

6A05 THRU 6A10

SILICON RECTIFIERS

FEATURES:

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

MECHANICAL DATA

Case : Molded plastic

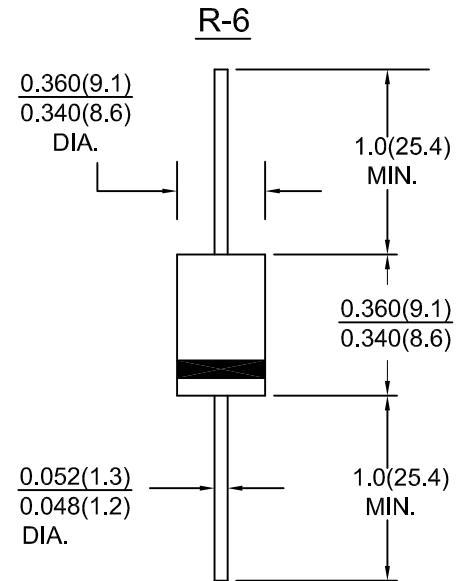
Epoxy : UL 94V-0 rate flame retardant

Lead : Axial leads, solderable per MIL-STD-202,
Method 208 guaranteed

Polarity : Color band on body denotes cathode end

Mounting Position : Any

Weight : 1.65 grams



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temp. unless otherwise specified.

Single phase, half sine wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20 %.

Characteristic	Symbol	6A05	6A1	6A2	6A4	6A6	6A8	6A10	Units
Maximum recurrent peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current .375"(9.5mm) lead length at Ta=60 °C	I _(AV)	6.0							Amps
Peak forward surge current ,8.3ms single half sine-wave superimposed on rated load(JEDEC Method)	I _{FSM}	300							Amps
Maximum instantaneous forward voltage at 6.0 A	V _F	0.95							Volts
Maximum DC reverse current at rated DC blocking voltage	I _R	10.0 400							μ A
Typical junction capacitance (note 1)	C _j	100							pF
Typical thermal resistance R _{th-JA} (note 2)	R _{th-JA}	10							°C/W
Operating junction temperature	T _j	-65 to +125							°C
Storage temperature range	T _{stg}	-65 to +150							°C

