



S E M I C O N D U C T O R

1A1 THRU 1A7

GENERAL PURPOSE PLASTIC RECTIFIER

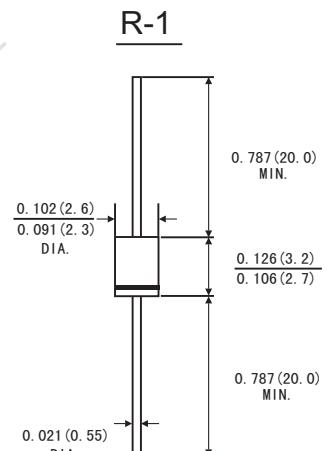
Reverse Voltage - 50 to 1000 Volts
Forward Current - 1.0Ampere

FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU

MECHANICAL DATA

- Case: R-1 molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.007ounce, 0.19 gram



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 by 20%.)

	Symbols	1A1	1A2	1A3	1A4	1A5	1A6	1A7	Units
Maximum recurrent 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	I _(AV)				1.0				Amp
Peak forward surge current (8.3ms half sine-wave superimposed on rated load (JEDEC method)at T _A =75°C	I _{FSM}				25.0				Amps
Maximum instantaneous forward voltage at 1.0 A	V _F				1.1				Volts
Maximum reverse current at rated DC blocking voltage	T _A =25°C T _A =100°C	I _R			5.0				µA
					500				
Typical thermal resistance (Note 2)	R _{θJA}				60.0				°C/W
Typical junction capacitance (Note 1)	C _J				15.0				pF
Operating and Storage temperature Range	T _J T _{STG}				-55 to+150				°C

Note: 1.Measured at 1MHz and applied reverse voltage of 4.0V dc.

2.Thermal resistance from junction to ambient and from junction to lead at 0.375"(9.5mm)lead length ,p.c.b. mounted

RATINGS AND CHARACTERISTIC CURVES 1A1 THRU 1A7

FIG.1-FORWARD CURRENT DERATING CURVE

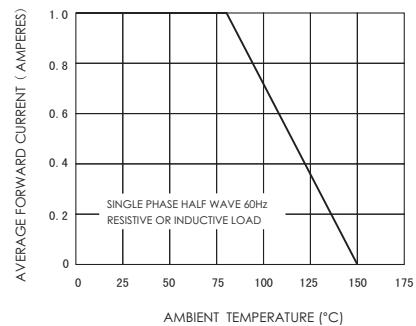


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

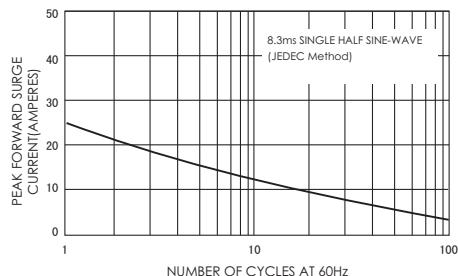


FIG.5-TYPICAL JUNCTION CAPACITANCE

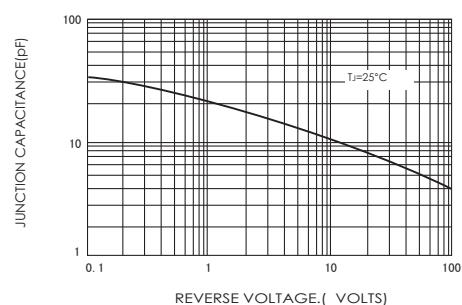


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

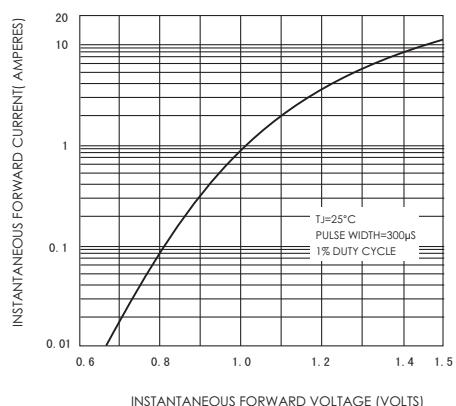


FIG.4-TYPICAL REVERSE CHARACTERISTICS

