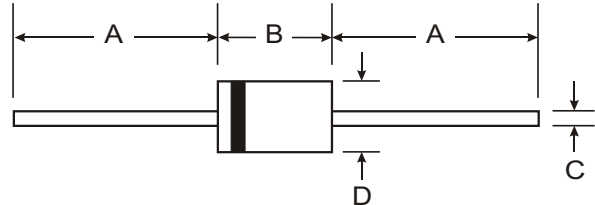


NOT RECOMMENDED FOR NEW DESIGNS,  
PLEASE USE PR1006G - PR1007G

### Features

- Plastic Package: UL Flammability Classification Rating 94V-0
- Capable of Meeting the Environmental Tests in MIL-STD-750C
- High Reliability and Low Leakage
- Fast Switching for High Efficiency



### Mechanical Data

- Case: DO-41, Molded Plastic
- Terminals: Axial Lead, Solderable per MIL-STD-202, Method 208
- Mounting Position: Any
- Polarity: Cathode Band
- Weight: 0.35 grams (approx.)

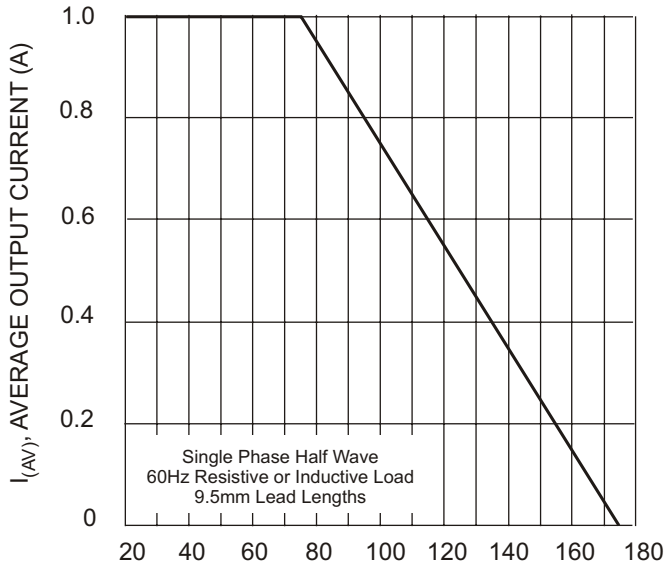
DO-41		
Dim	Min	Max
A	25.4	—
B	4.1	5.2
C	0.71	0.86
D	2.0	2.7
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics

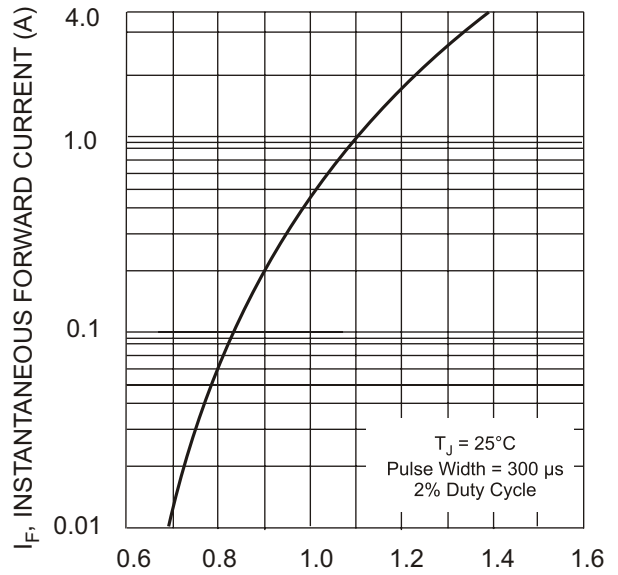
Rating at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60Hz, resistive or inductive load.

