

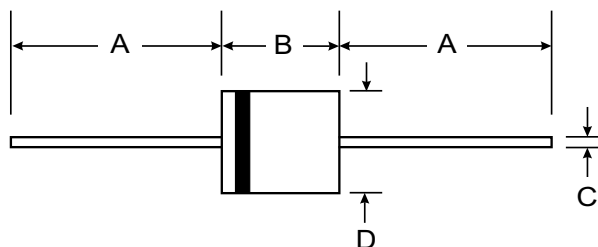
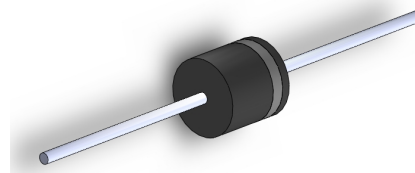
**VOLTAGE RANGE: 50 - 1000V**  
**CURRENT: 6.0 A**

### Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability

### Mechanical Data

- Case: R-6 Molded Plastic
- Terminals: Axial Leads, Solderable per MIL-STD-202, Method 208
- Polarity: Color Band Indicates Cathode
- Approx. Weight: 1.7 grams
- Mounting Position: Any



| R-6                  |      |     |
|----------------------|------|-----|
| Dim                  | Min  | Max |
| A                    | 25.4 | —   |
| B                    | 8.6  | 9.1 |
| C                    | 1.2  | 1.3 |
| All Dimensions in mm |      |     |

### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

| Characteristic  | Symbol              | P600A       | P600B | P600D | P600G | P600J | P600K | P600M | Unit     |
|---|---------------------|-------------|-------|-------|-------|-------|-------|-------|----------|
| Peak Repetitive Reverse Voltage   | V <sub>RRM</sub>    |             |       |       |       |       |       |       |          |
| Working Peak Reverse Voltage  | V <sub>RWM</sub>    | 50          | 100   | 200   | 400   | 600   | 800   | 1000  | V        |
| DC Blocking Voltage   | V <sub>R</sub>      |             |       |       |       |       |       |       |          |
| RMS Reverse Voltage   | V <sub>R(RMS)</sub> | 35          | 70    | 140   | 280   | 420   | 560   | 700   | V        |
| Average Rectified Output Current<br>(Note 1) @T <sub>A</sub> = 60°C   | I <sub>O</sub>      | 6.0         |       |       |       |       |       |       | A        |
| Non-Repetitive Peak Forward Surge Current<br>8.3ms Single half sine-wave superimposed on<br>rated load (JEDEC Method) | I <sub>FSM</sub>    | 400         |       |       |       |       |       |       | A        |
| Forward Voltage @I <sub>F</sub> = 6.0A  | V <sub>FM</sub>     | 1.0         |       |       |       |       |       |       | V        |
| Peak Reverse Current @T <sub>A</sub> = 25°C<br>At Rated DC Blocking Voltage @T <sub>A</sub> = 100°C                   | I <sub>RM</sub>     | 5.0<br>1.0  |       |       |       |       |       |       | μA<br>mA |
| Typical Junction Capacitance (Note 2)   | C <sub>j</sub>      | 150         |       |       |       |       |       |       | pF       |
| Typical Thermal Resistance Junction to Ambient<br>(Note 1)  | R <sub>θJA</sub>    | 20          |       |       |       |       |       |       | K/W      |
| Operating Temperature Range   | T <sub>j</sub>      | -50 to +150 |       |       |       |       |       |       | °C       |
| Storage Temperature Range   | T <sub>STG</sub>    | -50 to +150 |       |       |       |       |       |       | °C       |

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case  
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

