

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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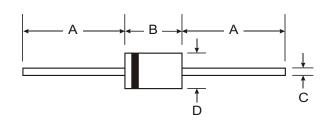


## FR106 / FR107

### 1.0A FAST RECOVERY RECTIFIER

# \_\_\_ NOT RECOMMENDED FOR NEW DESIGNS, \_\_\_\_\_\_ PLEASE USE PR1006G - PR1007G

- 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**

**Features** 

• Case: DO-41, Molded Plastic

 Terminals: Axial Lead, Solderable per MIL-STD-202, Method 208

Mounting Position: AnyPolarity: Cathode Band

Weight: 0.35 grams (approx.)

DO-41				
Dim	Min	Max		
Α	25.4	_		
В	4.1	5.2		
С	0.71	0.86		
D	2.0	2.7		
All Dimensions in mm				

### **Maximum Ratings and Electrical Characteristics**

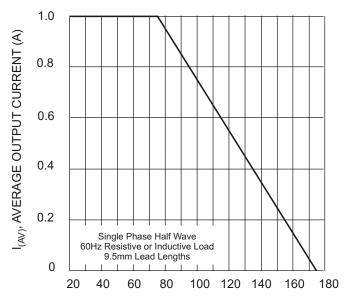
Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.

Characteristic	Symbol	FR106	FR107	Unit
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	800	1000	V
Maximum RMS Voltage	V <sub>RSM</sub>	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	800	1000	V
	I <sub>(AV)</sub>	1.0		А
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	30		А
Maximum Forward Voltage at 1.0A	VF	1.3		V
	I <sub>R</sub>	5.0 100		μА
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	50		°C/W
Typical Junction Capacitance (Note 2)	CJ	15		pF
Maximum Reverse Recovery Time (Note 3)	T <sub>rr</sub>	250	500	ns
Storage and Operating Temperature	T <sub>J</sub> , T <sub>STG</sub>	-65 to +175		°C

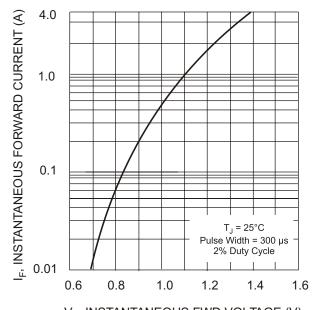
Notes: 1. Thermal Resistance from Junction to Ambient PC Board Mounting, 9.5mm Lead Length.

- 2. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.
- 3. Measured with I<sub>F</sub>= 0.5A, I<sub>R</sub>=1.0A, I<sub>RR</sub>=.25A

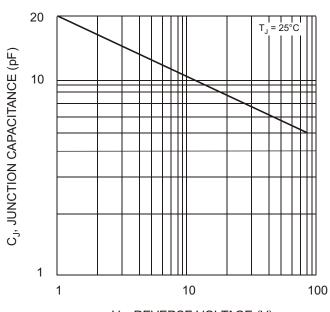




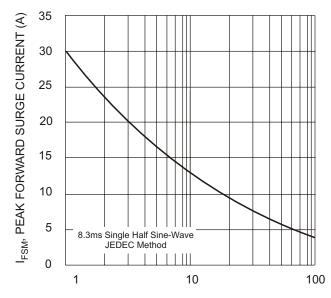
T<sub>A</sub>, AMBIENT TEMPERATURE (°C) Fig. 1, Forward Current Derating Curve



V<sub>F</sub>, 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