

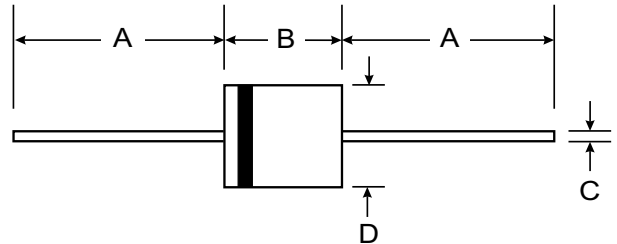
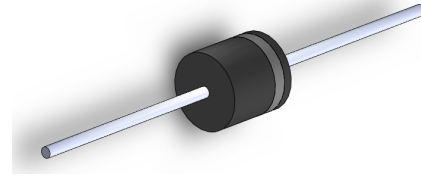
**VOLTAGE RANGE: 50 - 1000V**  
**CURRENT: 10.0 A**

### Features

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

### Mechanical Data

- Case: R-6, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Mounting Position: Any
- Marking: Type Number
- Weight: 2.1 grams (approx.)



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 $T_A = 25^\circ\text{C}$ unless otherwise specified

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

Characteristi	Symbol	P1000A	P1000B	P1000D	P1000G	P1000J	P1000K	P1000M	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	$V_{RWM}$								
DC Blocking Voltage	$V_R$								
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ $T_A = 50^\circ\text{C}$	$I_O$	10							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	600							A
Forward Voltage @ $I_F = 10\text{A}$	$V_{FM}$	1.0							V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	$I_{RM}$	10 100							$\mu\text{A}$
Typical Junction Capacitance (Note 2)	$C_j$	150				80			pF
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	10							$^\circ\text{C/W}$
Operating Temperature Range	$T_j$	-50 to +150							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-50 to +150							$^\circ\text{C}$

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.

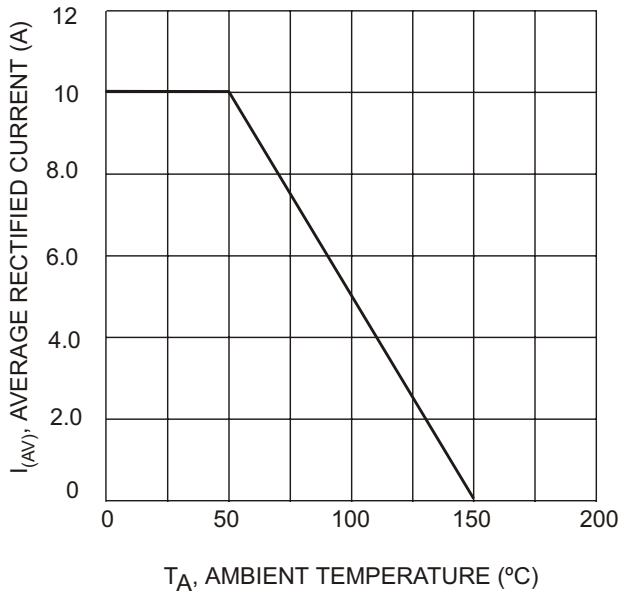


Fig. 1 Forward Current Derating Curve

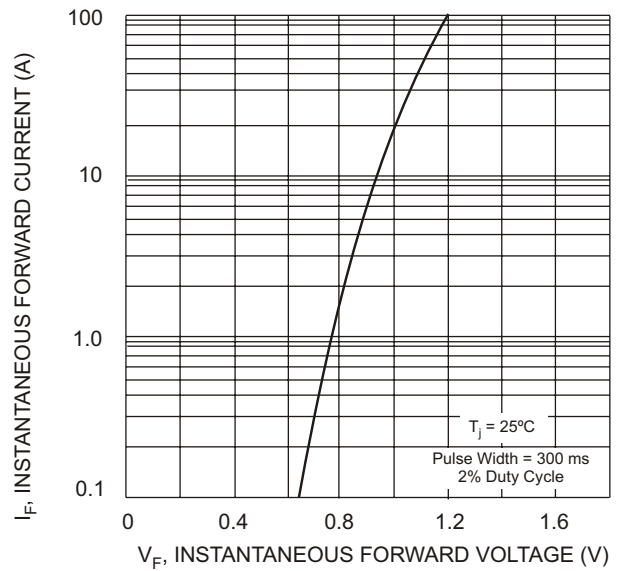


Fig. 2 Typical Forward Characteristics

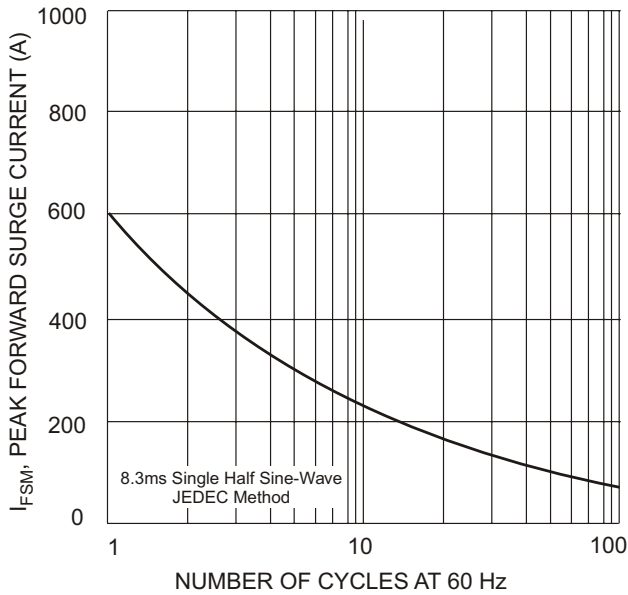


Fig. 3 Maximum Non-Repetitive Peak Forward Surge Current

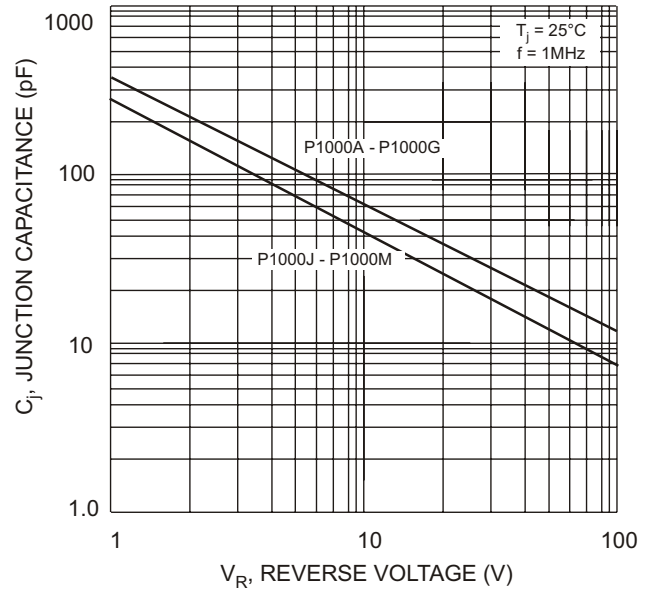


Fig. 4 Typical Junction Capacitance