# imall

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!



# Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





# FR1A - FR1M

## **GLASS PASSIVATED FAST RECOVERY RECTIFIER**

### NOT RECOMMENDED FOR NEW DESIGNS, \_\_\_\_\_ PLEASE USE RS1AB - RS1MB

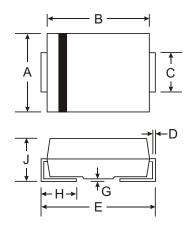
- For Surface Mounted Applications
- Capable of Meeting Environmental Standards of MIL-STD-19500
- Plastic Material UL Flammability Classification 94V-0
- High Reliability

Features

- Submersible Temperature of 265 °C for 10 Seconds in Solder Bath
- Glass Passivated Junction

#### **Mechanical Data**

- Case: SMB, Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Approx. Weight: 0.093 grams
- Mounting Position: Any



SMB							
Dim	Min	Max					
Α	3.30	3.94					
В	4.00	4.65					
С	1.95	2.21					
D	0.15	0.40					
E	5.00	6.00					
G	0.10	0.20					
н	0.76	1.52					
J	2.00	2.62					
All Dimensions in mm							

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

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

Characteristic		FR1A	FR1B	FR1D	FR1G	FR1J	FR1K	FR1M	Unit
Maximum Recurrent Peak Reverse Voltage		50	100	200	400	600	800	1000	V
Maximum RMS Voltage		35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage		50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ $T_A = 75^{\circ}C$		1.0							А
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		30						А	
Maximum Instantaneous Forward Voltage at 1.0 A		1.3							V
$ \begin{array}{ll} \mbox{Maximum DC Reverse Current at Rated} & @ T_{A} = \ 25^{\circ}\mbox{C} \\ \mbox{DC Blocking Voltage} & @ T_{A} = \ 125^{\circ}\mbox{C} \\ \end{array} $		5.0 100							μ <b>A</b>
$\begin{array}{llllllllllllllllllllllllllllllllllll$		50							μ <b>A</b>
Maximum Reverse Recovery Time (See Note 1)			150		250	500	500	ns	
MaximumThermal Resistance (See Note 2)		30							°C/W
Typical Junction Capacitance (See Note 3)		15							pF
Operating and Storage Temperature Rating		-65 to +175						°C	

Notes: 1. Reverse Recovery Test Conditions:  $I_F = 0.5A$ ,  $I_R = 1A$ ,  $I_{RR} = 0.25A$ 

2. Thermal Resistance from junction to lead with 6.0mm<sup>2</sup> copper pads

3. Measured at 1.0MHz and applied reverse voltage of 4.0V



