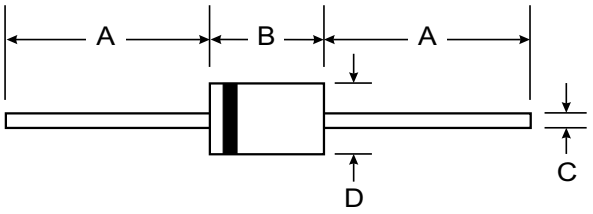
FR106 / FR107

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



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°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°C at Rated DC Blocking Voltage @ T_A = 100°C	I_R	5.0 100		μA
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	50		K/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		°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= 0.5A, I_R=1.0A, I_{RR}=.25A

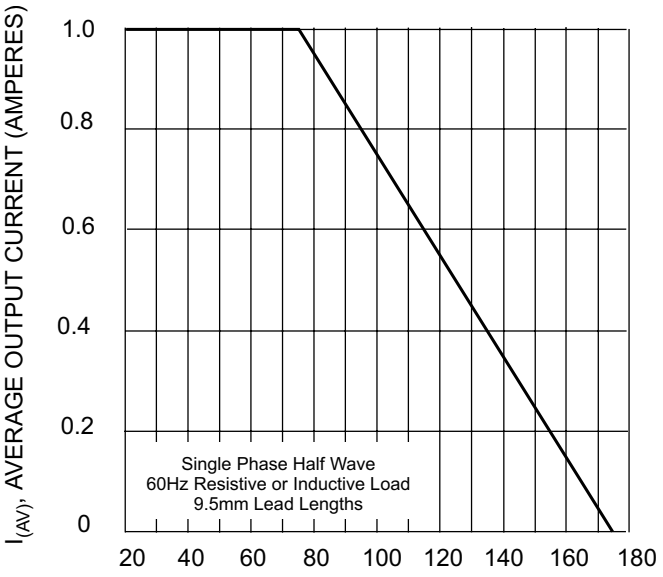


Fig. 1, Forward Current Derating Curve

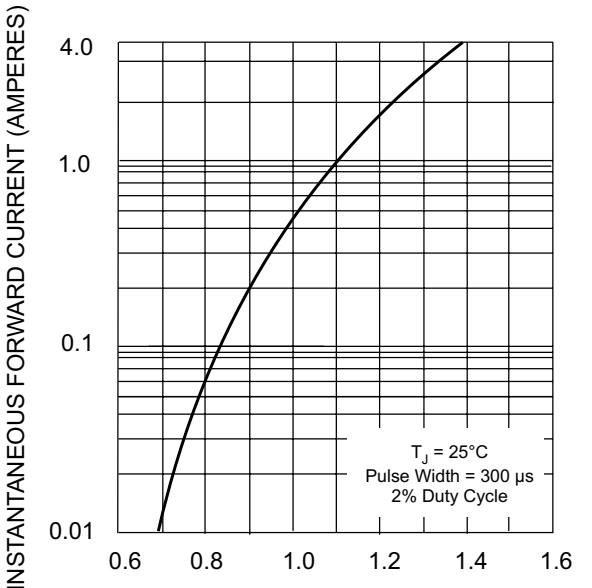


Fig. 2, Typical Forward Characteristics

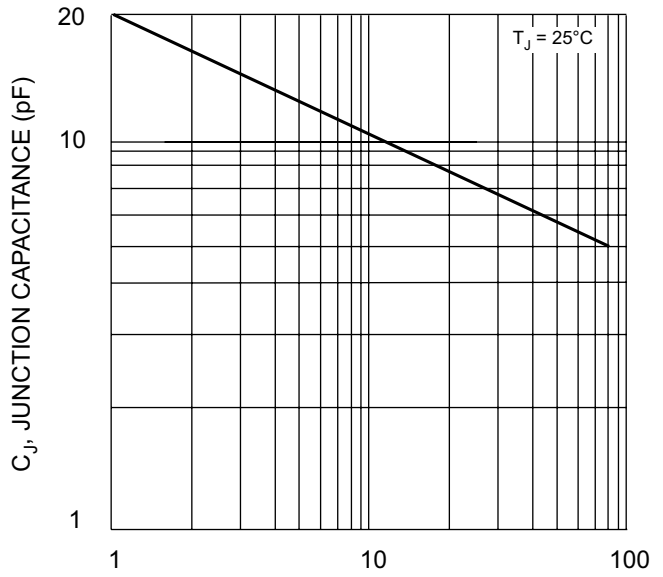


Fig. 3, Typical Junction Capacitance

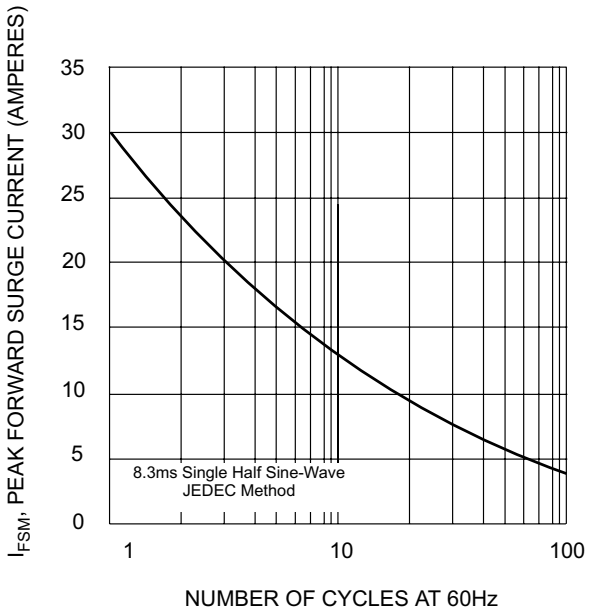


Fig. 4, Max Non-Repetitive Peak Forward Surge Current