

GENERAL PURPOSE SILICON RECTIFIER

FEATURES <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 		VOLTAGE RANGE 50 to 1500Volts CURRENT 1.0 Ampere									
MECHANICAL DATA <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>Dimensions in inches and (millimeters)</p>									
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS 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%.											
	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 $T_A=25^\circ\text{C}$	$I_{(AV)}$	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	$T_A=25^\circ\text{C}$									μAmps
		$T_A=100^\circ\text{C}$									
Maximum Full Load Reverse Current, full cycle average 0.375" (9.5mm) lead length at $T_L=75^\circ\text{C}$	$I_{R(AV)}$	30									μAmps
Typical Junction Capacitance(NOTE1)	C_J	15									Pf
Typical Thermal Resistance(NOTE2)	$R_{\theta JA}$	50									$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +175									$^\circ\text{C}$
NOTES: 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.											

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

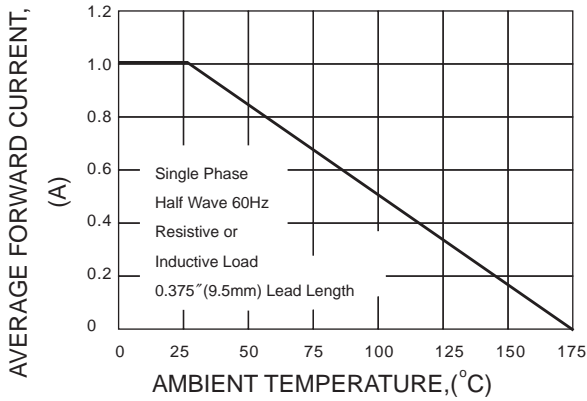


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

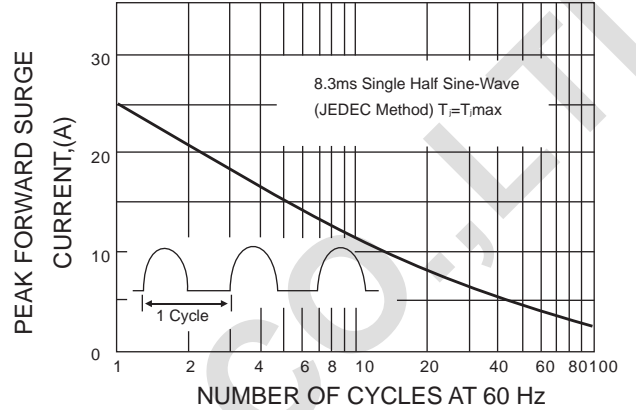


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

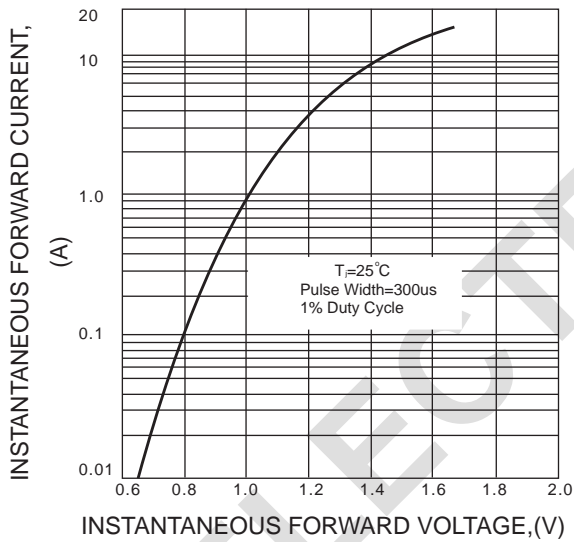


FIG.4-TYPICAL REVERSE CHARACTERISTICS

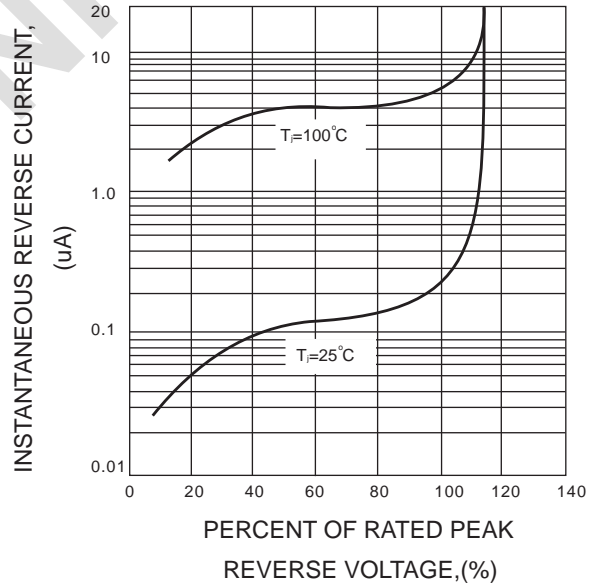


FIG.5-TYPICAL JUNCTION CAPACITANCE

