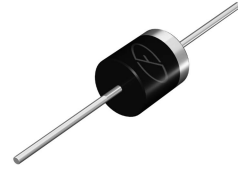


Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- High ESD (ESD \geq 15KV/Contact,ESD \geq 30KV/Air)
 Reference standard: IEC-61000-4-2, Contact/Air



Package: P600 (R-6)

Mechanical Data

- Epoxy: UL 94V-O rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band denotes cathode
- High temperature soldering guaranteed: 250°C/10S

Applications

- For use in solar cell junction box as a bypass rectifier for protection

Maximum Ratings and Electrical Characteristics (T_A = 25°C unless otherwise noted)

| Parameter | Symbol | Value | Unit |
|---|--------------------|-----------------------|------|
| Maximum Repetitive Peak Reverse Voltage | V _{RRM} | 45 | V |
| Maximum RMS Voltage | V _{RMS} | 31.5 | V |
| Maximum DC Blocking Voltage | V _{DC} | 45 | V |
| Average Forward Rectified Current T _A =50°C | I _{F(AV)} | 20 | A |
| Peak Forward Surge Current Single Sine-wave Superimposed on Rated Load (JEDEC Method) | I _{FSM} | 350 | A |
| Forward Voltage I _F =5A | V _F | 0.45 | V |
| | | I _F =20A | |
| Maximum DC Reverse Current at rated DC Blocking Voltage per leg T _J =25°C | I _R | 500 | μA |
| | | T _J =100°C | 25 |
| Typical Thermal Resistance per leg | R _{θJC} | 2.2 ⁽¹⁾ | °C/W |
| Junction Temperature V _R ≤80%V _{RRM} In DC forward mode | T _J | -50 to +150 200 | °C |
| Storage Temperature Range | T _{STG} | -50 to +175 | °C |

Notes: 1. Thermal Resistance Junction to Case

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

Ratings and Characteristics Curves

($T_A = 25^\circ\text{C}$ unless otherwise noted)

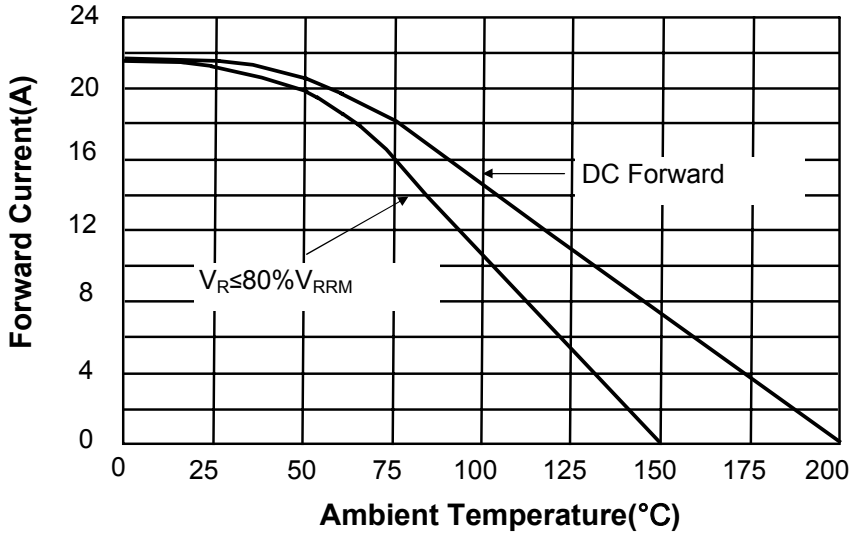


Figure 1. Forward Current Derating

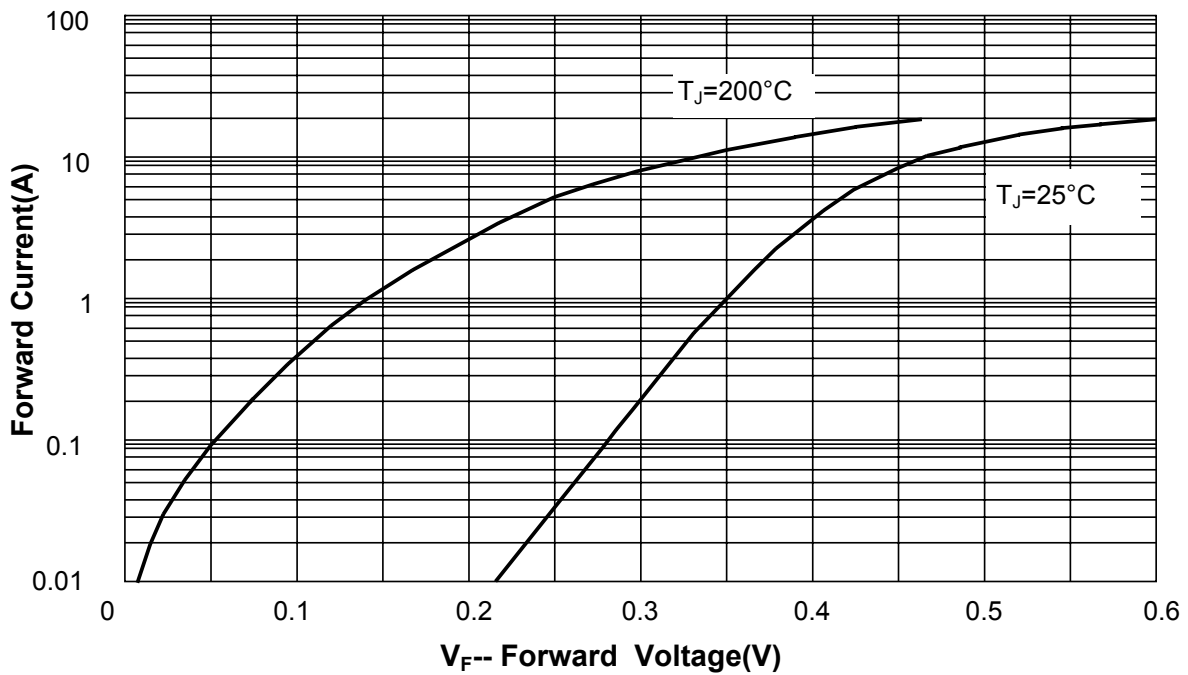


Figure 2. Forward Characteristics(Typical Value)

Package Outline Dimensions

in inches (millimeters)

P600 (R-6)

