



VOLTAGE RANGE 50 to 1500Volts
CURRENT 1.0 Ampere

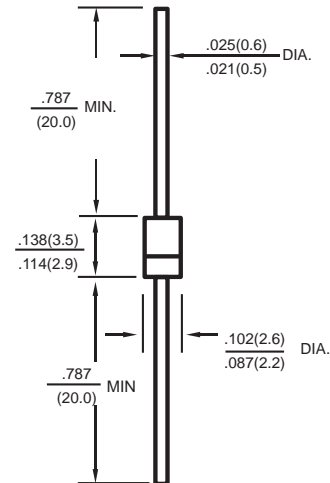
Features

- ✧ 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

Mechanical Data

- ✧ **Case:** Transfer molded plastic
- ✧ **Epoxy:** UL94V-0 rate flame retardant
- ✧ **Polarity:** Color band denotes cathode end
- ✧ **Mounting position:** Any
- ✧ **Weight:** 0.20 gram

R-1



Dimensions in inches and (millimeters)

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%.

Type Number	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 $T_A=25^\circ C$	$I_{(AV)}$	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	$T_A=25^\circ C$									μ Amps
		$T_A=100^\circ C$									
Maximum Full Load Reverse Current, full cycle average 0.375" (9.5mm) lead length at $T_L=75^\circ C$	$I_{R(AV)}$	30									μ Amps
Typical Junction Capacitance(NOTE1)	C_J	15									Pf
Typical Thermal Resistance(NOTE2)	$R_{\theta JA}$	50									$^\circ C/W$
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +175									$^\circ C$

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

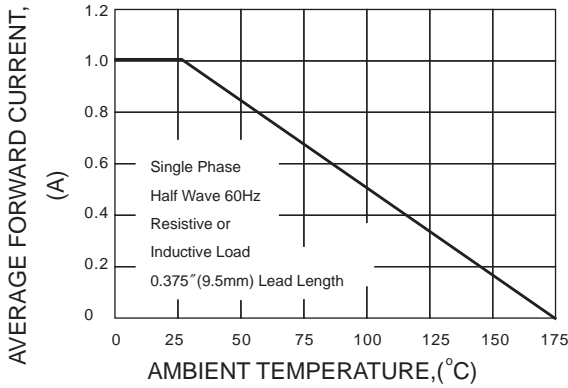


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

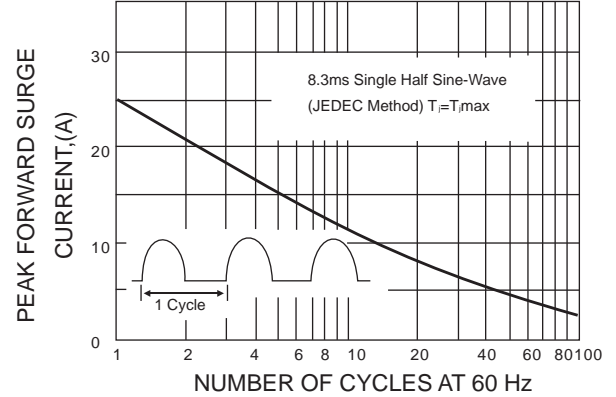


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

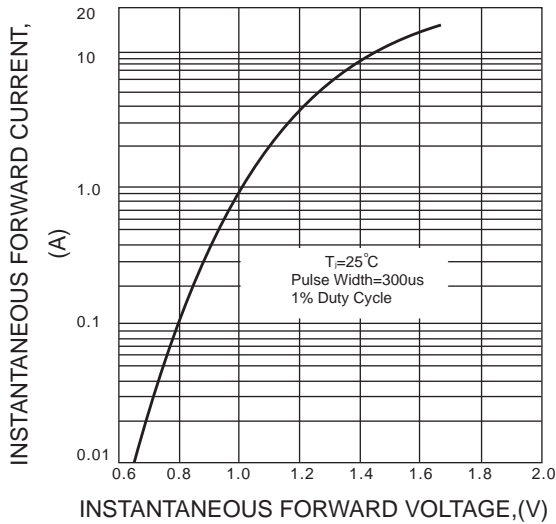


FIG.4-TYPICAL REVERSE CHARACTERISTICS

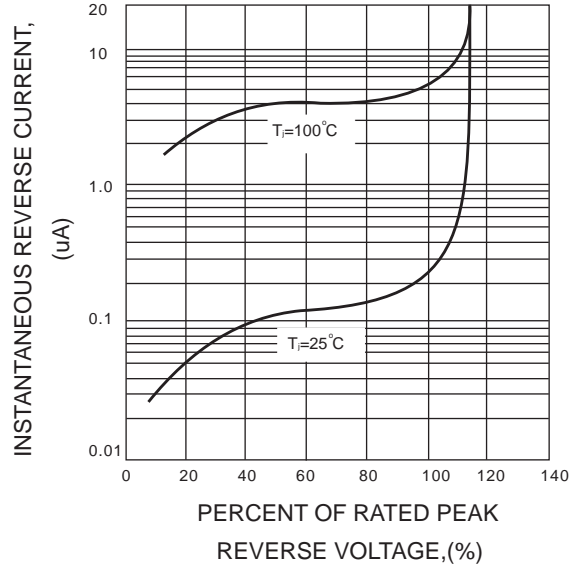
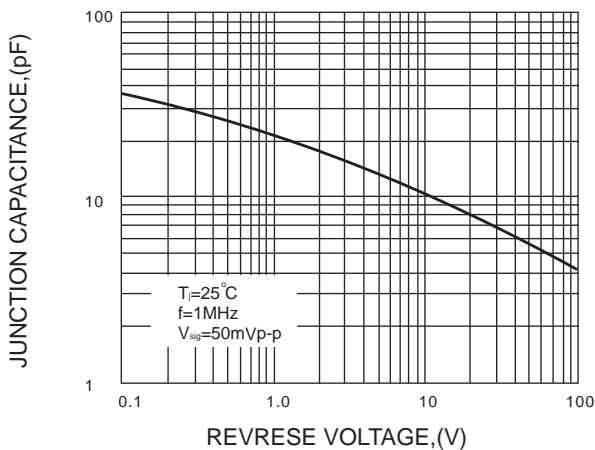


FIG.5-TYPICAL JUNCTION CAPACITANCE



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
R-1	5000/AMMO	50000	42X28X31	12.00	10.00