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

2. Thermal resistance from junction to ambient .375"(9.5mm) lead length

RATINGS AND CHARACTERISTIC CURVES 6A05 THRU 6A10

FIG.1-TYPICAL FORWARD CHARACTERISTICS

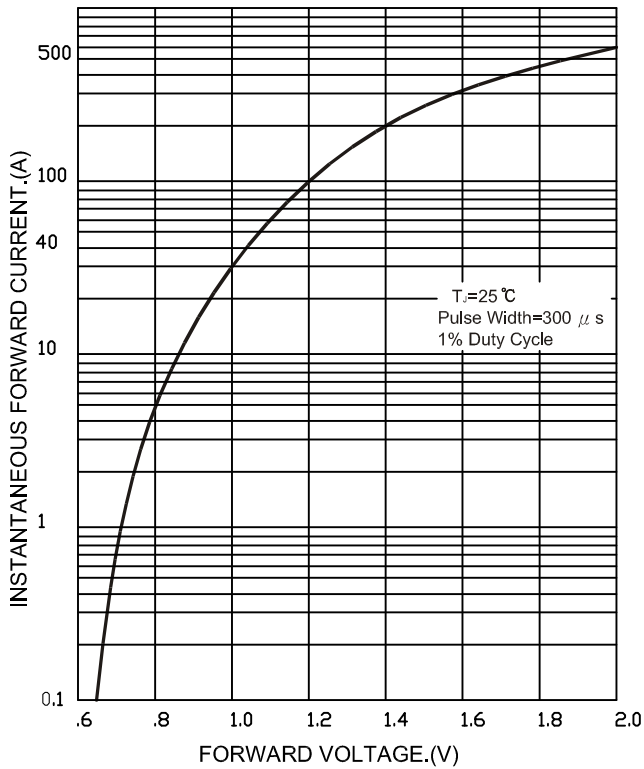


FIG.2 - TYPICAL FORWARD CURRENT DERATING CURVE

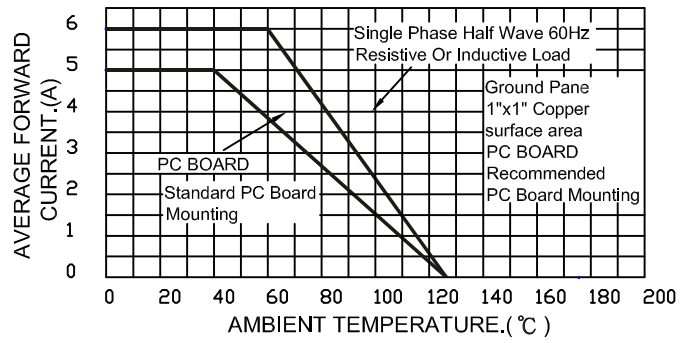


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

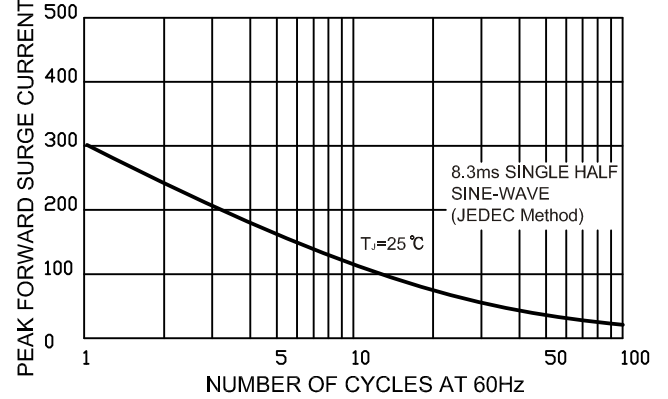


FIG.3-TYPICAL REVERSE CHARACTERISTICS

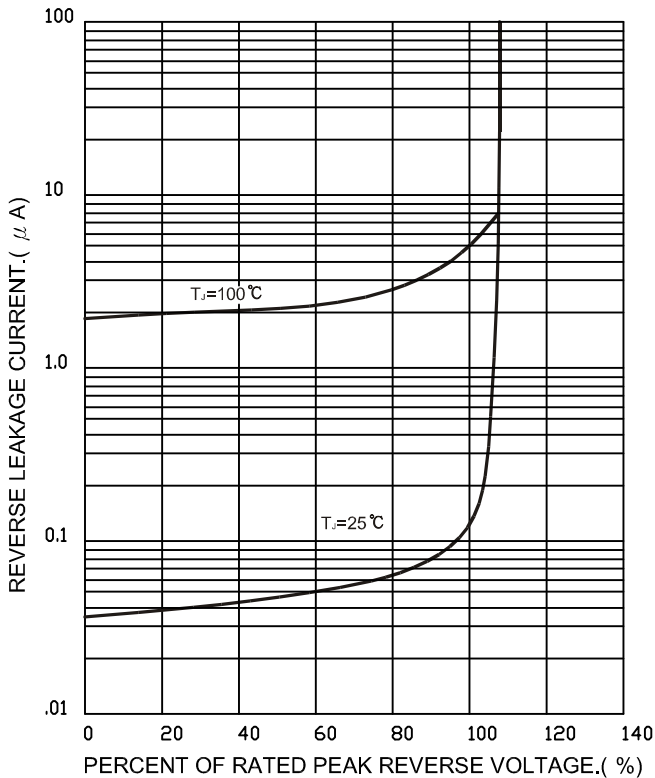


FIG.5 - TYPICAL THERMAL RESISTANCE VS. LEAD LENGTH