Characteristic	Symbol	FR106	FR107	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	800	1000	V
Maximum RMS Voltage	$V_{RSM}$	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	800	1000	V
Maximum Average Forward Rectified Current 9.5mm Lead Lengths @ $T_A = 75^\circ\text{C}$	$I_{(AV)}$	1.0		A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	30		A
Maximum Forward Voltage at 1.0A	$V_F$	1.3		V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_A = 25^\circ\text{C}$ @ $T_A = 100^\circ\text{C}$	$I_R$	5.0 100		$\mu\text{A}$
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	50		$^\circ\text{C}/\text{W}$
Typical Junction Capacitance (Note 2)	$C_J$	15		pF
Maximum Reverse Recovery Time (Note 3)	$T_{rr}$	250	500	ns
Storage and Operating Temperature	$T_J, T_{STG}$	-65 to +175		$^\circ\text{C}$

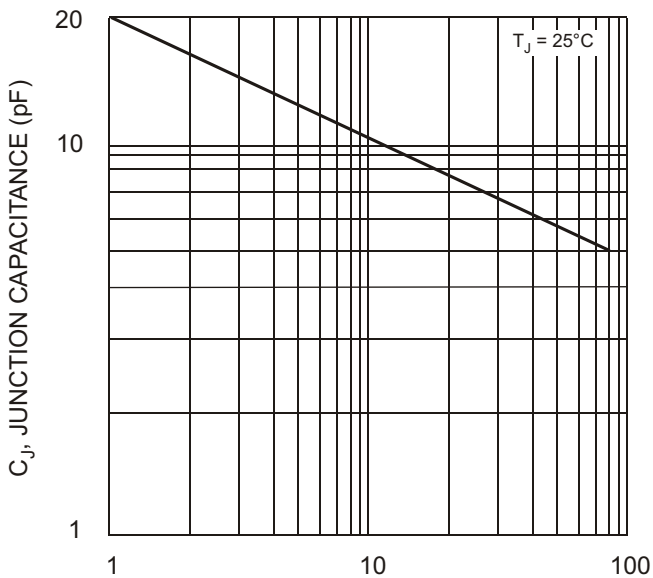
- Notes:
1. Thermal Resistance from Junction to Ambient PC Board Mounting, 9.5mm Lead Length.
  2. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.
  3. Measured with  $I_F = 0.5\text{A}$ ,  $I_R = 1.0\text{A}$ ,  $I_{RR} = .25\text{A}$



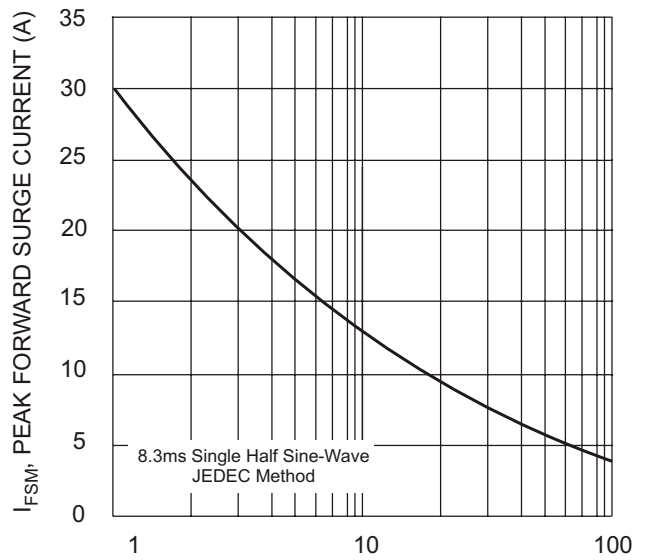
$T_A$ , AMBIENT TEMPERATURE (°C)  
Fig. 1, Forward Current Derating Curve



$V_F$ , INSTANTANEOUS FWD VOLTAGE (V)  
Fig. 2, Typical Forward Characteristics



$V_R$ , REVERSE VOLTAGE (V)  
Fig. 3, Typical Junction Capacitance



NUMBER OF CYCLES AT 60Hz  
Fig. 4, Max Non-Repetitive Peak Forward Surge Current