAL REVERSE CHARACTERISTICS

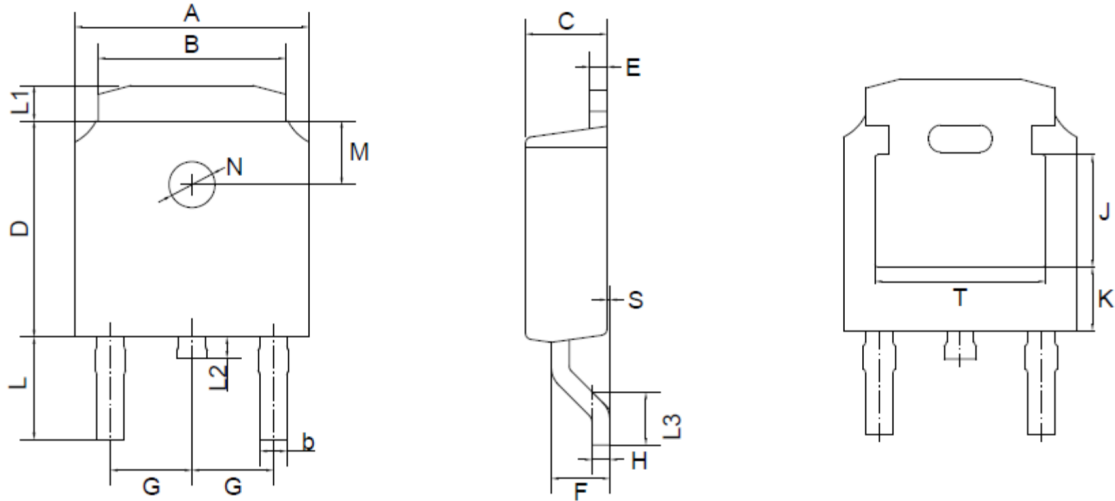




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Surface Mount Standard Rectifiers

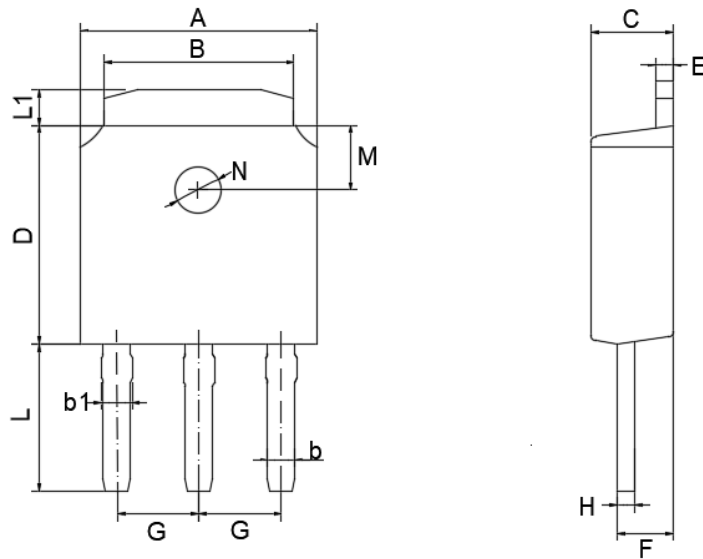
TO-252(D-PAK) Package Outline Dimensions



TO-252(D-PAK) mechanical data

UNIT	A	B	b	C	D	E	F	G	H	L	L1	L2	L3	S	M	N	J	K	T
mm	max	6.7	5.5	0.8	2.5	6.3	1.8	2.29	0.55	3.1	1.2	1.0	1.75	0.1	1.8	1.3	3.16	1.80	4.83
	min	6.3	5.1	0.3	2.1	5.9	1.3	TYPICAL	0.45	2.7	0.8	0.6	1.40	0.0	TYPICAL	TYPICAL	ref.	ref.	ref.
mil	max	264	217	31	98	24	71	90	22	122	47	39	69	4	71	51	124	71	190
	min	248	201	12	83	16	51	TYPICAL	18	106	31	24	55	0	TYPICAL	TYPICAL	ref.	ref.	ref.

TO-251(I-PAK) Package Outline Dimensions



TO-251(I-PAK) mechanical data

UNIT	A	B	b	b1	C	D	E	F	G	H	L	L1	M	N
mm	max	6.70	5.50	0.80	0.90	2.50	6.30	1.80	2.29	0.55	4.30	1.20	1.8	1.3
	min	6.30	5.10	0.30	0.76	2.10	5.90	1.30	TYPICAL	0.45	3.90	0.80	TYPICAL	TYPICAL
mil	max	264	217	31	35	98	24	71	90	22	169	47	71	51
	min	248	201	12	30	83	16	51	TYPICAL	18	154	31	TYPICAL	TYPICAL