



GENERAL PURPOSE RECTIFIER P600A ~ P600M

General Purpose Rectifier

Features

- Low forward voltage
- Low reverse leakage
- High forward surge current capacity
- High temperature soldering guaranteed: 260/10 seconds 0.375" (9.5mm) lead length
- RoHS and REACH compliance



**RoHS
COMPLIANT**

Mechanical Data

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

Maximum Ratings ($T_{Ambient}=25^{\circ}C$ unless noted otherwise)

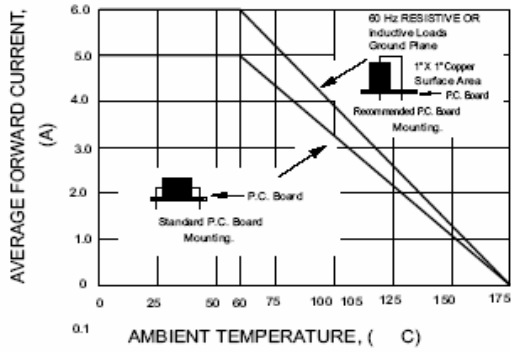
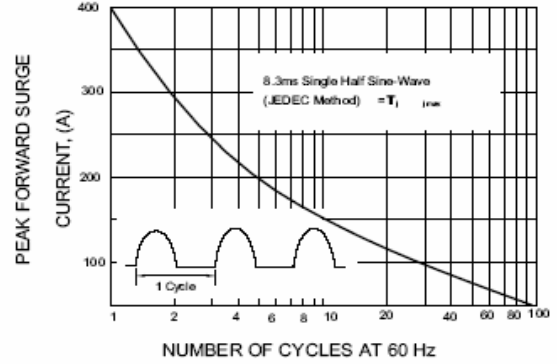
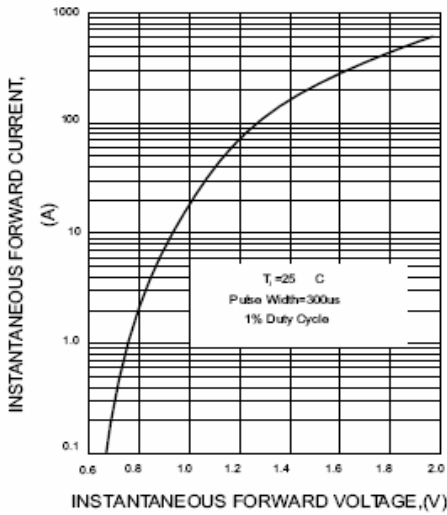
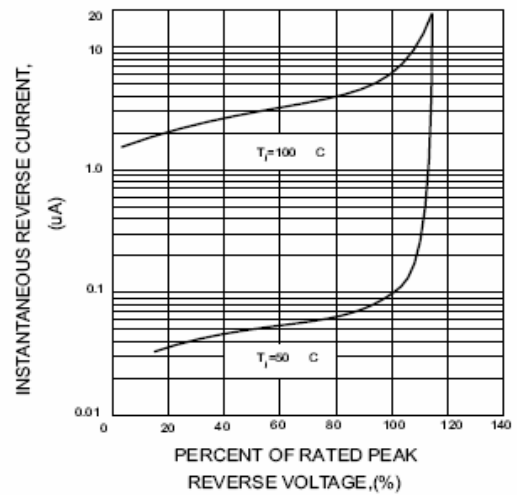
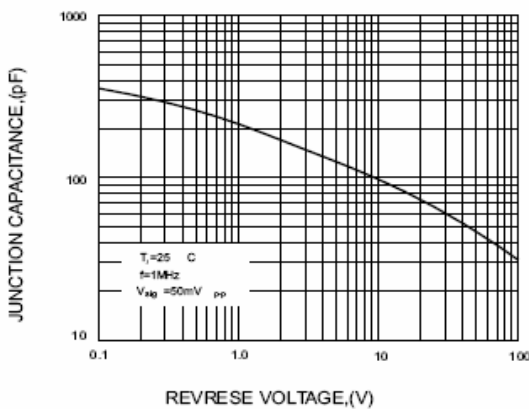
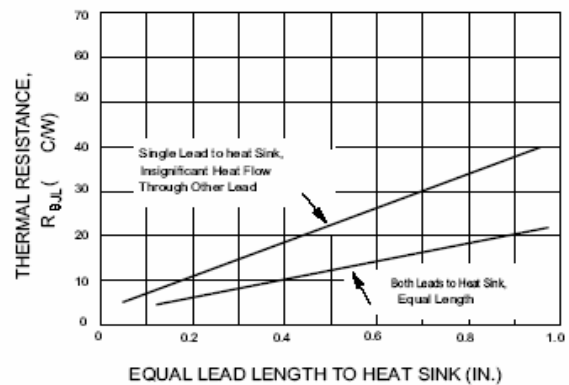
| Symbol | Description | P600A | P600B | P600D | P600G | P600J | P600K | P600M | Unit | Conditions |
|----------|---|-------------|-------|-------|-------|-------|-------|-------|------|--|
| VRRM | Non-Repetitive Peak Reverse Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| VRMS | Maximum RMS Voltage | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V | |
| VDC | Maximum DC Blocking Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| I(AV) | Maximum Average Forward Rectifier Current | 6.0 | | | | | | | Amps | 0.375"(9.5mm) at TA=60°C |
| IFSM | Peak Forward Surge Current | 400 | | | | | | | Amps | 8.3mS Single half sine wave (JEDEC method) |
| TJ, TSTG | Operating and Storage Temperature | -65 to +175 | | | | | | | °C | |
| IR | Maximum DC Reverse Current at Rated DC Blocking Voltage per element | 10.0 | | | | | | | µA | TA=25°C |
| | | 1.0 | | | | | | | | TA=100°C |

Electrical Characteristics ($T_{Ambient}=25^{\circ}C$ unless noted otherwise)

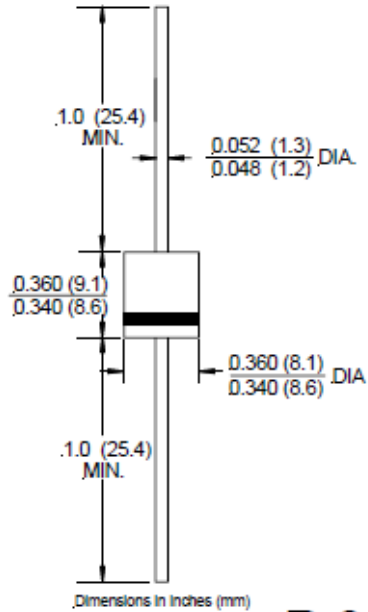
| Symbol | Description | Unit | Conditions |
|--------|-----------------------------------|------|---|
| VF | Max Instantaneous Forward Voltage | V | 3.0A |
| IR(AV) | Maximum Full Load Reverse Current | µA | Full cycle average 0.375"(9.5mm) lead length at TL=105°C |
| CJ | Typical Junction Capacitance | pF | 1.0MHz & 4.0V |
| Rθ-JA | Typical Thermal Resistance | °C/W | Note 1 |

Note:

1. Thermal resistance from junction to ambient with 0.375" (9.5mm) lead length
2. PCB mounted with 0.2" x 0.2" (20mm x 20mm) copper pads

Ratings And Characteristic Curves P600A ~ P600M:
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


Dimensions in inch (mm)



R-6

Contact us:

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