6A05S - 6A10S

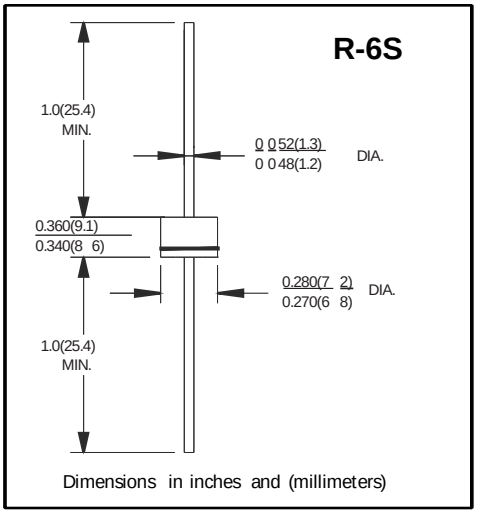
Voltage Range - 50 to 1000 V

Forward Current - 6 Ampere

AXIAL SILASTIC GUARD JUNCTION STANDARD RECTIFIER

FEATURES

- Low cost construction
- Low forward voltage
- High forward surge current capability
- High temperature soldering guaranteed: 260/10 secods.0.375”(9.5mm)lead length



MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL94V-O rate flame retardant
- Polarity: Color band denotes cathode end
- Lead: Plated axial lead, solderable per MIL-STD-202E method 208C
- Mounting position: Any
- Weight: 0.06ounce, 1.7 grams

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		SYMBOLS	6A05S	6A1S	6A2S	6A4S	6A6S	6A8S	6A10S	UNITS
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 TA= 60℃		$I_{(AV)}$	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 @ 6.0A		V_F	1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	T_A = 25℃	I_R	10.0							μA
	T_A = 100℃		500							
Maximum Full Load Reverse Current, full cycle average 0.375”(9.5mm)lead length at T_L=105℃		$I_{R(AV)}$	500							μA
Typical Junction Capacitance (Note 2)		C_J	170							pF
Typical Thermal Resistance (Note 1)		$R_{\theta JA}$	10							℃/W
Operating Junction Temperature Range		T_J	（-55 to +150）							℃
Storage Temperature Range		T_{STG}	（-55 to +150）							℃

Notes:

1. Thermal Resistance from junction to Ambient at .375”(9.5mm)lead length, PBC mounted with 1.1”× 1.1”(30mm×30mm) copper pads
2. Measured at 1.0MHz and Applied Reverse Voltage of 4.0V DC

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RATING AND CHRACTERISTIC CURVES 6A05S - 6A10S

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

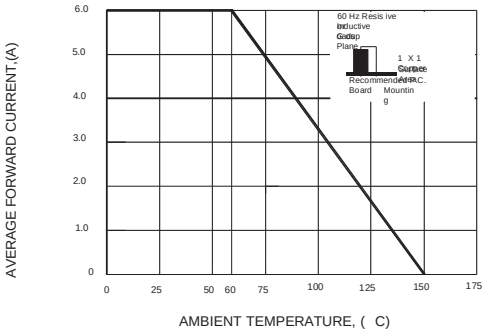


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

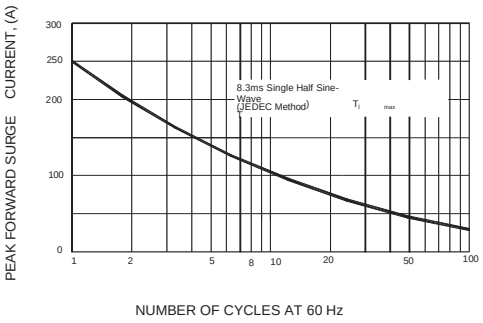


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

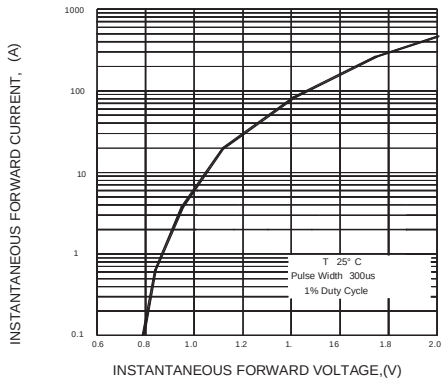


FIG.4-TYPICAL REVERSE CHARACTERISTICS

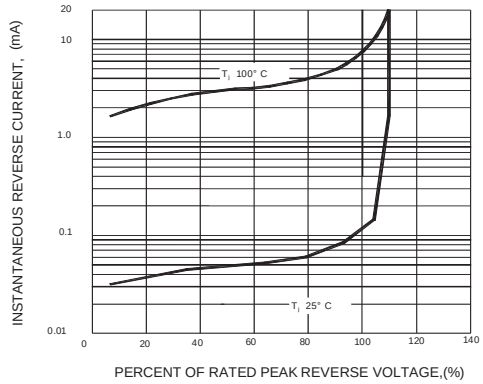
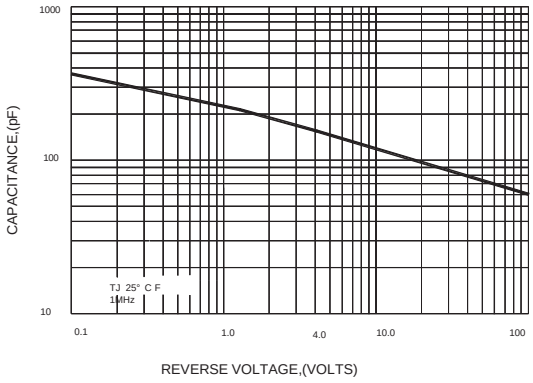


FIG.5-TYPICAL JUNCTION CAPACITANCE



Disclaimer

All product, product specifications and data are subject to change without notice to improve reliability, function or design or otherwise.

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