

6A05 THRU 6A10

GENERAL PURPOSE PLASTIC RECTIFIER

Reverse Voltage - 50 to 1000 Volts

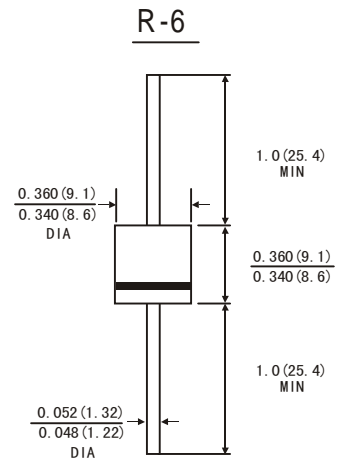
Forward Current -6.0Amperes

FEATURES

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- High forward current capability
- High surge current capability
- Construction utilizes void-free molded plastic technique
- 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 lead, solderable per MIL-STD-750,method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.07ounce, 2.1 grams



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 by 20%.)

	Symbols	6A05	6A1	6A2	6A3	6A4	6A6	6A8	6A10	Units
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	300	400	600	800	1000	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	210	280	420	560	700	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	300	400	600	800	1000	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length $T_A=60^{\circ}C$	$I_{(AV)}$	6.0								Amps
Peak forward surge current (8.3ms half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	400.0								Amps
Maximum instantaneous forward voltage at 6.0 A	V_F	1.1								Volts
Maximum reverse current at rated DC blocking voltage	I_R	$T_A=25^{\circ}C$	10.0							μA
		$T_A=100^{\circ}C$	100.0							
Typical thermal resistance (Note 2)	$R_{\theta JA}$ $R_{\theta JL}$	20.0							$^{\circ}C/W$	
		4.0								
Typical junction capacitance (Note 1)	C_J	150								pF
Operating and Storage temperature range	T_J T_{STG}	-50 to +175								$^{\circ}C$

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V .

2. Thermal resistance from junction to ambient and from junction to lead at 0.375"(9.5mm)lead length , p.c.b. mounted with 1.1 X 1.1"(30 X 30mm) copper pads.

RATINGS AND CHARACTERISTIC CURVES 6A05 THRU 6A10

FIG. 1-FORWARD CURRENT DERATING CURVE

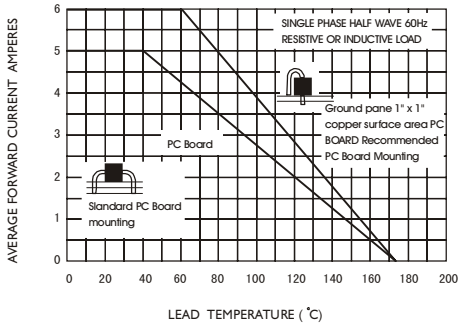


FIG. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

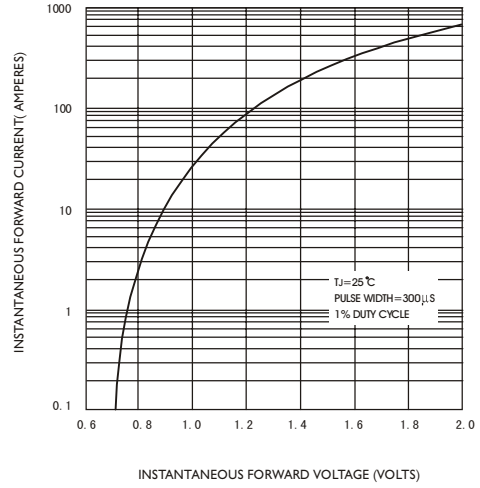


FIG. 3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

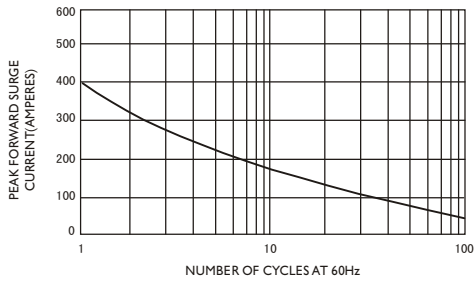


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

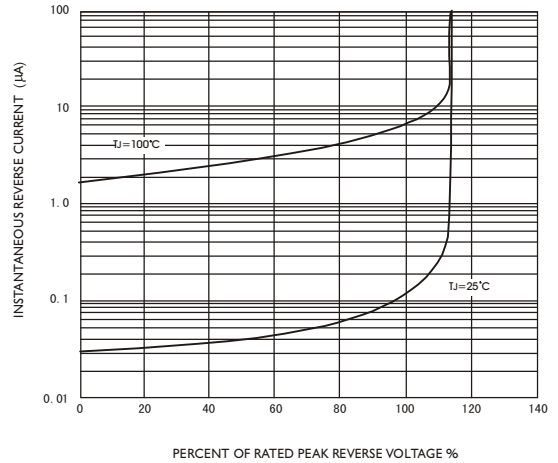


FIG. 5-TYPICAL THERMAL RESISTANCE VS LEAD LENGTH

