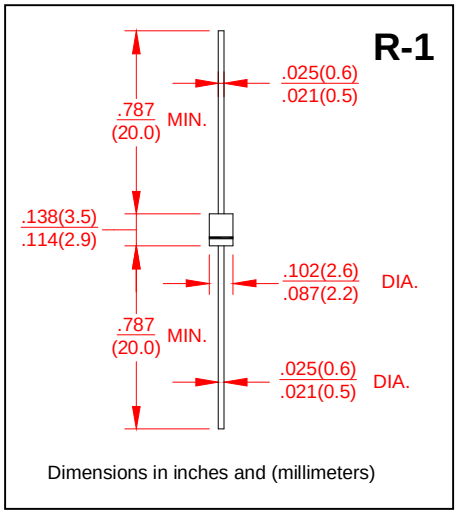
HIGH EFFICIENCY RECTIFIER

1G1 THRU 1G7

VOLTAGE RANGE **50 to 1000 Volts**
CURRENT **1.0 Ampere**

FEATURES

- Glass passivated chip junction
- Low forward voltage drop
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:
  260℃/10 secods,0.375”(9.5mm)lead length at 5 lbs(2.3kg) tension



Dimensions in inches and (millimeters)

MECHANICAL DATA

- 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: 0.007ounce, 0.20 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25^{O}C ambient temperature unless otherwise specified
- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

		SYMBOLS	1G1	1G2	1G3	1G4	1G5	1G6	1G7	UNIT
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= 25℃		$I_{(AV)}$	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 @ 1.0A		V_F	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	T_A = 25℃	I_R	5.0							μA
	T_A = 125℃		50							
Maximum DC Reverse Current, full cycle Average 0.375(9.5mm) lead length at T_L=75℃		$I_{R(AV)}$	30							μA
Typical Junction Capacitance (NOTE 1)		C_J	15							pF
Typical Thermal Resistance (NOTE 2)		$R_{\theta JA}$	50							℃/W
Operating Temperature Range		T_J	(-55 to +150)							℃
Storage Temperature Range		T_{STG}	(-55 to +150)							

Notes:
1.Measured at 1.0MHz and a]pplied Reverse voltage of 4.0Volits.
2. Thermal Resistance from Junction to Ambient at. 375”(9.5mm)lead length, P.C. board mounted.

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FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

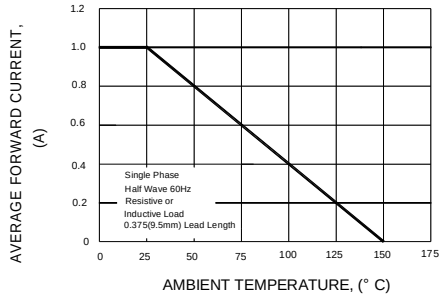

FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

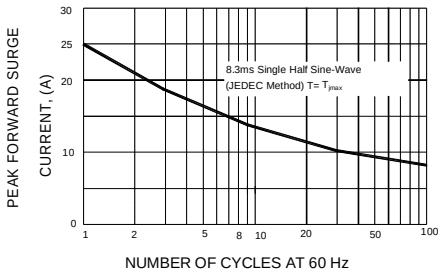

FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

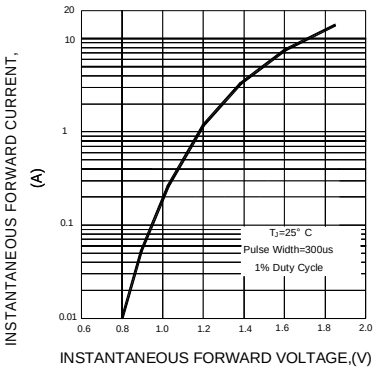

FIG.4-TYPICAL REVERSE CHARACTERISTICS

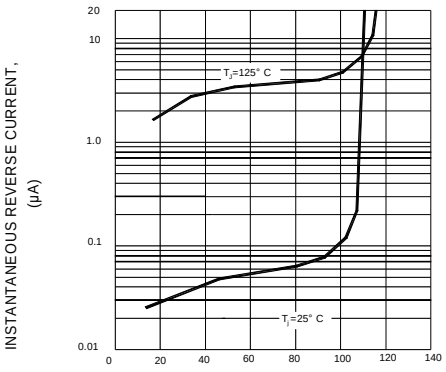

FIG.5-TYPICAL JUNCTION CAPACITANCE