General Purpose Rectifier

Features

RoHS COMPLIANT

- Low forward voltage
- Low reverse leakage
- High forward surge current capacity
- High temperature soldering guaranteed: 260/10 seconds 0.375" (9.5mm) lead length
- RoHS and REACH compliance

Mechanical Data

Case:	Transfer molded plastic
Epoxy:	UL94V-0 rate flame retardant
Terminals:	Plated axial lead, solderable per MIL-STD-202E, Method 208C
Polarity:	Color band denotes cathode end
Mounting position:	Any
Weight:	0.07 Ounce, 2.0 gram

Maximum Ratings *(T Ambient=25ºC unless noted otherwise)*

Symbol	Description	P600A	P600B	P600D	P600G	P600J	P600K	P600M	Unit	Conditions
VRRM	Non-Repetitive Peak Reverse Voltage	50	100	200	400	600	800	1000	**V**	
VRMS	Maximum RMS Voltage	35	70	140	280	420	560	700	**V**	
VDC	Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	**V**	
I(AV)	Maximum Average Forward Rectifier Current	6.0							**Amps**	0.375"(9.5mm) at TA=60℃
IFSM	Peak Forward Surge Current	400							**Amps**	8.3mS Single half sine wave (JEDEC method)
TJ, TSTG	Operating and Storage Temperature	--65 to +175							**℃**	
IR	Maxmum DC Reverse Current at Rated DC Blocking Voltage per element	10.0							**μA**	TA=25℃
		1.0								TA=100℃

Electrical Characteristics *(T Ambient=25ºC unless noted otherwise)*

Symbol	Description		Unit	Conditions
VF	Max Instantaneous Forward Voltage	1.0	**V**	3.0A
IR(AV)	Maximum Full Load Reverse Current	1.0	**μA**	Full cycle average 0.375"(9.5mm) lead length at TL=105℃
CJ	Typical Junction Capacitance	150	**pF**	1.0MHz & 4.0V
RθJA	Typical Thermal Resistance	10	**℃/W**	Note 1

Note:

1. Thermal resistance from junction to ambient with 0.375" (9.5mm) lead length
2. PCB mounted with 0.2" x 0.2" (20mm x 20mm) copper pads

Ratings And Characteristic Curves P600A ~ P600M:

