





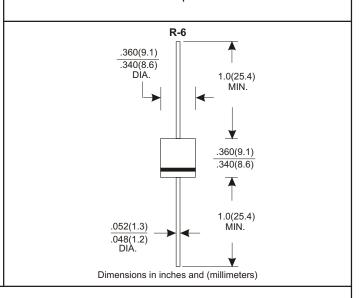
# **FEATURES**

- \* 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 guranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any \* Weight: 1.65 grams

## VOLTAGE RANGE 50 TO 1000 Volts CURRENT 6.0 Amperes



# MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwies specified. Single phase half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

TYPE NUMBER	6A05	6A1	6A2	6A4	6A6	6A8	6A10	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=60°C		6.0						
Peak Forward Surge Current, 8.3 ms single half sine-wave								
superimposed on rated load (JEDEC method)		200					Α	
Maximum Instantaneous Forward Voltage at 6.0A		0.95					V	
Maximum DC Reverse Current Ta=25°C		10.0						
at Rated DC Blocking Voltage Ta=100℃		400						
Typical Junction Capacitance (Note 1)		100						pF
Typical Thermal Resistance R JA (Note 2)		10					°C/W	
Operating and Storage Temperature Range TJ, TsTG		-65—+175						

#### 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 (6A05 THRU 6A10)

FIG.1-TYPICAL FORWARD **CHARACTERISTICS** 500 INSTANTANEOUS FORWARD CURRENT,(A) 100 40 10 Tj=25℃ Pulse Width 300u 1% Duty Cycle

1.2

FORWARD VOLTAGE,(V)

1.4

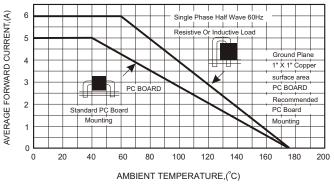
1.6

2.0

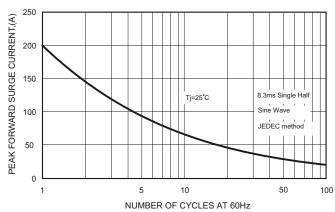
.6

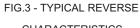
Single Phase Half Wave 60Hz

FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE



## FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT





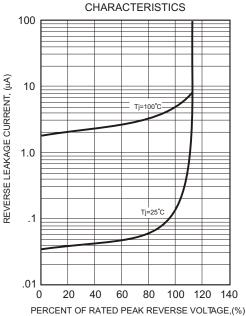


FIG.5 - TYPICAL THERMAL RESISTANCE VS. LEAD LENGTH

