



# 10A05 THRU 10A10

## 0.0 AMP SILICON RECTIFIERS



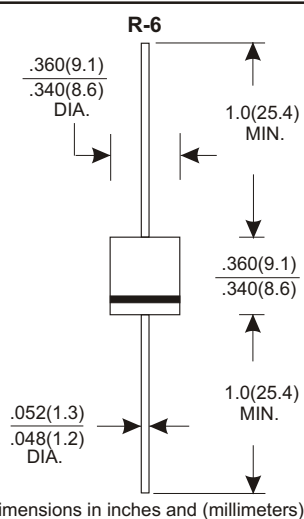
### FEATURES

- \* 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

**VOLTAGE RANGE**  
50 TO 1000 Volts  
**CURRENT**  
6.0 Amperes



Dimensions in inches and (millimeters)

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	10A05	10A1	10A2	10A4	10A6	10A8	10A10	Units
Maximum repetitive 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 @ $T_A=50^{\circ}C$	$I_{F(AV)}$	10							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	600							Amps
Maximum forward voltage at 10A DC	$V_F$	1							Volts
Maximum DC reverse current @ $T_J = 25^{\circ}C$ at rated DC blocking voltage @ $T_J = 100^{\circ}C$	$I_R$	10 100							$\mu A$
Typical junction capacitance (Note 1)	$C_J$	150							pF
Typical thermal resistance (Note 2)	$R_{\theta JA}$	10							$^{\circ}C/W$
Operating temperature range	$T_J$	-55 to +125							$^{\circ}C$
Storage temperature range	$T_S$	-55 to +150							$^{\circ}C$

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

FIG.1-TYPICAL FORWARD CHARACTERISTICS

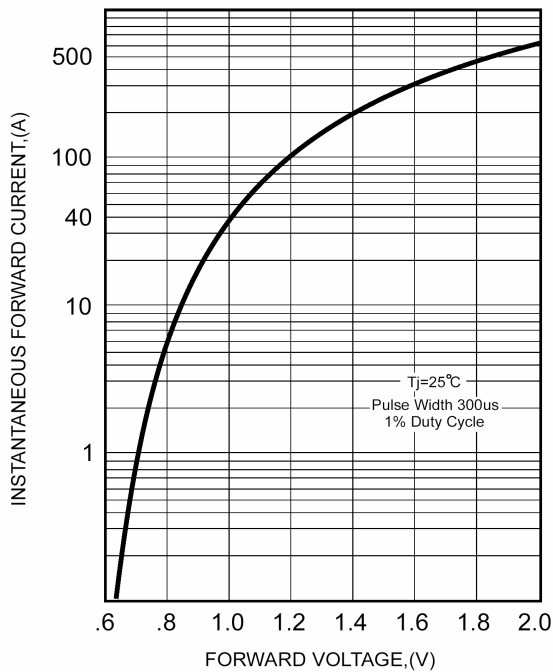


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

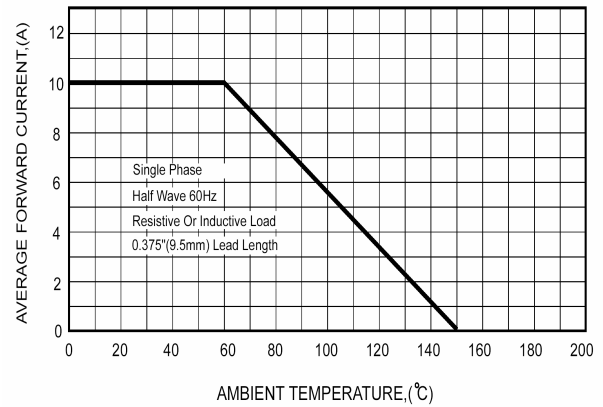


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

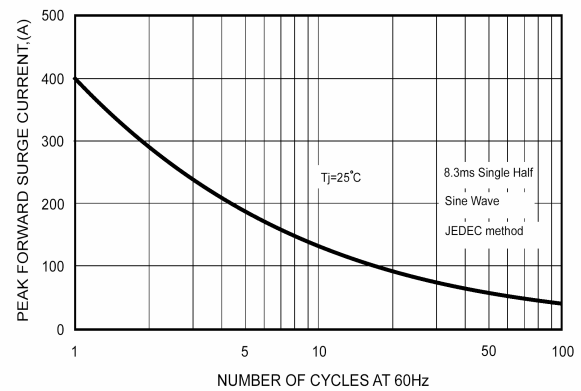


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

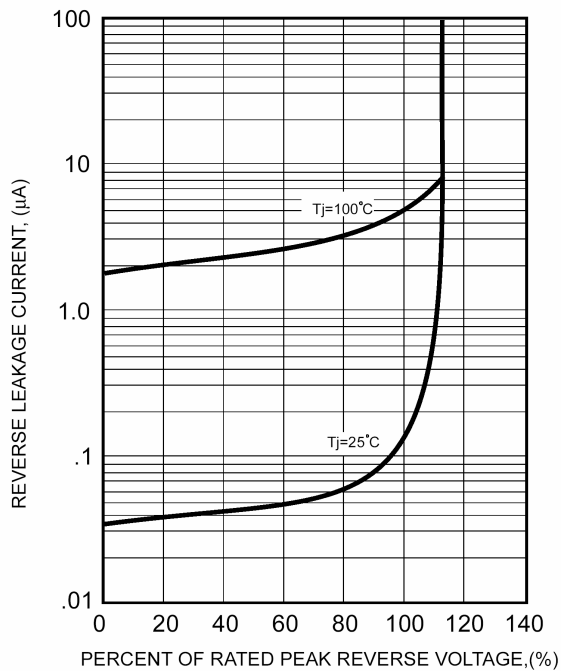


FIG.5 - TYPICAL THERMAL RESISTANCE VS. LEAD LENGTH

