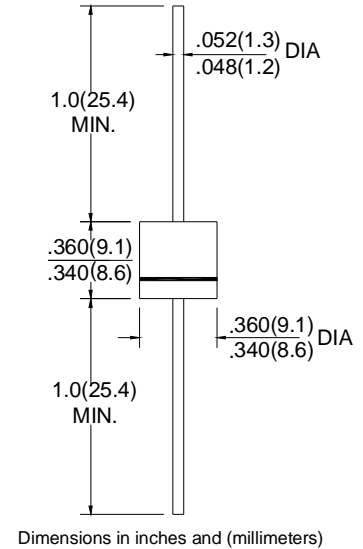


AXIAL SILASTIC GUARD JUNCTION STANDARD RECTIFIER
FEATURES

- Low forward voltage drop
- Low reverse leakage
- High forward surge current capability

MECHANICAL DATA

- Case: R-6
- Case material: Molded epoxy, UL flammability
- Classification Rating: 94V-0
- Terminals: Plated axial lead, solderable per MIL-STD-202E method 208C
- Weight: 0.07ounce, 2.0grams (approximate)



Dimensions in inches and (millimeters)

R-6
MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	6A05	6A1	6A2	6A4	6A6	6A8	6A10	Unit
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 0.375"(9.5mm) lead length at $T_A=60^{\circ}\text{C}$	$I_{(AV)}$	6.0							A
Peak forward surge current 8.3ms single half sine wave superimposed on rated load (JEDEC method)	I_{FSM}	300							A
Maximum full load reverse current Full cycle average 0.375"(9.5mm)lead length at $T_L=105^{\circ}\text{C}$	$I_{R(AV)}$	1.0							mA
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, T_{STG}	-55 ~ +150							$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Max.	Unit	Conditions
Maximum instantaneous forward voltage	V_F	0.95	V	$I_F=6.0\text{A}$
Maximum DC reverse current	I_R	10	μA	$V_R=V_{DC}, T_A=25^{\circ}\text{C}$
		1.0	mA	$V_R=V_{DC}, T_A=100^{\circ}\text{C}$

Note:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V.
2. Thermal resistance from junction to ambient at .375"(9.5mm)lead length, P.C.board mounted with 1.1"× 1.1" (30×30mm)copper heatsink.
3. Single phase, half wave, 60Hz, resistive or inductive load
4. For capacitive load derate current by 20%

AXIAL SILASTIC GUARD JUNCTION STANDARD RECTIFIER

Typical Characteristics

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

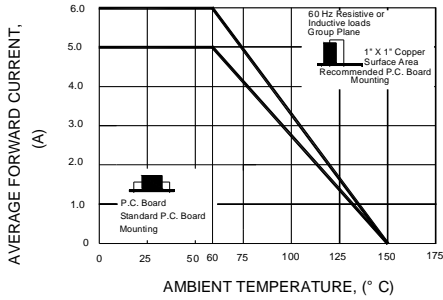


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

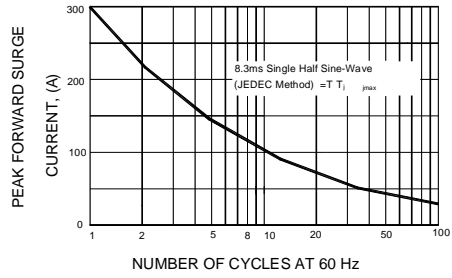


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

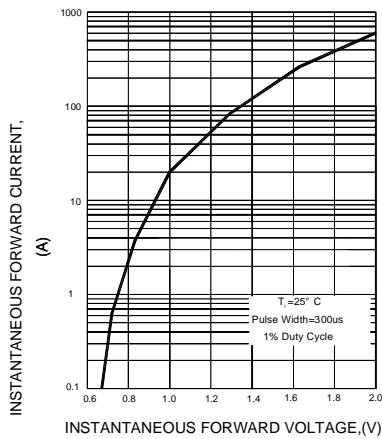


FIG.4-TYPICAL REVERSE CHARACTERISTICS

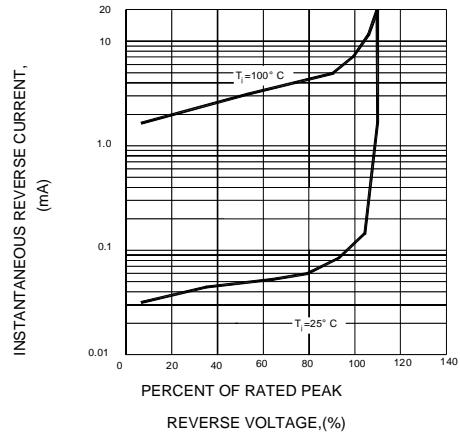


FIG.5-TYPICAL JUNCTION CAPACITANCE

