



10A05 THRU 10A10

TECHNICAL SPECIFICATIONS OF SILICON RECTIFIER

VOLTAGE: 50-1000V

CURRENT: 10.0A

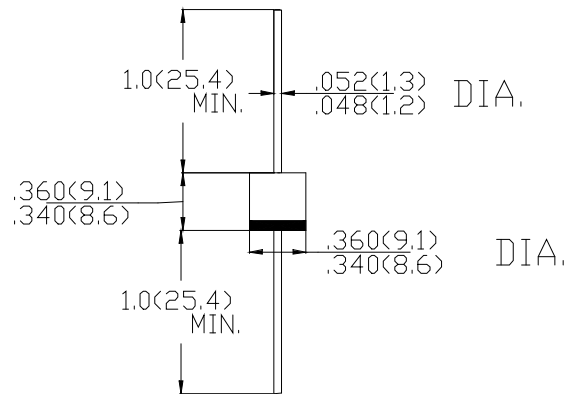
FEATURES

- Low cost
- Low leakage
- Low forward voltage drop
- High current capability
- High surge current capability

MECHANICAL DATA

- **Case:** Molded plastic
- **Epoxy:** UL94V-0 rate flame retardant
- **Lead:** MIL-STD- 202E, Method 208 guaranteed
- **Polarity:** Color band denotes cathode end
- **Mounting position:** Any
- **Weight:** 2.08 grams

R-6



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%.

		10A05	10A1	10A2	10A4	10A6	10A8	10A10	
Maximum Recurrent 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 $T_A=75^\circ\text{C}$	I_o	10.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	300							A
Maximum Instantaneous forward Voltage at 10.0A DC	V_F	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ $T_A=25^\circ\text{C}$	10							μA
	@ $T_A=100^\circ\text{C}$	500							
Maximum Full Load Reverse Current Average, Full Cycle .375" (9.5mm) lead length at $T_L=75^\circ\text{C}$		50							
Typical Junction Capacitance (Note)	C_J	150							pF
Typical Thermal Resistance	$R_{\theta JA}$	10							$^\circ\text{C/W}$

Notes: Measured at 1MHz and applied reverse voltage of 4.0 volts