



# 6A05 THRU 6A10

**6.0 AMPS. SILICON RECTIFIERS**

Voltage Range  
200 to 1000 Volts  
Current  
6.0 Amperes

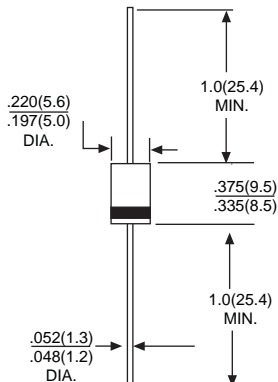
**Features**

- \*Low forward voltage drop
- \*High current capability
- \*High reliability
- \*High surge current capability

**Mechanical Data**

- \*Cases: Molded plastic
- \*Epoxy: UL 94V-O rate flame retardant
- \*Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- \*Polarity: Color band denotes cathode end
- \*High temperature soldering guaranteed:  
250°C/10 seconds/.375", (9.5mm) lead lengths at 5 lbs., (2.3kg) tension
- \*Weight: 1.65 grams

**DO-201AD**



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating at 25°C ambient temperature unless otherwise 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 Repetitive Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length @TA = 60°C	IF(AV)	6.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	IFSM	250							A
Maximum Instantaneous Forward Voltage @6.0A	VF	0.95							V
Maximum DC Reverse Current @ TA = 25°C at Rated DC Blocking Voltage @ TA = 100°C	IR	10 400							µA µA
Maximum Full Load Reverse Current, Full Cycle Average .375"(9.5mm) Lead Length @TL=75°C	IR	50							µA
Typical Junction Capacitance (Note 1)	CJ	100							pF
Typical Thermal Resistance (Note 2)	RJA	10							°C/W
Operating Temperature Range	TJ	-55 to +125							°C
Storage Temperature Range	TSTG	-55 to +150							°C

NOTES: 1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C.  
2. Thermal Resistance from Junction to Ambient .375"(9.5mm) Lead Length.

# RATING AND CHARACTERISTIC CURVES 6A05 THRU 6A10



FIG.1-MAXIMUM OUTPUT CURRENT VS AMBIENT TEMPERATURE

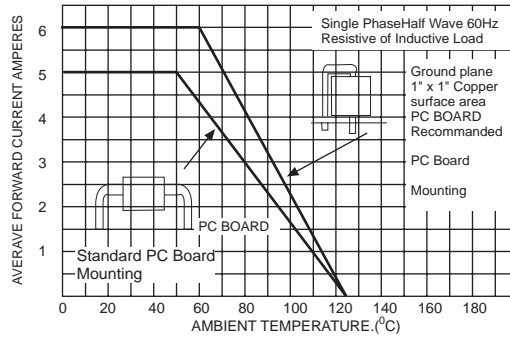


FIG.2-TYPICAL FORWARD CHARACTERISTICS

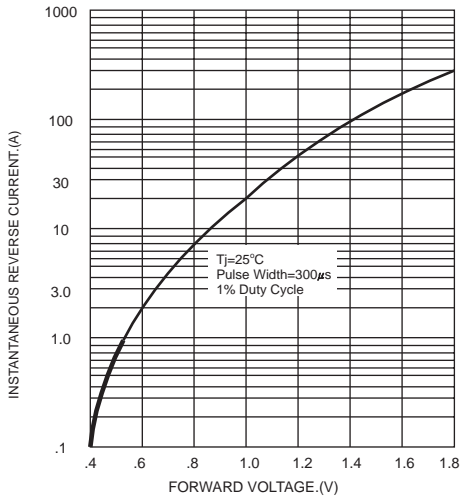


FIG.3-TYPICAL REVERSE CHARACTERISTICS

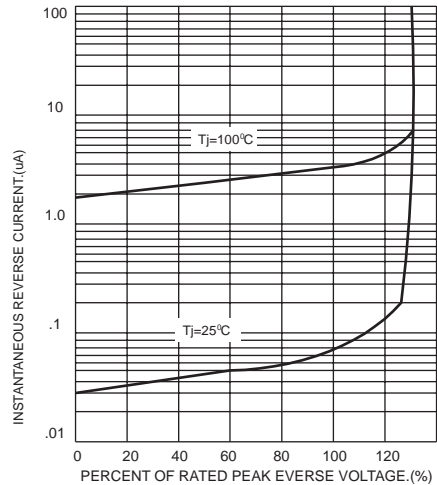


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

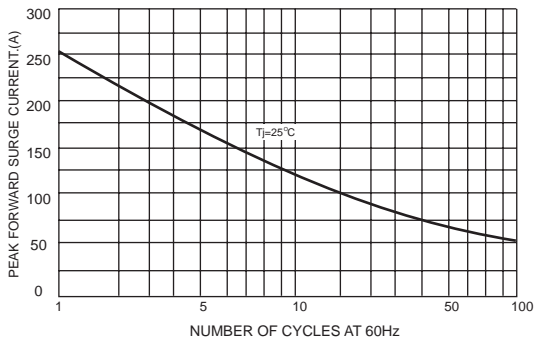


FIG.5-TYPICAL JUNCTION CAPACITANCE

