



# 10A05 THRU 10A10

## GENERAL PURPOSE SILICON RECTIFIERS

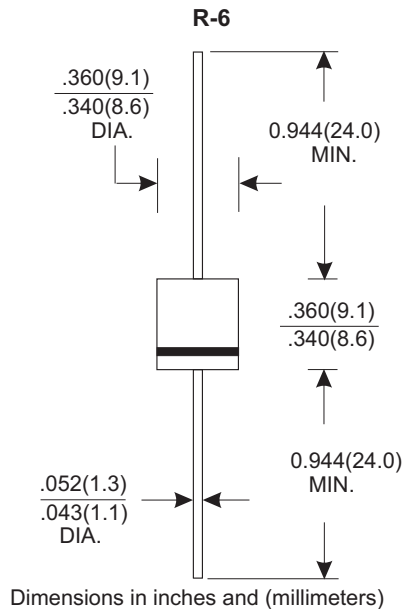
Reverse Voltage - 50 to 1000 Volts Forward Current - 10.0 Ampere

### FEATURES

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

### MECHANICAL DATA

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 1.65 grams



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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	10A05	10A1	10A2	10A4	10A6	10A8	10A10	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at Ta=50°C	10.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	600							A
Maximum Instantaneous Forward Voltage at 10.0A	1.0							V
Maximum DC Reverse Current Ta=25°C	10.0							µA
at Rated DC Blocking Voltage Ta=100°C	400							µA
Typical Junction Capacitance (Note 1)	150							pF
Typical Thermal Resistance RθJA (Note 2)	10							°C/W
Operating Temperature Range Tj	-65 — +125							°C
Storage Temperature Range Tstg	-65 — +150							°C

**NOTES:**

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance from Junction to Ambient .375" (9.5mm) lead length.

# RATING AND CHARACTERISTIC CURVES (10A05 THRU 10A10)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

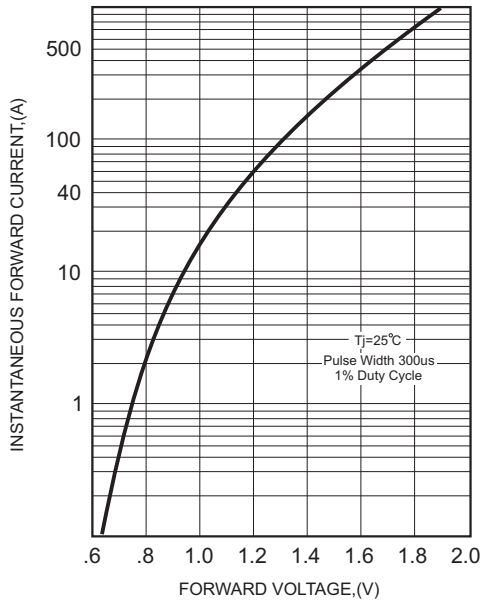


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

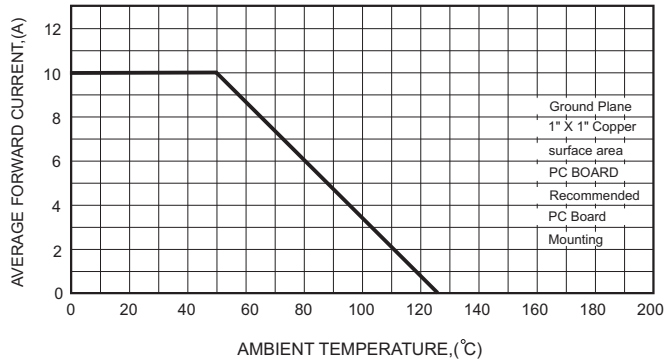


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

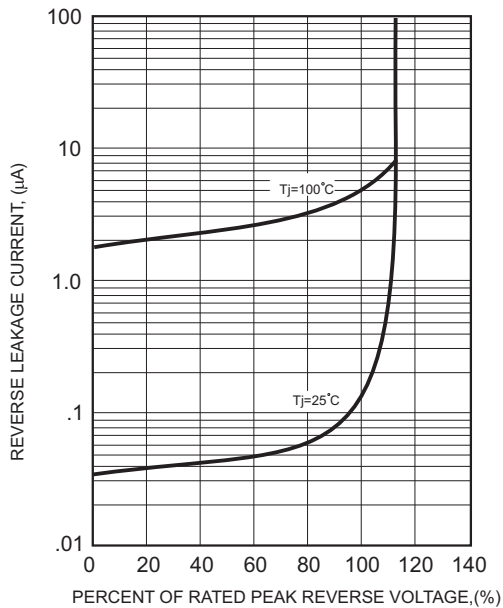


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

