

### GENERAL PURPOSE SILICON RECTIFIER

<b>FEATURES</b> <ul style="list-style-type: none"> <li>• Low cost construction</li> <li>• Low forward voltage drop</li> <li>• Low reverse leakage</li> <li>• High forward surge current capability</li> <li>• High temperature soldering guaranteed: 260°C/10 seconds/0.375" (9.5mm) lead length at 5 lbs (2,3kg) tension</li> </ul>		<b>VOLTAGE RANGE</b> 50 to 1000 Volts <b>CURRENT</b> 6.0 Amperes							
<b>MECHANICAL DATA</b> <ul style="list-style-type: none"> <li>• <b>Case:</b> Transfer molded plastic</li> <li>• <b>Epoxy:</b> UL94V-0 rate flame retardant</li> <li>• <b>Polarity:</b> Color band denotes cathode end</li> <li>• <b>Lead:</b> Plated axial lead, solderable per MIL-STD-202E method 208C</li> <li>• <b>Mounting position:</b> Any</li> <li>• <b>Weight:</b> 0.07 ounce, 2.0 grams</li> </ul>		<p>Dimensions in inches and (millimeters)</p>							
<b>MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS</b> Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load derate current by 20%.									
	<b>SYMBOLS</b>	P600A	P600B	P600D	P600G	P600J	P600K	P600M	<b>UNITS</b>
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current 0.375" (9.5mm) lead length at $T_A=60^\circ C$	$I_{(AV)}$	6.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	400							Amps
Maximum Instantaneous Forward Voltage at 6.0A	$V_F$	0.95							Volts
Maximum DC Reverse Current at rated DC blocking voltage	$T_A=25^\circ C$	10							$\mu$ Amps
	$T_A=100^\circ C$	1.0							mAmps
Maximum Full Load Reverse Current, full cycle average 0.375" (9.5mm) lead length at $T_L=105^\circ C$	$I_{R(AV)}$	1.0							mAmps
Typical Junction Capacitance(NOTE1)	$C_J$	150							pF
Typical Thermal Resistance(NOTE2)	$R_{\theta JA}$	10							$^\circ C/W$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-65 to +175							$^\circ C$
<b>NOTES:</b> 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts. 2. Thermal Resistance from Junction to Ambient at 0.375" (9.5mm) lead length, P.C. board mounted with 1.1" X1.1" (30X30mm) copper heatsink.									

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

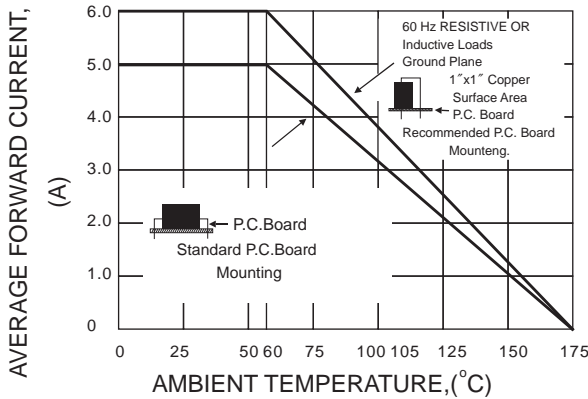


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

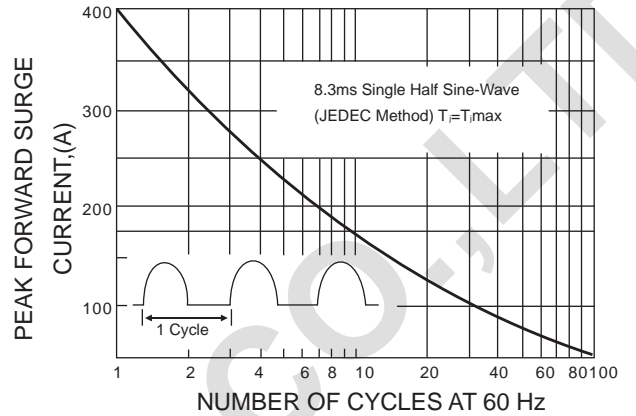


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

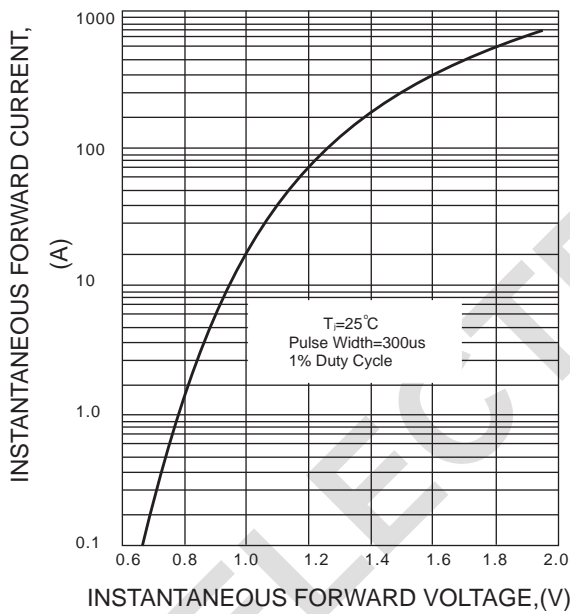


FIG.4-TYPICAL REVERSE CHARACTERISTICS

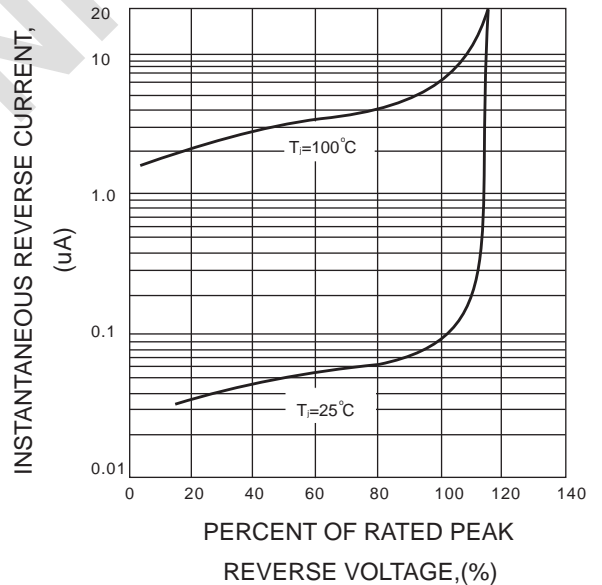


FIG.5-TYPICAL JUNCTION CAPACITANCE

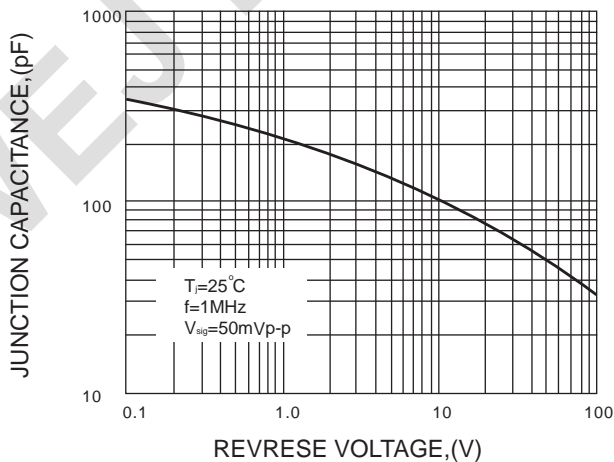


FIG.6-TYPICAL THERMAL RESISTANCE VS LEAD LENGTH

