

SILICON RECTIFIERS

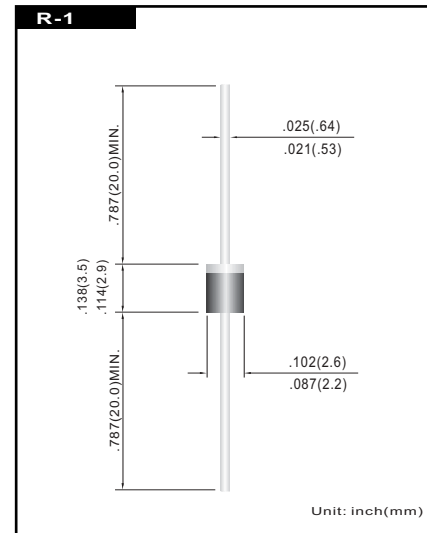
Voltage Range – 50 to 1000 Volts
Current – 1.0 Amperes

Features

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

Mechanical Data

- **Case:** Molded plastic black body
- **Lead:** MIL-STD 202E method 208C guaranteed.
- **Mounting Position:** Any



Absolute Maximum Ratings and 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 repetitive peak reverse voltage	V_{RRM}	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
Maximum average forward rectified current at $T_A = 25^\circ\text{C}$	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
Maximum instantaneous forward voltage at 1A DC	V_F	1.1							V
Maximum DC reverse current at rated DC blocking voltage	@ $T_A = 25^\circ\text{C}$	5.0							uA
	@ $T_A = 100^\circ\text{C}$	50							
Maximum full load reverse current full cycle average 0.375" (9.5mm) lead length at $T_L = 75^\circ\text{C}$	I_R	100							uA
Typical junction capacitance (note)	C_J	15							pF
Typical thermal resistance	$R_{\theta JA}$	60							$^\circ\text{C/W}$
Operating and storage temperature range	T_J, T_S	-50 to +150							$^\circ\text{C}$

Note: Measured at 1MHz and applied reverse voltage of 4V.

