

AXIAL SILASTIC GUARD JUNCTION STANDARD RECTIFIER

P600 THRU P600M

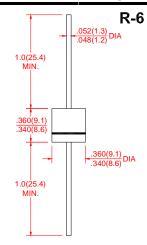
VOLTAGE RANGE CURRENT 50 to 1000 Volts 6.0 Ampere

FEATURES

- Low coat construction
- Low forward voltage drop
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed: 260°C/10 secods/.375"(9.5mm)lead length at 5 lbs(2.3kg) tension

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: 0.0070 ounce, 0.20 grams



Dimensions in inches and (millimeters)

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 | P600A | P600B | P600D | P600G | P600J | P600K | P600M | 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 $^{\circ}$ C | | I _(AV) | 6.0 | | | | | | | Amps |
| Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method) | | I_{FSM} | 300 | | | | | | | Amps |
| Maximum Instantaneous Forward Voltage @ 6.0A | | V_F | 1.0 | | | | | | | Volts |
| Maximum DC Reverse Current at Rated DC Blocking Voltage per element | $T_A = 25^{\circ}C$ | T | 10 | | | | | | | μА |
| | T _A = 100°C | I_R | 1.0 | | | | | | | |
| Maximum Full Load Reverse Current, full cycle average 0.375 "(9.5mm)lead length at T_L = 105 °C | | $I_{R(AV)}$ | 150 | | | | | | | mA |
| Typical Junction Capacitance (Note 1) | | C_J | 15 | | | | | | | pF |
| Typical Thermal Resistance (Note 2) | | $R_{\theta JA}$ | 10 | | | | | | | °C/W |
| Operating Junction Temperature Range | | T_{J} | (-55 to +150) | | | | | | | $^{\circ}$ C |
| Storage Temperature Range | | T_{STG} | (-55 to +150) | | | | | | | $^{\circ}$ |

Notes:

- 1. Measured at 1.0MHz and Applied Reverse Voltage of 4.0V Volts.
- 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.



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RATING AND CHRACTERISTIC CURVES P600A Thur P600M

