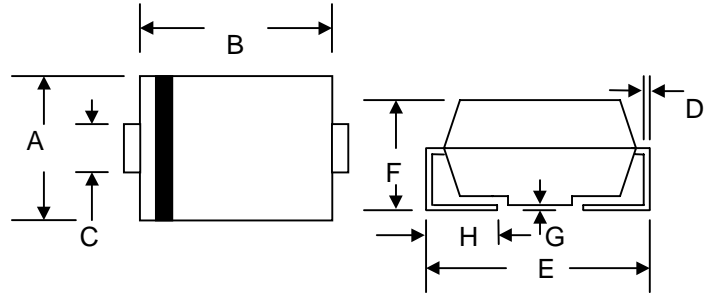


### Features

- Glass Passivated Die Construction
- 600W Peak Pulse Power Dissipation
- 5.0V – 170V Standoff Voltage
- Uni- and Bi-Directional Versions Available
- Excellent Clamping Capability
- Fast Response Time
- Plastic Case Material has UL Flammability Classification Rating 94V-O



### Mechanical Data

- Case: JEDEC DO-214AA Low Profile Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking:  
 Unidirectional – Device Code and Cathode Band  
 Bidirectional – Device Code Only
- Weight: 0.093 grams (approx.)

SMB/DO-214AA		
Dim	Min	Max
A	3.30	3.94
B	4.06	4.70
C	1.91	2.11
D	0.152	0.305
E	5.08	5.59
F	2.13	2.44
G	0.051	0.203
H	0.76	1.27
All Dimensions in mm		

“C” Suffix Designates Bi-directional Devices  
 “A” Suffix Designates 5% Tolerance Devices  
 No Suffix Designates 10% Tolerance Devices

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

Characteristic	Symbol	Value	Unit
Peak Pulse Power Dissipation 10/1000µS Waveform (Note 1, 2) Figure 3	PPPM	600 Minimum	W
Peak Pulse Current on 10/1000µS Waveform (Note 1) Figure 4	IPPM	See Table 1	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method) (Note 2, 3)	IFSM	100	A
Operating and Storage Temperature Range	T <sub>i</sub> , T <sub>STG</sub>	-55 to +150	°C

- Note: 1. Non-repetitive current pulse, per Figure 4 and derated above T<sub>A</sub> = 25°C per Figure 1.  
 2. Mounted on 5.0mm<sup>2</sup> (0.013mm thick) land areas.  
 3. Measured on 8.3ms single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minutes maximum.

