

Excellent Integrated System Limited

Stocking Distributor

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For any questions, you can email us directly:

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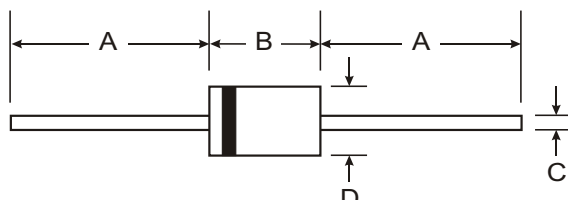
FR106 / FR107

1.0A FAST RECOVERY RECTIFIER

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

NOT RECOMMENDED FOR NEW DESIGNS,
PLEASE USE PR1006G - PR1007G



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.)

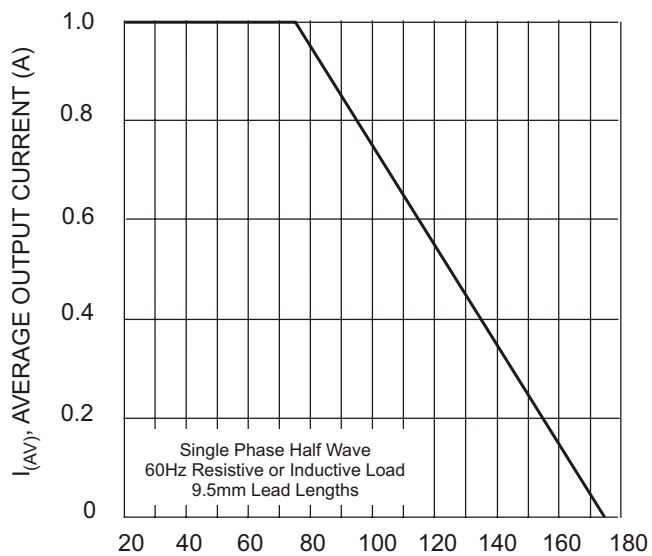
DO-41		
Dim	Min	Max
A	25.4	—
B	4.1	5.2
C	0.71	0.86
D	2.0	2.7
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics

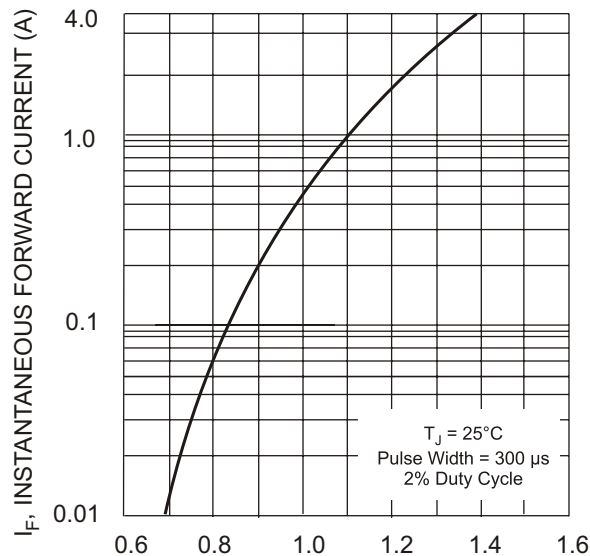
Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.

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 @ $T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	I_R	5.0 100		μA
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	50		$^\circ\text{C/W}$
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		$^\circ\text{C}$

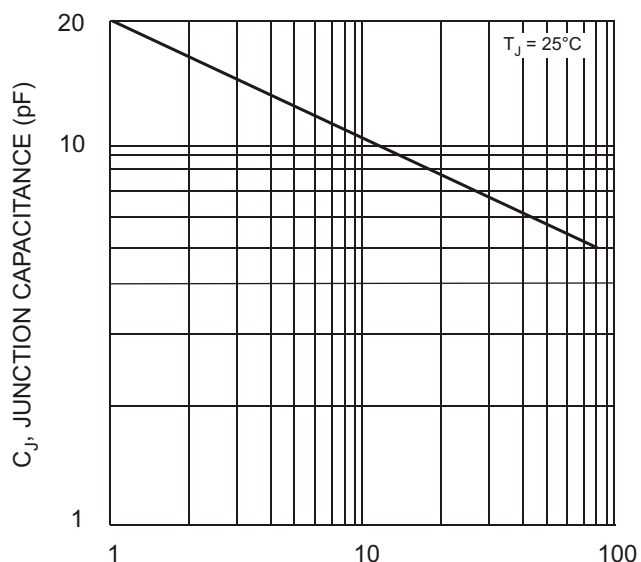
- Notes:
1. Thermal Resistance from Junction to Ambient PC Board Mounting, 9.5mm Lead Length.
 2. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.
 3. Measured with $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{RR} = .25\text{A}$



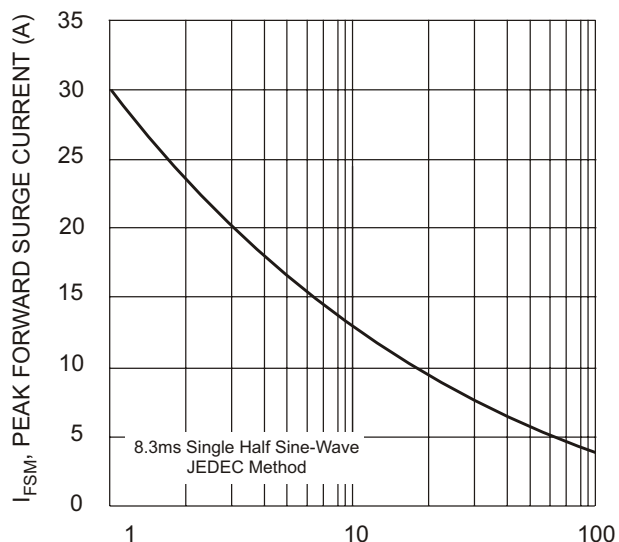
T_A , AMBIENT TEMPERATURE (°C)
Fig. 1, Forward Current Derating Curve



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