1A1 THRU 1A7

MINIATURE GENERAL PURPOSE PLASTIC SILICON RECTIFIER



REVERSE VOLTAGE: 50 to 1000 VOLTS FORWARD CURRENT: 1.0 AMPERE

FEATURES

· Low forward voltage drop

· High current capability

· High capability

· High surge current capability

· Exceeds environmental standards of MIL-S-19500/228

MECHANICAL DATA

Case: Molded plastic, R-1

Epoxy: UL 94V-O rate flame retardant

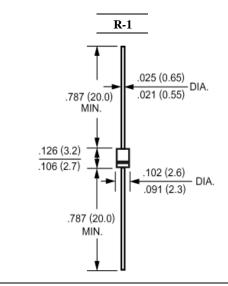
Lead: Axial leads, solderable per MIL-STD-202,

method 208 guaranteed

Polarity: Color band denotes cathode end

Mounting position: Any

Weight: 0.0064ounce, 0.181gram



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%.

	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	т .	I _(AV) 1.0							Amp
.375"(9.5mm) Lead Length at T _A =25℃	I(AV)								
Peak Forward Surge Current,									
8.3ms single half-sine-wave	I_{FSM}	I _{FSM} 25							
superimposed on rated load (JEDEC method)									
Maximum Forward Voltage	V _F	1.1							Volts
at 1.0A DC and 25℃	v _F								
Maximum Reverse Current at T _A =25℃		5.0							uAmp
at Rated DC Blocking Voltage T _A =100℃	_	50							
Maximum Full Load Reverse Current	I_R	100							uAmp
Full Cycle Average at T _L =75℃			100						
Typical Junction Capacitance (Note 1)	C_{J}	15							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	60							°C/W
Operating Junction Temperature Range	$T_{ m J}$	-55 to +150							င
Storage Temperature Range	Tstg	-55 to +150							င

NOTES:

- 1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
- 2- Thermal Resistance From Junction to Ambient 0.375"(9.5mm) lead length P.C.B. Mounted.



RATINGS AND CHARACTERISTIC CURVES

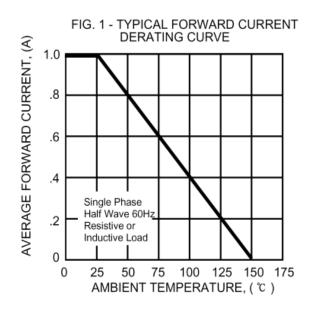


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD PEAK FORWARD SURGE CURRENT, (A) SURGE CURRENT 50 8.3ms Single Half Sine-Wave 40 (JEDED Method) 30 20 10 0

6 810

NUMBER OF CYCLES AT 60Hz

20

40 6080100

2

1

