



6A05 THRU 6A10

6.0 AMPS. SILICON RECTIFIERS

Voltage Range
200 to 1000 Volts
Current
6.0 Amperes

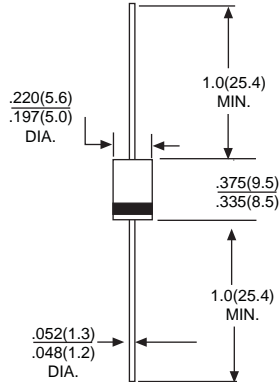
Features

- *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	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 .375"(9.5mm) Lead Length @T _A = 60°C	I _{F(AV)}	6.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	250							A
Maximum Instantaneous Forward Voltage @6.0A	V _F	0.95							V
Maximum DC Reverse Current @ T _A = 25°C at Rated DC Blocking Voltage @ T _A = 100°C	I _R	10 400							μA μA
Maximum Full Load Reverse Current, Full Cycle Average .375"(9.5mm) Lead Length @T _L =75°C	I _R	50							μA
Typical Junction Capacitance (Note 1)	C _J	100							pF
Typical Thermal Resistance (Note 2)	R _{JA}	10							°C/W
Operating Temperature Range	T _J	-55 to +125							°C
Storage Temperature Range	T _{STG}	-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

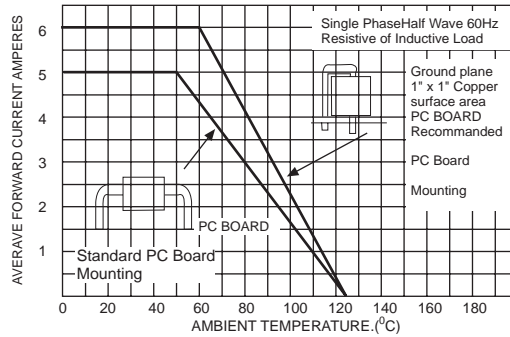


FIG.2-TYPICAL FORWARD CHARACTERISTICS

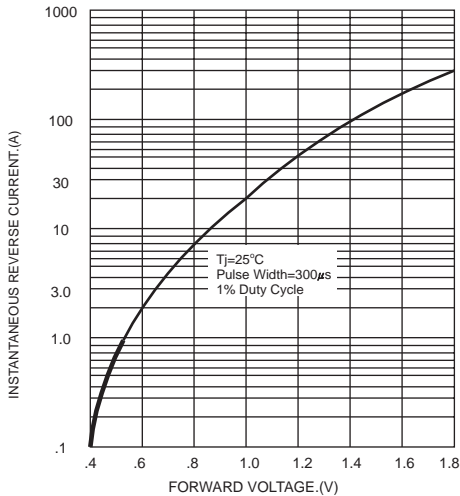


FIG.3-TYPICAL REVERSE CHARACTERISTICS

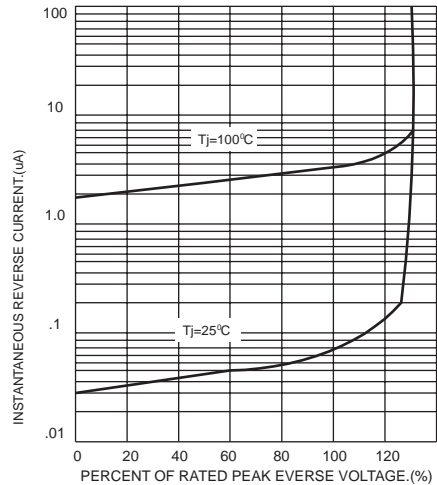


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

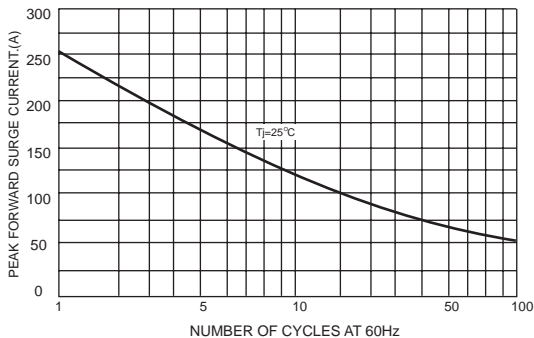


FIG.5-TYPICAL JUNCTION CAPACITANCE

