

R1A1 THRU R1A7

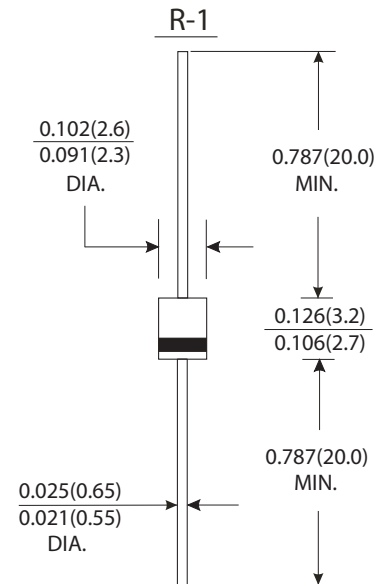
CURRENT 1.0 Ampere
VOLTAGE 50V to 1000 Volts

Features

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- Low reverse leakage
- High forward surge current capability
- High reliability

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 : 0.007 ounce, 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	R1A1	R1A2	R1A3	R1A4	R1A5	R1A6	R1A7	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 0.375"(9.5mm) lead length T _A =25 °C	I _(AV)	1.0							Amp
Peak forward surge current 8.3ms half sing wave superimposed on rated load (JEDEC method) at T _A =75 °C	I _{FSM}	25.0							Amps
Maximum instantaneous forward voltage at 1.0A	V _F	1.0							Volts
Maximum reverse current at rated voltage	T _A =25 °C	5.0							μA
	T _A =100 °C	50.0							
Typical thermal resistance (Note 2)	R _{θJA}	50.0							°C/W
Typical junction capacitance (Note 1)	C _J	15.0							pF
Operating and Storage temperature Range	T _J T _{STG}	-50 to +175							°C

Notes:

- (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 R1A1 THRU R1A7

FIG.1-FORWARD CURRENT DERATING CURVE

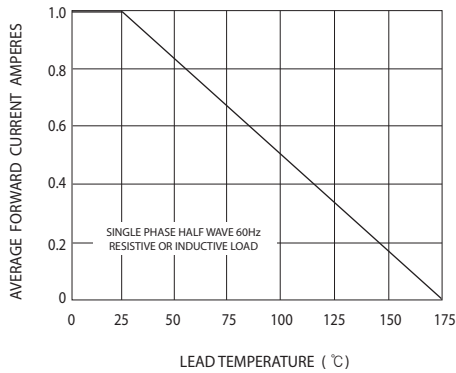


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

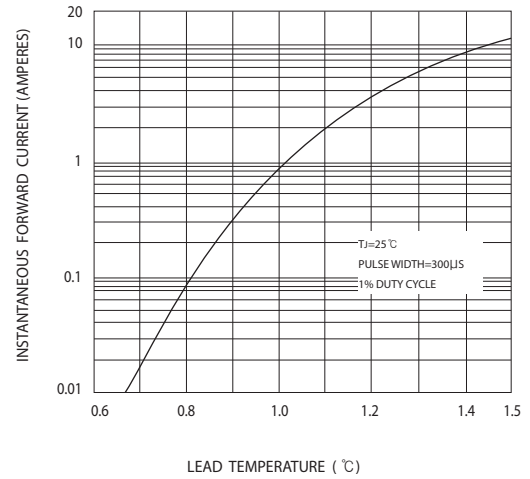


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

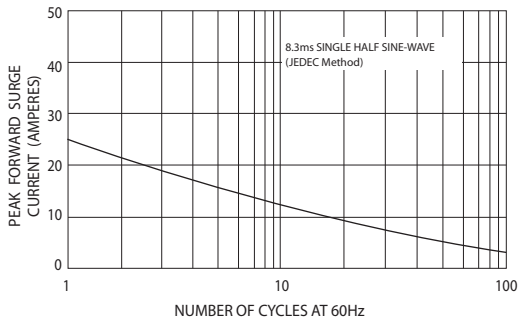


FIG.4-TYPICAL REVERSE CHARACTERISTICS

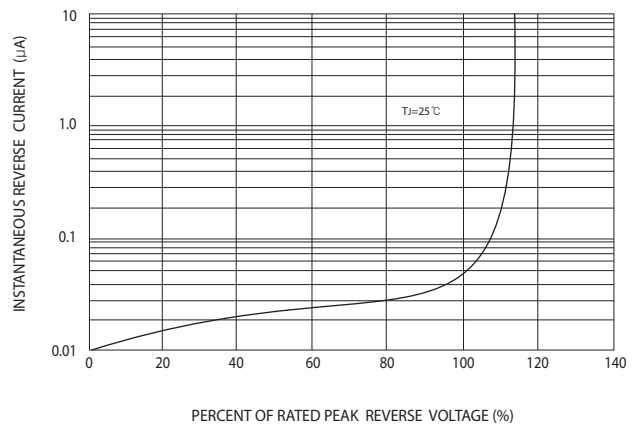


FIG.5-TYPICAL JUNCTION CAPACITANCE