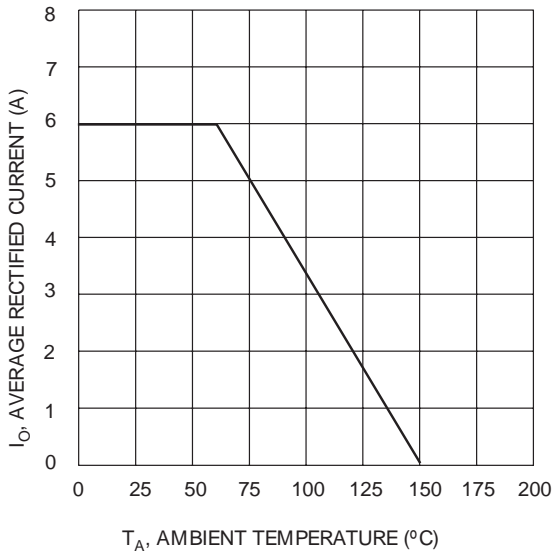


Fig. 1 Forward Current Derating Curve

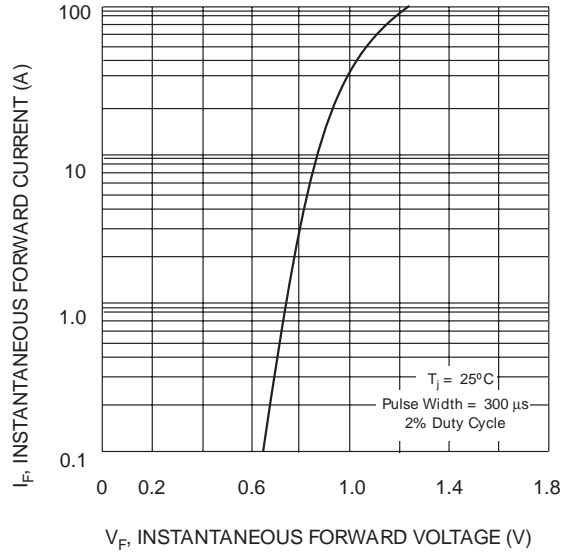


Fig. 2, Typical Forward Characteristics

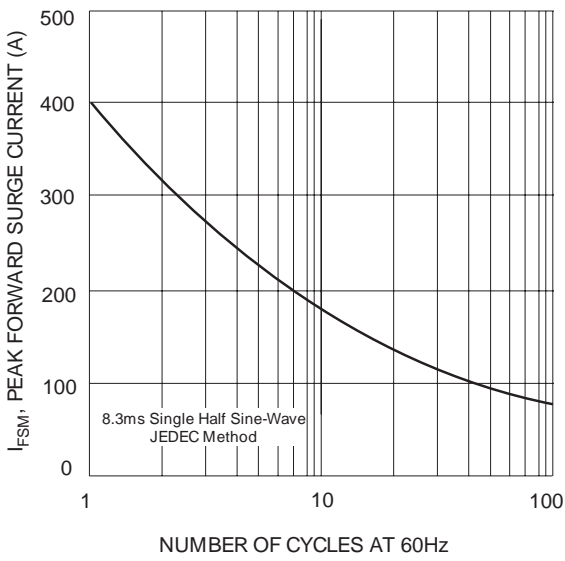


Fig. 3 Maximum Non-Repetitive Peak Forward Surge Current

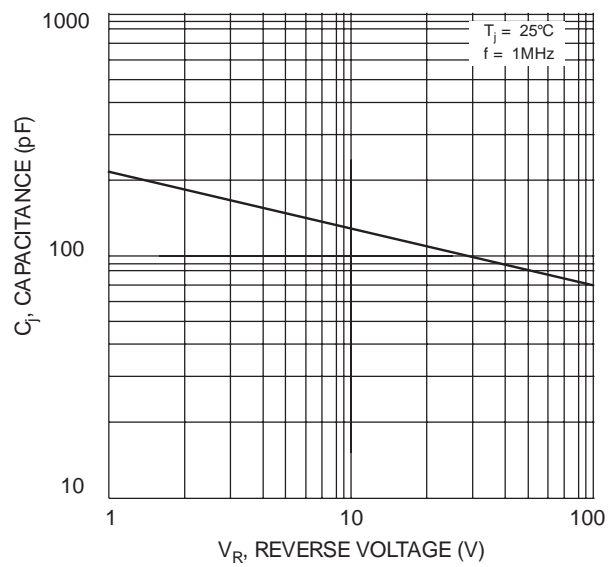


Fig. 4 Typical Junction Capacitance

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Diodes - General Purpose, Power, Switching category](#):*

*Click to view products by [SUNMATE manufacturer](#):*

Other Similar products are found below :

[MCL4151-TR3](#) [MMBD3004S-13-F](#) [RD0306T-H](#) [RD0506LS-SB-1H](#) [RGP30G-E373](#) [DSE010-TR-E](#) [BAQ333-TR](#) [BAQ335-TR](#) [BAQ33-GS18](#) [BAS1602VH6327XT](#) [BAV17-TR](#) [BAV19-TR](#) [BAV301-TR](#) [BAW27-TAP](#) [HSC285TRF-E](#) [NSVBAV23CLT1G](#) [NTE525](#) [1SS181-TP](#) [1SS184-TP](#) [1SS193,LF](#) [1SS193-TP](#) [1SS400CST2RA](#) [SBAV99LT3G](#) [SDAA13](#) [LL4448-GS18](#) [SHN2D02FUTW1T1G](#) [LS4150GS18](#) [LS4151GS08](#) [SMMD7000LT3G](#) [FC903-TR-E](#) [1N4449](#) [1N4934-E3/73](#) [1SS226-TP](#) [APT100DL60HJ](#) [RFUH20TB3S](#) [RGP30G-E354](#) [RGP30M-E3/73](#) [D291S45T](#) [MCL4151-TR](#) [BAS 16-02V H6327](#) [BAS 21U E6327](#) [BAS 28 E6327](#) [BAS33-TAP](#) [BAS 70-02V H6327](#) [BAV300-TR](#) [BAV303-TR3](#) [BAW27-TR](#) [BAW56DWQ-7-F](#) [BAW56M3T5G](#) [BAW75-TAP](#)