



AXIAL SILASTIC GUARD JUNCTION STANDARD RECTIFIER

6A05G THRU 6A10G

VOLTAGE RANGE

50 to 1000 Volts

CURRENT

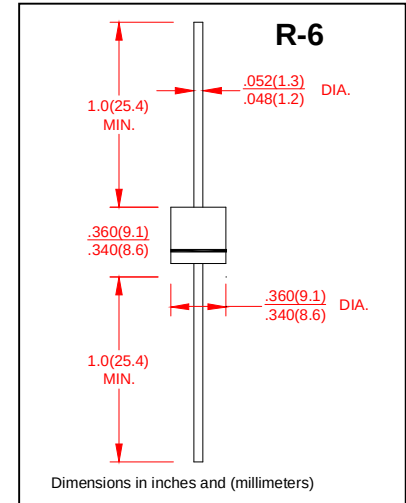
6.0 Ampere

FEATURES

- Glass passivated chip junction
- Low reverse leakage
- Low forward voltage
- High forward surge current capability
- High temperature soldering guaranteed
260°C/10 seconds, 0.375" (9.5mm) lead length

MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Polarity: Color band denotes cathode end
- Lead: Plated axial lead, solderable per MIL-STD-202E method 208C
- Mounting position: Any
- Weight: 0.07ounce, 2.0 gram



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%

	SYMBOLS	6A 05G	6A 1G	6A 2GG	6A 4G	6A 6G	6A 8G	6A 10G	UNIT
Maximum Repetitive 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 0.375" (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}	250							Amps
Maximum Instantaneous Forward Voltage at 6.0A	V_F	0.95							Volts
Maximum DC Reverse Current at rated DC blocking Voltage at	$T_A = 25^\circ\text{C}$	I_R							μA
	$T_A = 100^\circ\text{C}$								
Maximum Full Load Reverse Current, full cycle Average 0.375 (9.5mm) lead length at $T_L=105^\circ\text{C}$	$I_{R(AV)}$	500							μA
Typical Junction Capacitance (NOTE 2)	C_J	100							pF
Typical Thermal Resistance (NOTE 1)	$R_{\theta JA}$	10							$^\circ\text{C}/\text{W}$
Operating Temperature Range	T_J	(-55 to +150)							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	(-55 to +150)							$^\circ\text{C}$

Notes:

1. Thermal Resistance from Junction to Ambient with 0.375" (9.5mm) lead length, PCB. mounted with 1.1" x 1.1" (30mm x 30mm) copper pads.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V



AXIAL SILASTIC GUARD JUNCTION STANDARD RECTIFIER

6A05G THRU 6A10G

VOLTAGE RANGE

50 to 1000 Volts

CURRENT

6.0 Ampere

RATING AND CHARACTERISTIC CURVES 6A05S THRU 6A10S

FIG.1-TYPICAL FORWARD CURRENT
DERATING CURVE

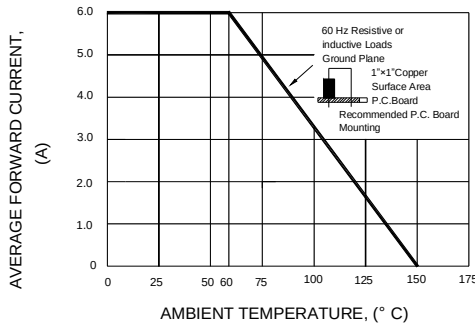


FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT

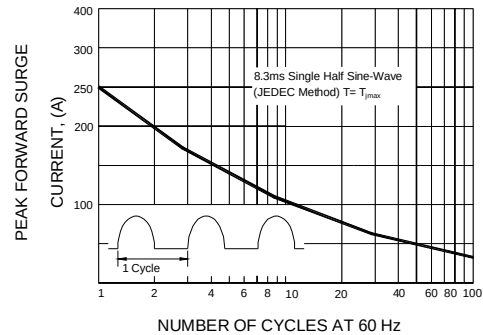


FIG.3-TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

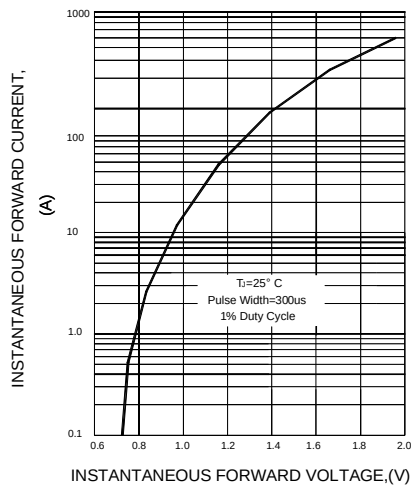


FIG.4-TYPICAL REVERSE
CHARACTERISTICS

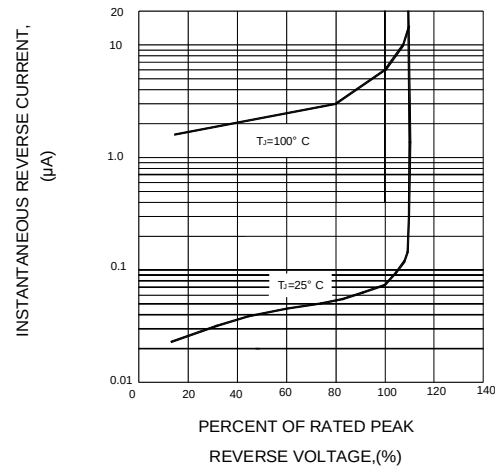


FIG.5-TYPICAL JUNCTION CAPACITANCE

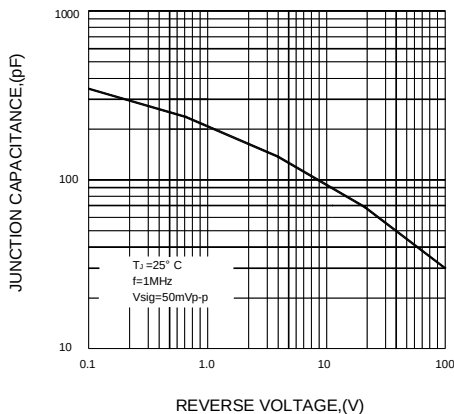


FIG.6-TYPICAL THERMAL RESISTANCE
VS LEAD LENGTH

