## Schottky Barrier Rectifier 2A High Voltage





#### Features:

- · Schottky Barrier Chip
- · Guard Ring Die Construction for Transient Protection
- · Low Power Loss, High Efficiency
- · Surge Overload Rating to 50A Peak
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Application
- High Temperature Soldering: 260°C/10 Second at Terminal

#### **Mechanical Data:**

Case : SMB

Case Material : Molded Plastic

Moisture Sensitivity : Level 1 per J-STD-020

Terminals : Lead Free Plating (Matte Tin Finish). Solderable per MIL-STD-202, Method 208

Polarity : Cathode Band or Cathode Notch Weight : 0.093 grams (approximate)

### Maximum Ratings (@T<sub>A</sub> = 25°C unless otherwise specified)

Characteristic	Symbol	B2100	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	100	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	70	
Average Rectified Output Current @ T <sub>T</sub> = 125°C	I <sub>o</sub>	2	
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load  I <sub>FSM</sub> 50		A	

### **Thermal Characteristics:**

Characteristic	Symbol	Value	Unit
Typical Thermal Resistance Junction to Terminal (Note 1)	$R_{\theta JT}$	15	°C/W
Operating and Storage Temperature Range	$T_J, T_STG$	-65 to +150	°C

### **Electrical Characteristics** (@T<sub>A</sub> = 25°C unless otherwise specified)

Characteristic	Symbol	Min	Тур	Max	Unit	Test Condition
Forward Voltage Drop	V <sub>F</sub>	ı	-	0.79 0.69	>	I <sub>F</sub> = 2A, T <sub>A</sub> = 25°C I <sub>F</sub> = 2A, T <sub>A</sub> = 100°C
Leakage Current (Note 2)	I <sub>R</sub>		-	7 2	μA mA	@ Rated V <sub>R</sub> , T <sub>A</sub> = 25°C @ Rated V <sub>R</sub> , T <sub>A</sub> = 100°C
Total Capacitance	C <sub>T</sub>	-	-	75	pF	V <sub>R</sub> = 4V, f = 1MHz

Notes: 1. Valid provided that terminals are kept at ambient temperature.

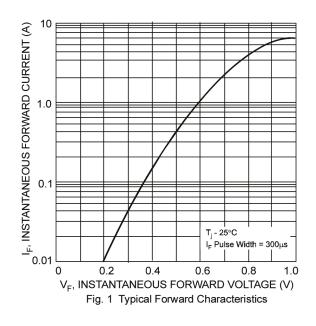
2. Short duration pulse test used to minimize self-heating effect.

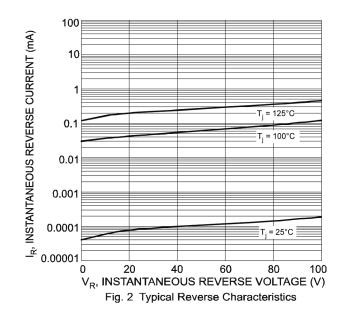
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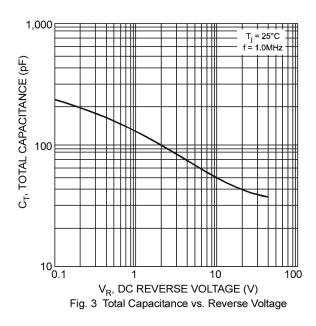


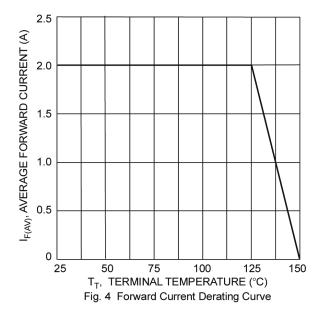
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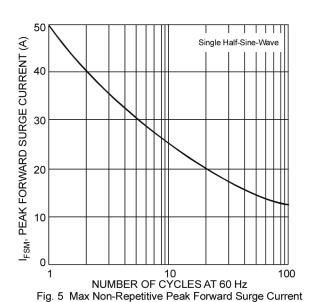




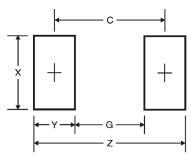


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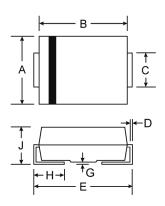




**Pad Layout** 



Dimensions	Value (mm)
Z	6.7
G	1.8
Х	2.3
Y	2.5
С	4.3



Dim	Min	Max
Α	3.3	3.94
В	4.06	4.57
С	1.96	2.21
D	0.15	0.31
Е	5	5.59
G	0.05	0.2
Н	0.76	1.52
J	2	2.5

Dimensions: Millimetres

#### **Part Number Table**

Description	Part Number
Rectifier, Schottky, 2A, 100V	B2100-13-F

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