

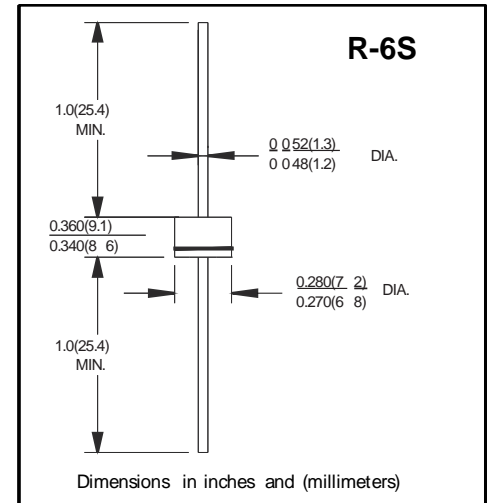
AXIAL SILASTIC GUARD JUNCTION STANDARD RECTIFIER

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 $T_A = 60$ | $I_{(AV)}$ | 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 | $T_A = 25^\circ C$ | 10.0 | | | | | | | μA |
| | $T_A = 100^\circ C$ | 500 | | | | | | | |
| Maximum Full Load Reverse Current, full cycle average 0.375"(9.5mm)lead length at $T_I = 105^\circ C$ | $I_{R(AV)}$ | 500 | | | | | | | μA |
| Typical Junction Capacitance (Note 2) | C_J | 170 | | | | | | | pF |
| Typical Thermal Resistance (Note 1) | $R_{\theta JA}$ | 10 | | | | | | | $^\circ C/W$ |
| Operating Junction Temperature Range | T_J | (-55 to +150) | | | | | | | $^\circ C$ |
| Storage Temperature Range | T_{STG} | (-55 to +150) | | | | | | | $^\circ C$ |

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 CHARACTERISTIC CURVES 6A05S - 6A10S

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

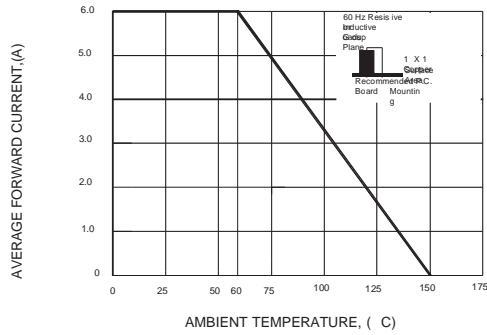


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

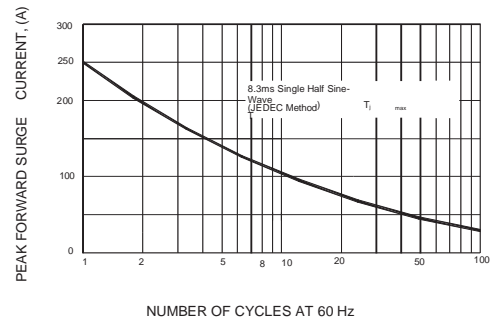


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

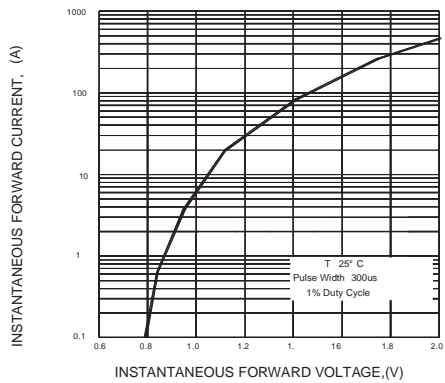


FIG.4-TYPICAL REVERSE CHARACTERISTICS

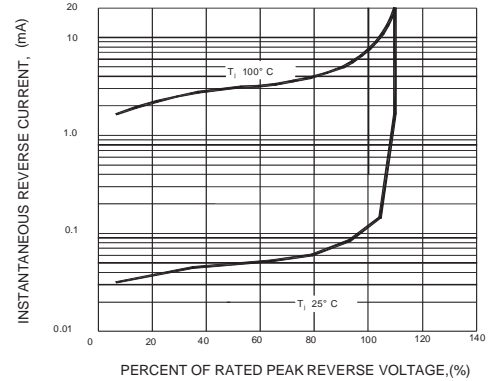
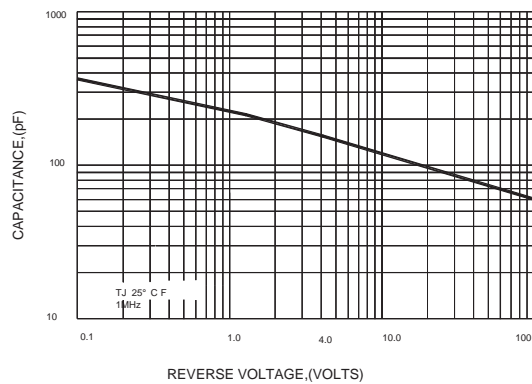


FIG.5-TYPICAL JUNCTION CAPACITANCE



Disclaimer

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