TAYCHIPST

GENERAL PURPOSE RECTIFIERS

6A05-6A10

50V-1000V 6.0A

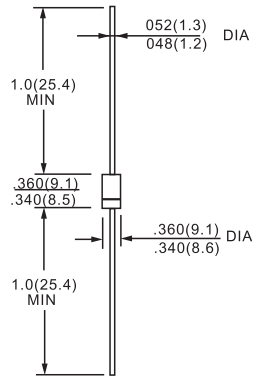
FEATURES

- 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℃/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°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°C at Rated Blocking Voltage @ T_A = 100°C	I_R	10 100							μA
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +175							°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

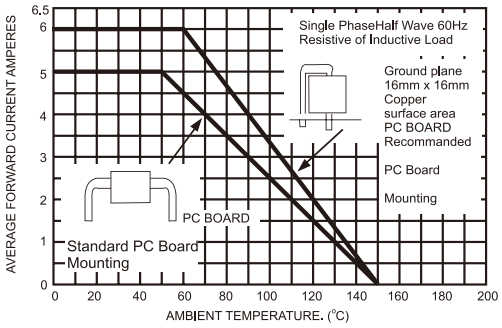


FIG.2- TYPICAL REVERSE CHARACTERISTICS

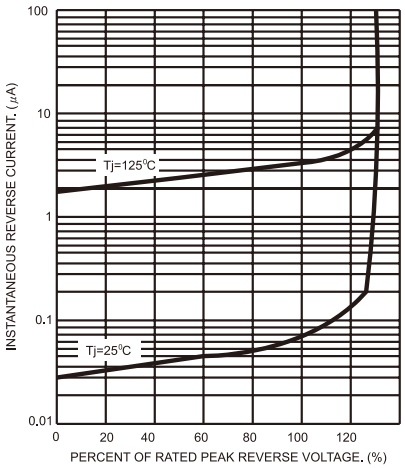


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

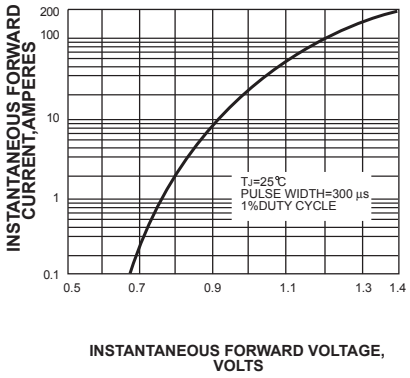


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

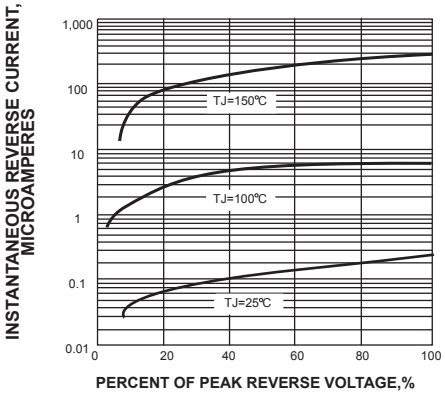


FIG. 5-TYPICAL JUNCTION CAPACITANCE

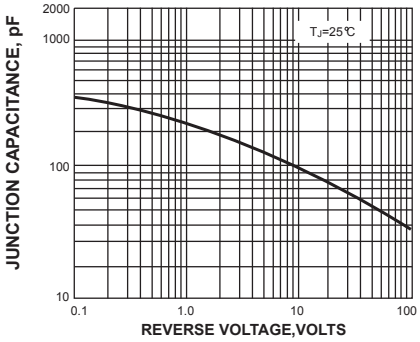


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE