

## 6A05 THRU 6A10

## General Purpose Silicon Rectifier

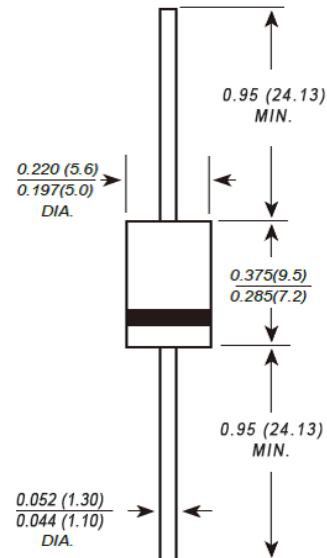
## FEATURES

- ◆ High current capability
- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- ◆ Exceeds environmental standards of MIL-S-19500/228
- ◆ Low leakage.

## Mechanical Data

- ◆ Case: Molded plastic, DO-201AD
- ◆ Terminals: Plated axial leads, solderable per MIL-STD-202, method 208 guaranteed
- ◆ Polarity: Color band denotes cathode end
- ◆ Mounting position: Any
- ◆ Weight: 0.04ounce, 1.1gram

## DO -201AD(DO -27)



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%

	SYMBOL	6A05	6A1	6A2	6A4	6A6	6A8	6A10	UNIT
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 $T_A=60^\circ\text{C}$	$I_{(AV)}$	6.0							Amps
Peak Forward Surge Current, 8.3ms single half sine wave superimposed on rated load (JEDEC method)	$I_{FSM}$	150							Amps
Maximum forward Voltage at 6.0A DC and 25°C	$V_F$	1.1							Volts
Maximum Reverse Current at $T_A=25^\circ\text{C}$ at Rated DC Blocking voltage	$I_R$	10 100							$\mu\text{Amp}$
Typical Junction Capacitance (NOTE 1)	$C_J$	150							pF
Typical Thermal Resistance (NOTE 2)	$R_{\theta JA}$	10							$^\circ\text{C}/\text{W}$
Operating Junction Temperature Range	$T_J$	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

Note: 1. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.

2. Thermal Resistance from Junction to Ambient and from junction to lead at 0.375"(9.5mm)lead length, P.C.B. Mounted with 0.8x0.8" (20x20mm) copper pads.

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### RATING AND CHARACTERISTIC CURVES 6A05 THRU 6A10

