

1A1 THRU 1A7

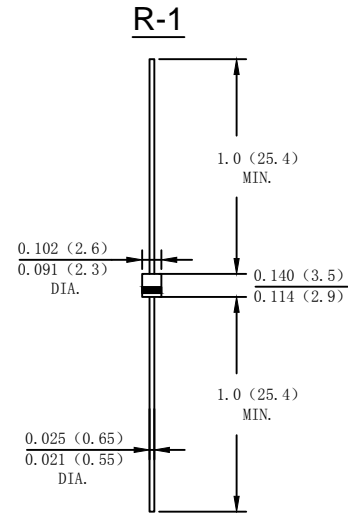
1.0 AMP.Plastic silicon Rectifiers

Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

Mechanical Data

- Case: Molded plastic black body,R-1
- Terminals: Plated leads solderable per MIL-STD-202,Method 208
- Polarity: Cathode band
- Mounting Position: Any
- Making: Type Number
- Lead Free: For RoHS/LeadFree Version



Dimensions in inches and(millimeters)

Maximum Ratings and Electrical Characteristics

Rating 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	SYMBOL	1A1	1A2	1A3	1A4	1A5	1A6	1A7	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Average Rectified Output Current (Note 1) @ $T_A = 40^\circ C$	I_o	1.0							A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	25							A
Forward Voltage @ $I_F = 1.0A$	V_{FM}	1.1							V
Peak Reverse Current @ $T_A = 25^\circ C$	I_R	5.0							uA
At Rated DC Blocking Voltage @ $T_A = 100^\circ C$		100							
Typical Junction Capacitance (Note 2)	C_j	15							pF
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	50							$^\circ C/W$
Operating Temperature Range	T_j	-65 to +125							$^\circ C$
Storage Temperature Range	T_{STG}	-65 to +150							$^\circ C$

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case

2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

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Fig. 1-FORWARD CURRENT DERATING CURVE

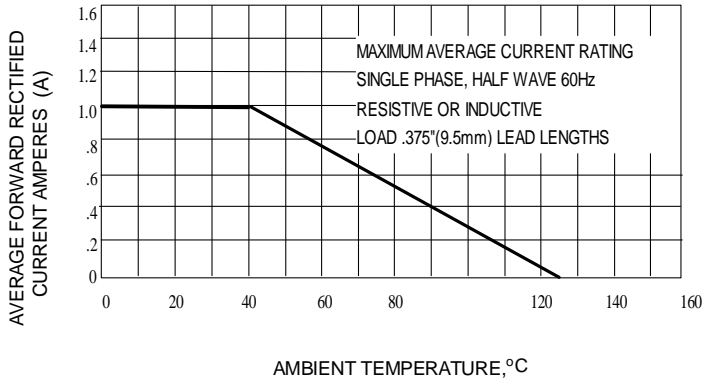


Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

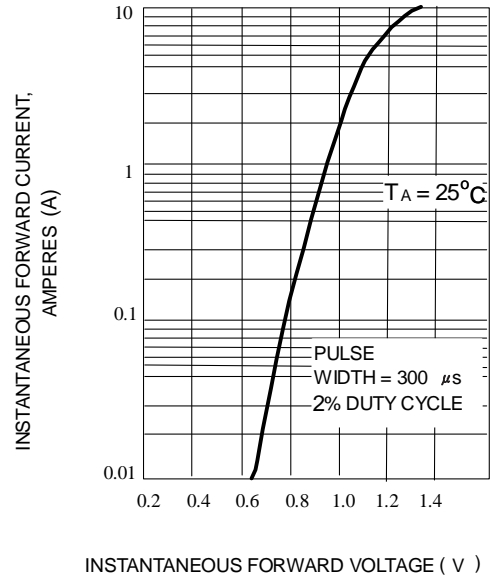


Fig. 3-MAXIMUM OVERLOAD SURGE CURRENT

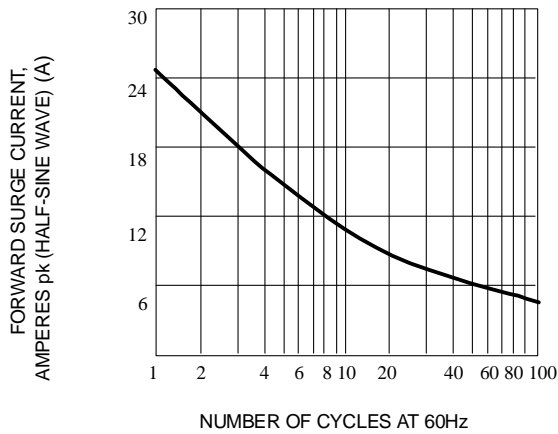


Fig. 4-TYPICAL JUNCTION CAPACITANCE

