

#### Features

- 600W Peak Pulse Power Dissipation
- 350V Standoff Voltage
- Glass Passivated Die Construction
- Excellent Clamping Capability
- Fast Response Time
- Lead Free Finish/RoHS Compliant (Note 1)
- Green Molding Compound (No Halogen and Antimony) (Note 2)

### **Mechanical Data**

- Case: SMB
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Lead Free Plating (Matte Tin Finish). Solderable per MIL-STD-202, Method 208
- Polarity Indicator: Cathode Band
- Weight: 0.1 grams (approximate)





Top View

Bottom View

#### Ordering Information (Note 3)

Part Number	Qualification	Case	Packaging
SMBJ350A-13-F	Commercial	SMB	3000/Tape & Reel

Notes: 1. EU Directive 2002/95/EC (RoHS). All applicable RoHS exemptions applied, see EU Directive 2002/95/EC Annex Notes

2. Diodes Inc.'s "Green" Policy can be found on our website at http://www.diodes.com.

3. For packaging details, go to our website at http://www.diodes.com.

### **Marking Information**



QG = Product type marking code (See Page 2) DII = Manufacturers' code marking YWW = Date code marking Y = Last digit of year (ex: 1 for 2011) WW = Week code (01 ~ 53)



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

Characteristic	Symbol	Value	Unit
Peak Pulse Power Dissipation	Р	600	W
(Non repetitive current pulse derated above $T_A = 25^{\circ}$ C) (Note 4)	P <sub>PK</sub>	600	vv
Peak Power Derating Above 25°C	P <sub>der</sub>	4.8	W/°C
Peak Forward Surge Current, 8.3ms Single Half Sine Wave Superimposed on Rated Load (Notes 4 & 5)	I <sub>FSM</sub>	100	А
Steady State Power Dissipation @ T <sub>L</sub> = 75°C	PM <sub>(AV)</sub>	5.0	W
Instantaneous Forward Voltage @ IPP = 35A (Notes 4 & 5)	V <sub>F</sub>	5.0	V

### **Thermal Characteristics**

Characteristic	Symbol	Value	Unit
Operating Temperature Range	TJ	-55 to +150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +175	°C

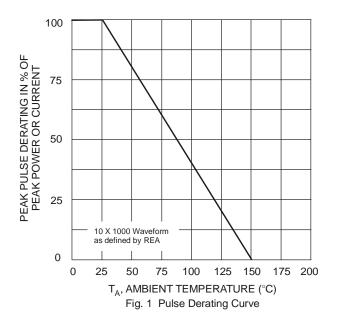
## Electrical Characteristics @T<sub>A</sub> = 25°C unless otherwise specified

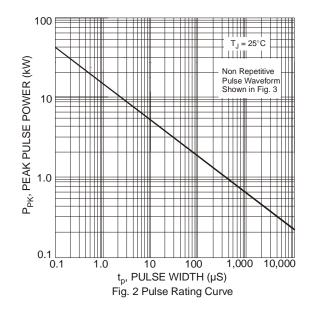
Part Number	Reverse Standoff Voltage	Volt	down age (Note 6)	Test Current	Max. Reverse Leakage @ V <sub>RWM</sub>	Max. Clamping Voltage @ I <sub>pp</sub>	Max. Peak Pulse Current I <sub>pp</sub>	Marking Code
See Note 5	V <sub>RWM</sub> (V)	Min (V)	Max (V)	I⊤(mA)	I <sub>R</sub> (μΑ)	V <sub>C</sub> (V)	(A)	-
SMBJ350A	350.0	391.0	432.0	1.0	5.0	567.0	1.1	QG

4. Valid provided that terminals are kept at ambient temperature.

5. Measured with 8.3ms single half sine-wave. Duty cycle = 4 pulses per minute maximum.

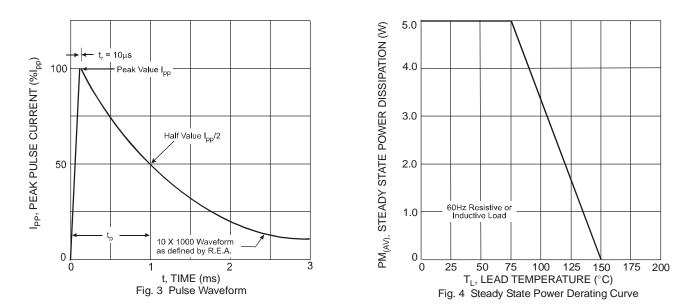
6.  $V_{BR}$  measured with I<sub>T</sub> current pulse = 300µs



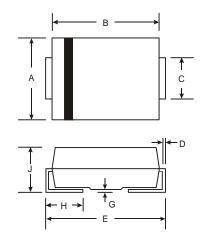


Notes:



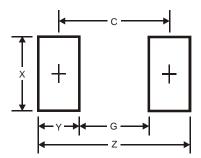


## **Package Outline Dimensions**



SMB				
Dim	Min	Max		
Α	3.30	3.94		
В	4.06	4.57		
С	1.96	2.21		
D	0.15	0.31		
Е	5.00	5.59		
G	0.05	0.20		
Н	0.76	1.52		
J	2.00	2.50		
All Dimensions in mm				

# Suggested Pad Layout



Dimensions	Value (in mm)
Z	6.8
G	1.8
Х	2.3
Y	2.5
C	4.3



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