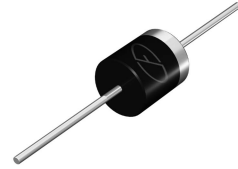


Features

- 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)

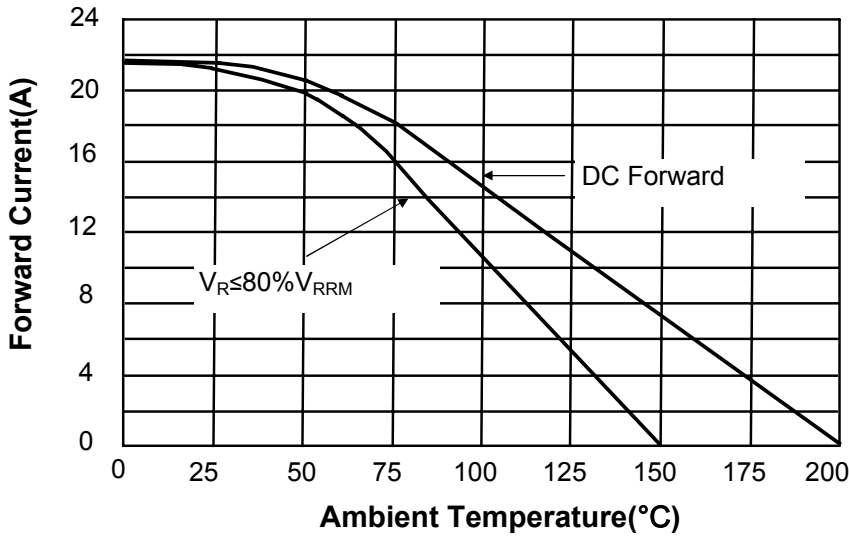


Figure 1. Forward Current Derating

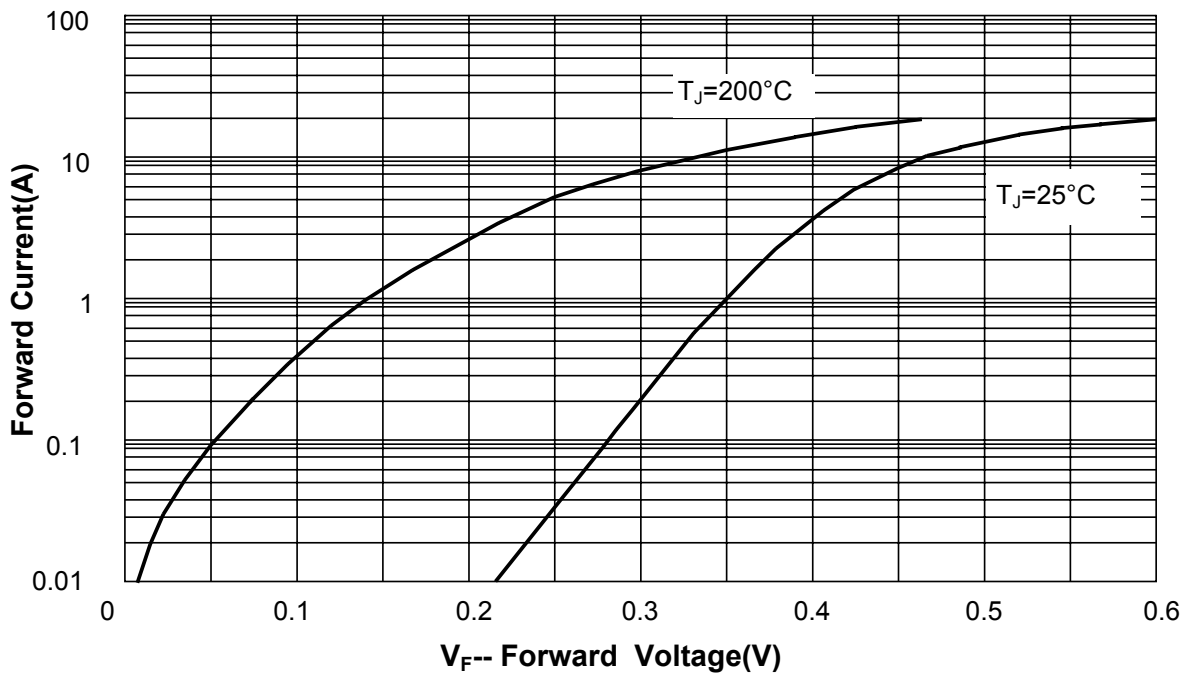


Figure 2. Forward Characteristics(Typical Value)

Package Outline Dimensions

in inches (millimeters)

P600 (R-6)