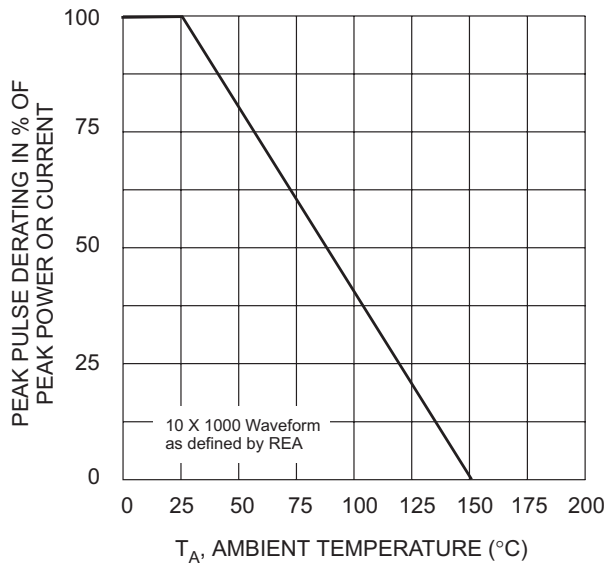


Fig. 1 Pulse Derating Curve

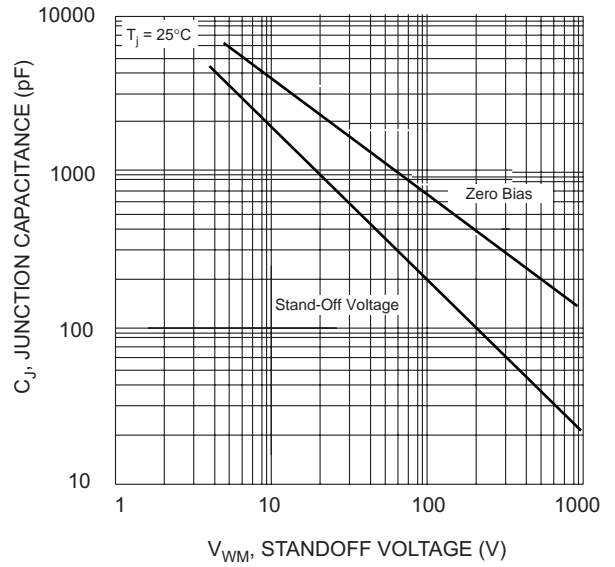


Fig. 2 Typical Junction Capacitance

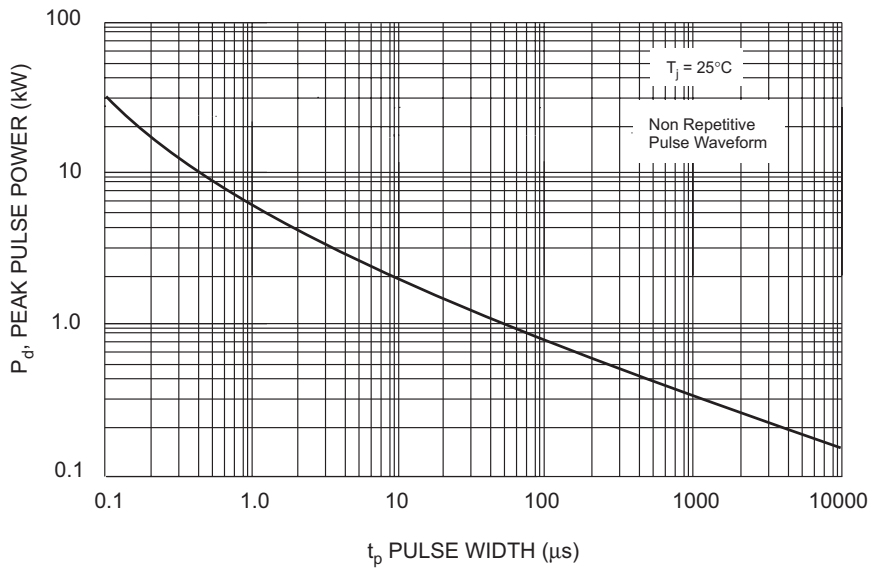


Fig. 3 Pulse Rating Curve

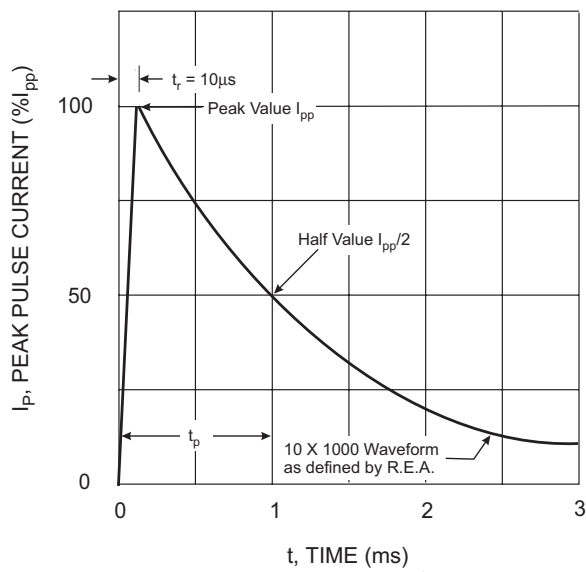


Fig. 4 Pulse Waveform





## ORDERING INFORMATION

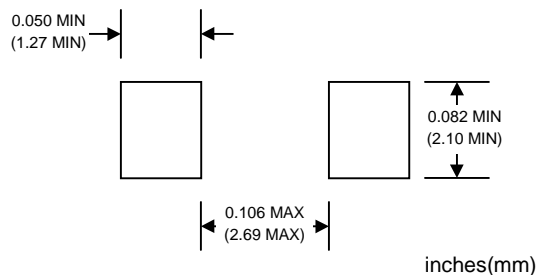
Product No.♦	Package Type	Shipping Quantity
P6SMBJxx-T1	SMB	500/Tape & Reel
<b>P6SMBJxx-T3</b>	SMB	3000/Tape & Reel
P6SMBJxxA-T1	SMB	500/Tape & Reel
<b>P6SMBJxxA-T3</b>	SMB	3000/Tape & Reel
P6SMBJxxC-T1	SMB	500/Tape & Reel
<b>P6SMBJxxC-T3</b>	SMB	3000/Tape & Reel
P6SMBJxxCA-T1	SMB	500/Tape & Reel
<b>P6SMBJxxCA-T3</b>	SMB	3000/Tape & Reel

Products listed in **bold** are WTE **Preferred** devices.

♦T1 suffix refers to a 7" reel. T3 suffix refers to a 13" reel.

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

## RECOMMENDED FOOTPRINT



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**WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT.** WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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