

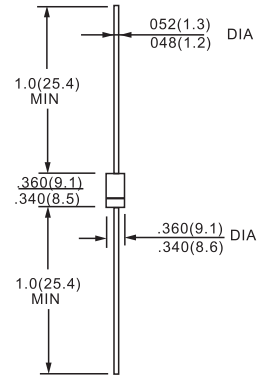
## FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Construction utilizes void-free molded plastic technique
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed:  
250°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

## MECHANICAL DATA

**Case:** R-6 molded plastic body  
**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026  
**Polarity:** Color band denotes cathode end  
**Mounting Position:** Any  
**Weight:** 0.072 ounce, 2.05 grams

R-6



Dimensions in inches and (millimeters)

## Maximum Ratings and Electrical Characteristics @25°C unless otherwise specified

Ratings at 25°C ambient temperature unless otherwise specified.  
 Single phase, halfwave, 60Hz, resistive or inductive load.

Characteristic	Symbol	6A05	6A1	6A2	6A4	6A6	6A8	6A10	Unit
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 9.5mm lead length @ $T_A = 75^\circ\text{C}$ (See Fig. 1)	$I_{(AV)}$	6.0							A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	400							A
Maximum Instantaneous Forward Current at 6.0A DC	$V_F$	0.90							V
Maximum DC Reverse Current @ $T_A = 25^\circ\text{C}$ at Rated Blocking Voltage @ $T_A = 100^\circ\text{C}$	$I_R$	10 100							$\mu\text{A}$
Operating and Storage Temperature Range	$T_J,$ $T_{STG}$	-65 to +175							$^\circ\text{C}$

Notes: 1. RoHS revision 13.2.2003. Glass and High Temperature Solder Exemptions Applied, see EU Directive Annex Notes 5 and 7.

FIG.1- MAXIMUM FORWARD CURRENT DERATING  
CURE

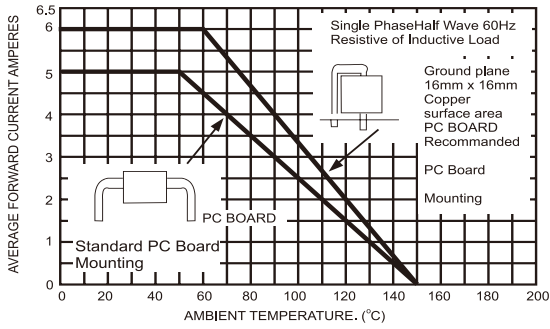


FIG.2- TYPICAL REVERSE CHARACTERISTICS

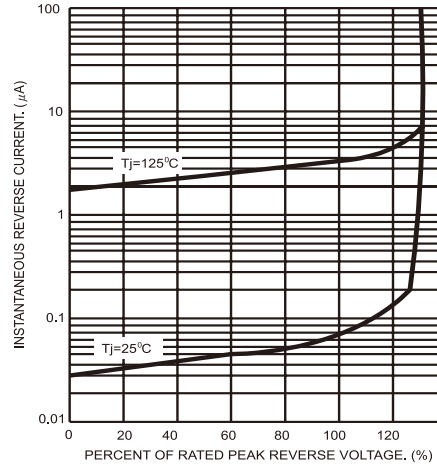


FIG. 3-TYPICAL INSTANTANEOUS FORWARD  
CHARACTERISTICS

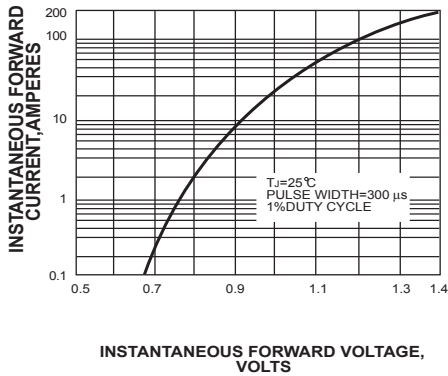


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

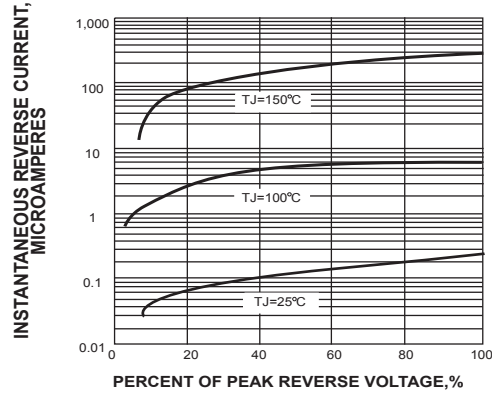


FIG. 5-TYPICAL JUNCTION CAPACITANCE

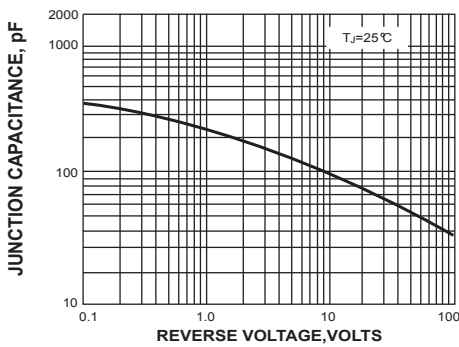


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