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

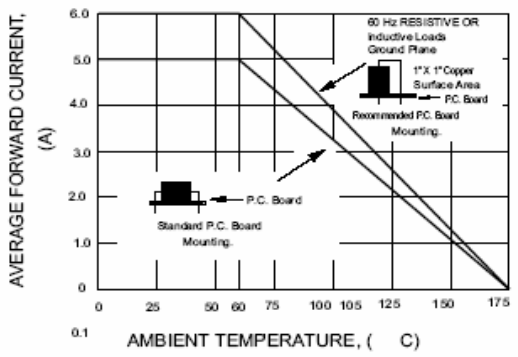


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

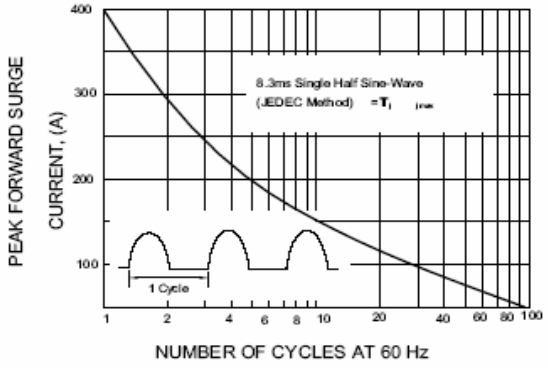


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

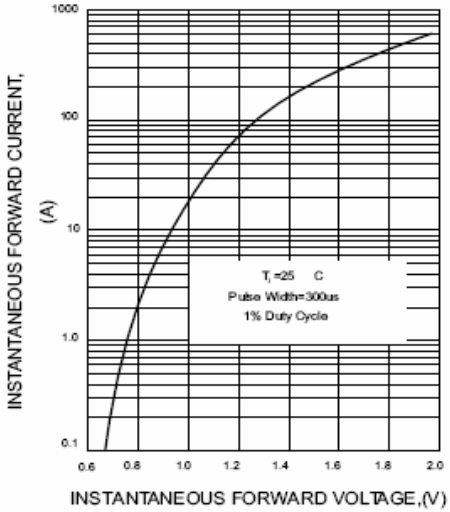


FIG.4-TYPICAL REVERSE CHARACTERISTICS

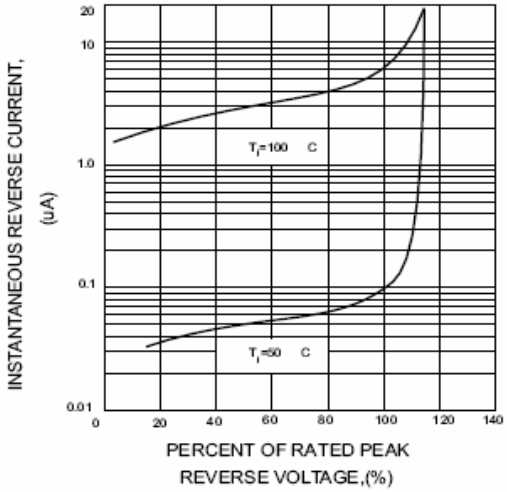


FIG.5-TYPICAL JUNCTION CAPACITANCE

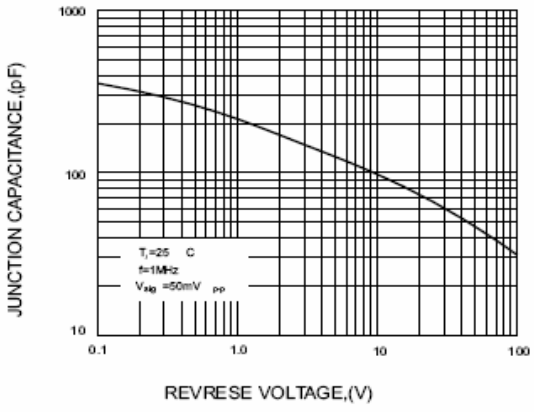
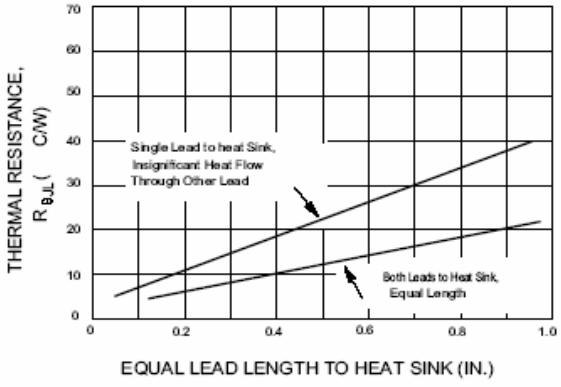
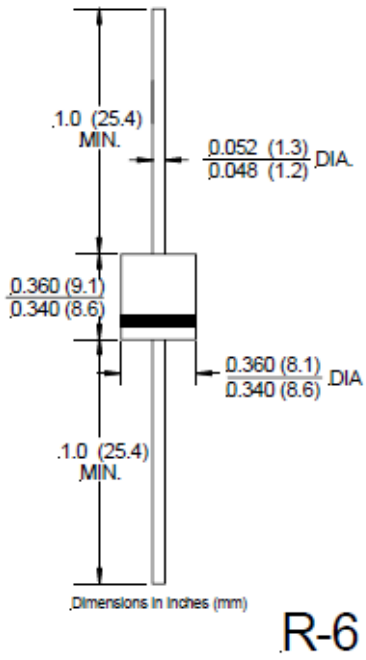


FIG.6-TYPICAL THERMAL RESISTANCE VS LEAD LENGTH



P600A ~ P600M

Dimensions in inch (mm)



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