

GENERAL PURPOSE SILICON RECTIFIER

<p>FEATURES</p> <ul style="list-style-type: none"> • Low cost construction • Low forward voltage drop • Low reverse leakage • High forward surge current capability • High temperature soldering guaranteed: 260°C/10 seconds/0.375" (9.5mm) lead length at 5 lbs (2,3kg) tension <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> • Case: Transfer molded plastic • Epoxy: UL94V-0 rate flame retardant • Polarity: Color band denotes cathode end • Lead: Plated axial lead, solderable per MIL-STD-202E method 208C • Mounting position: Any • Weight: 0.0070 ounce, 0.20 gram 	<p>VOLTAGE RANGE CURRENT</p> <p>50 to 1500Volts 1.0 Ampere</p> <p>Dimensions in inches and (millimeters)</p>										
<p>MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS</p> <p>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%.</p>											
	SYMBOLS	1A1	1A2	1A3	1A4	1A5	1A6	1A7	1A8	1A9	UNITS
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	1200	1500	Volts
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	840	1050	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	1200	1500	Volts
Maximum Average Forward Rectified Current 0.375" (9.5mm) lead length at T _A =25°C	I _(AV)	1.0									Amp
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	25									Amps
Maximum Instantaneous Forward Voltage at 1.0A	V _F	1.1									Volts
Maximum DC Reverse Current at rated DC blocking voltage	I _R	5.0									μAmps
		50									
Maximum Full Load Reverse Current, full cycle average 0.375" (9.5mm) lead length at T _L =75°C	I _{R(AV)}	30									μAmps
Typical Junction Capacitance(NOTE1)	C _J	15									Pf
Typical Thermal Resistance(NOTE2)	R _{θJA}	50									°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +175									°C
<p>NOTES:</p> <p>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.</p>											

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

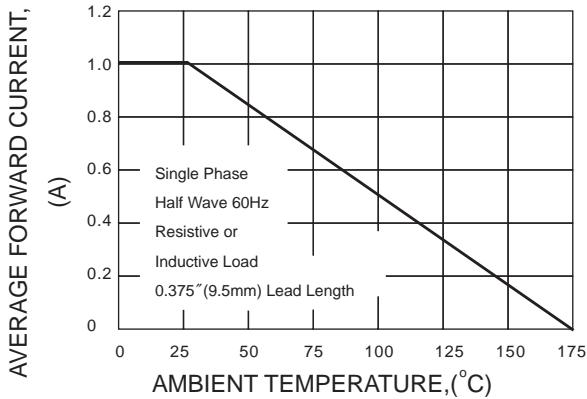


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

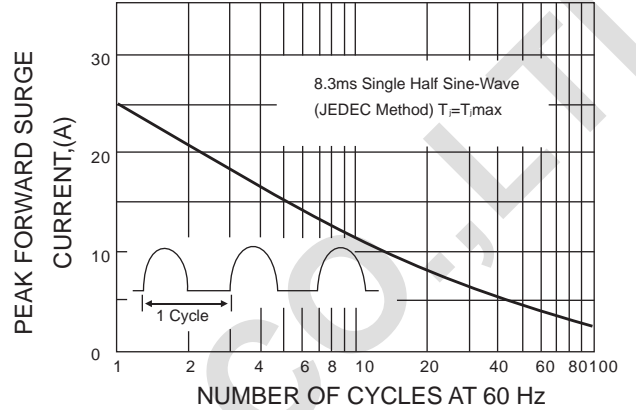


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

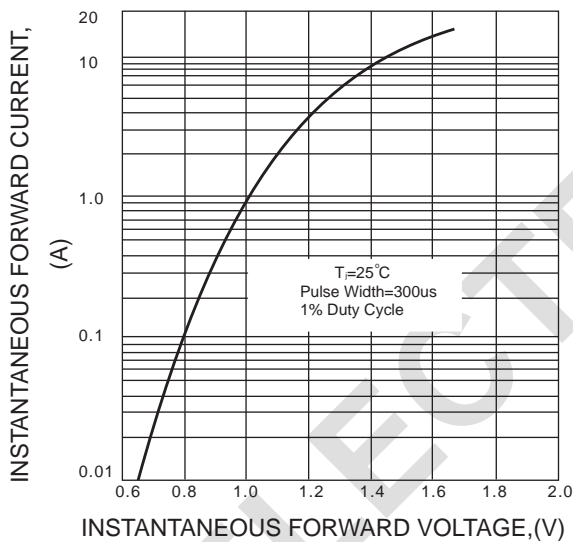


FIG.4-TYPICAL REVERSE CHARACTERISTICS

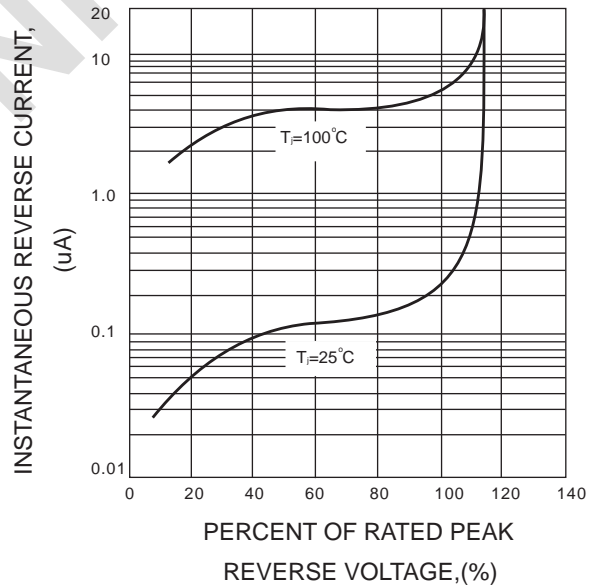


FIG.5-TYPICAL JUNCTION CAPACITANCE

