



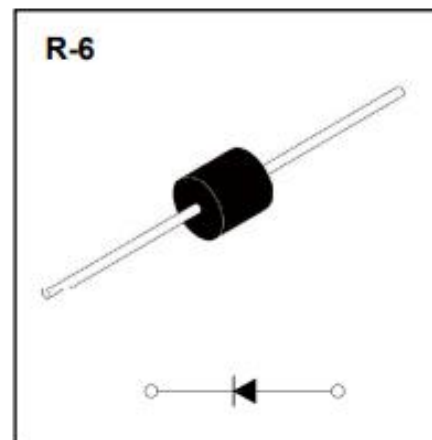
6A05 THRU 6A10

General Purpose Rectifier Diode

Reverse Voltage : 50~1000 Volts Forward Current : 6.0 Ampere

Features

- High surge current capability
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0 utilizing Flame Retardant Epoxy Molding Compound
- Void-free Plastic in a R-6 package
- High current operation 6.0 ampere at $T_A=60^\circ\text{C}$
- Exceeds environmental standards of MIL-S-19500/228



Maximum Ratings and Electrical Characteristics

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

Parameter		Symbol	6A05	6A1	6A2	6A4	6A6	6A8	6A10	Unit
Maximum Recurrent 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 .342”(9.5mm) Lead Length at T _A =60°C		I _(AV)	6.0							A
Peak Forward Surge Current, 8.3ms Single Half-sine-wave Superimposed On Rated Load(JEDEC Method)		I _{FSM}	400							A
Maximum Forward Voltage at 6.0A DC and 25°C		V _F	1.1							V
Maximum Reverse Current At Rated DC Blocking Voltage	T _A =25°C	I _R	10.0							uA
	T _A =100°C		100							
Typical Junction Capacitance ⁽¹⁾		C _J	150							pF
Typical Thermal Resistance ⁽²⁾		R _{θJA}	10							°C
Operating Junction Temperature Range		T _J	-55~+150							°C
Storage Temperature Range		T _{STG}	-55~+150							°C

Notes:

1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.

2. Thermal Resistance From Junction to Ambient 0.375"(9.5mm) lead length P.C.B. Mounted with 1.1x1.1" (30x30mm) copper pads



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Typical Characteristics

FIG. 1- MAXIMUM FORWARD CURRENT DERATING CURVE

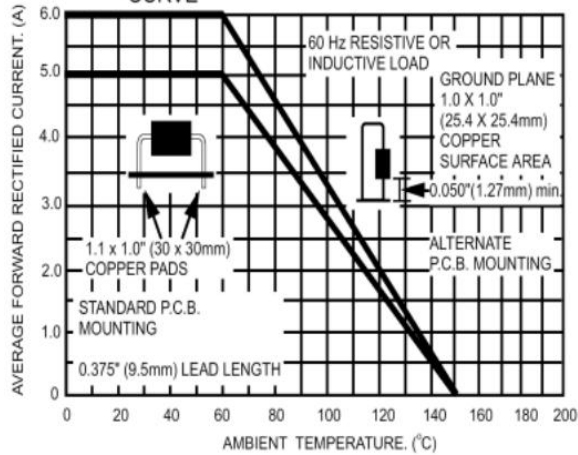


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

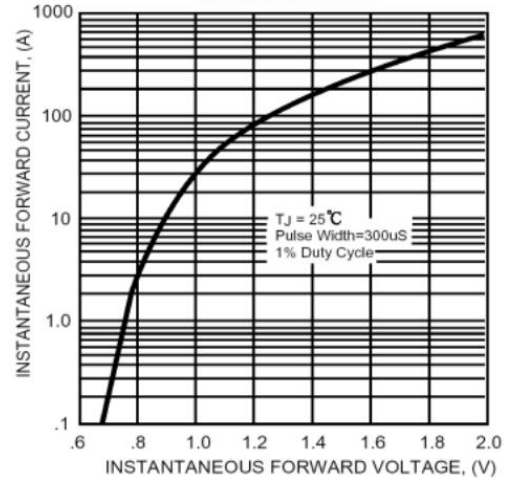


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

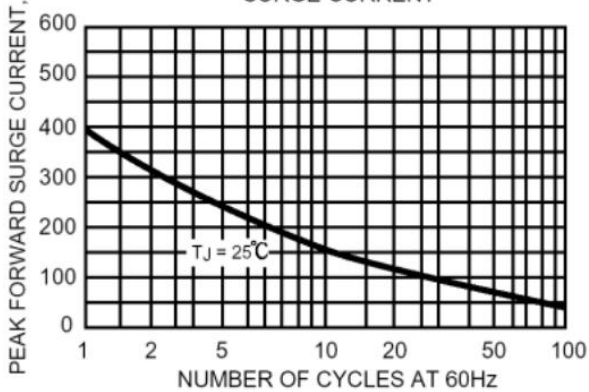


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

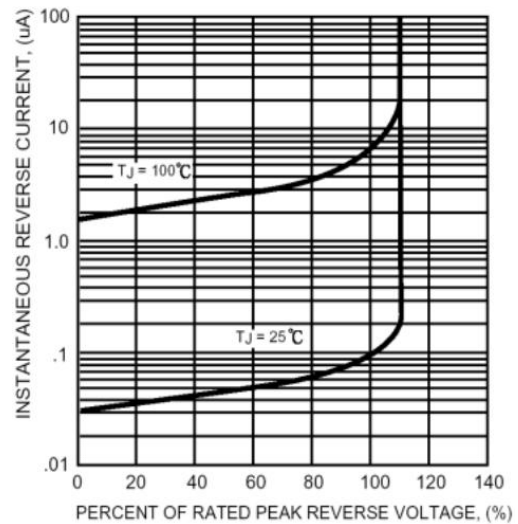
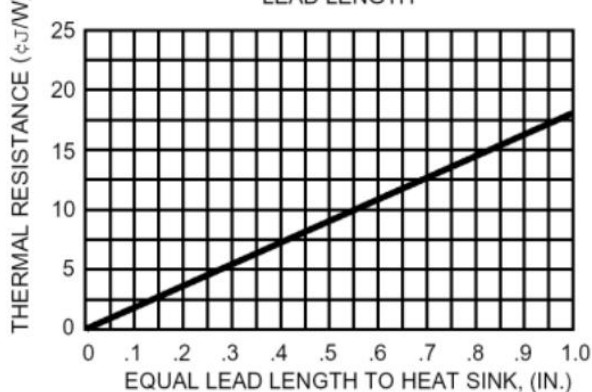
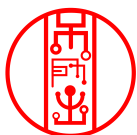


FIG. 5 - TYPICAL THERMAL RESISTANCE VS LEAD LENGTH





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Package Information

R-6

Dimensions in mm