FIG. 1- MAXIMUM FORWARD CURRENT DERATING CURVE

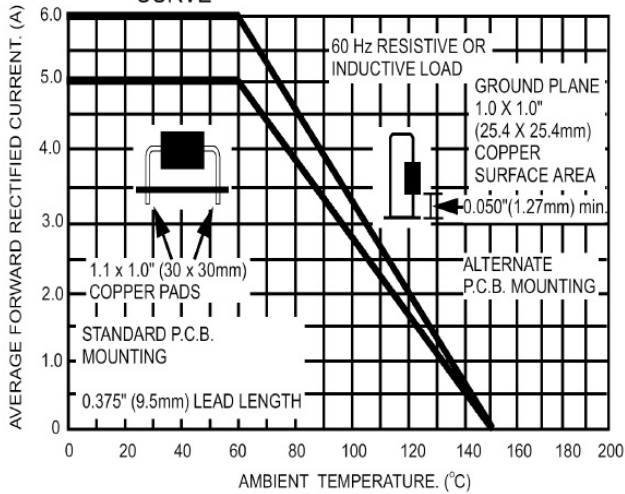


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

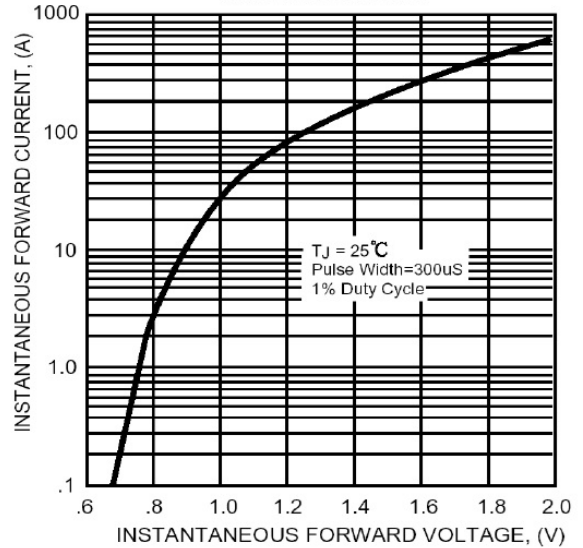


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

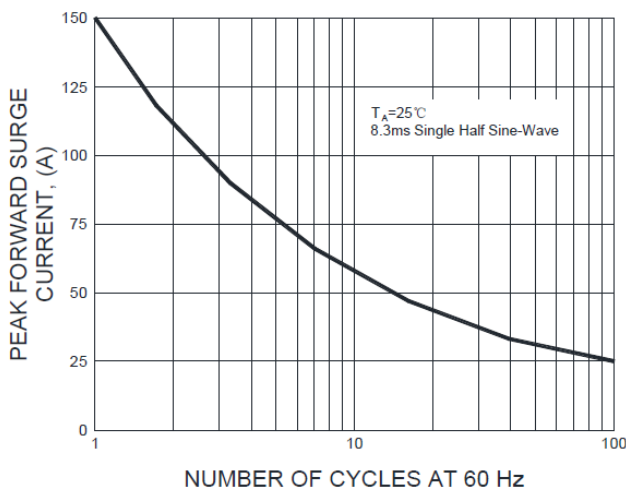


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

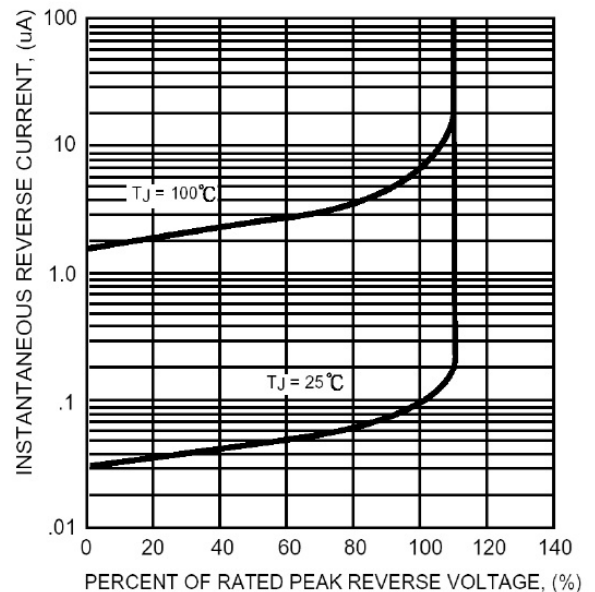
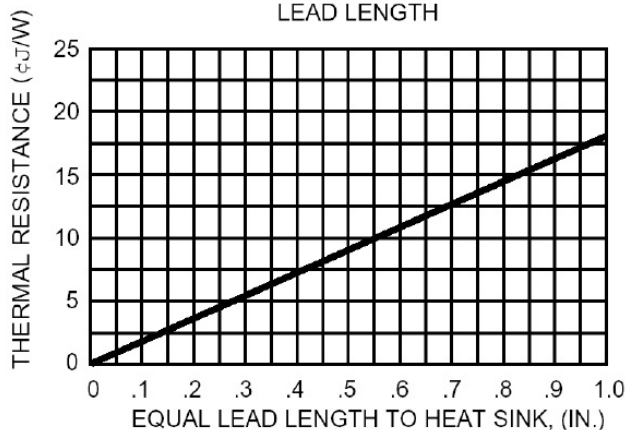


FIG. 5 - TYPICAL THERMAL RESISTANCE VS LEAD LENGTH



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.