

Features

- Glass Passivated Die Construction
- 3000W 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-214AB 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: 0.21 grams (approx.)

SMC/DO-214AB		
Dim	Min	Max
A	5.59	6.22
B	6.60	7.11
C	2.92	3.07
D	0.152	0.305
E	7.75	8.13
F	2.00	2.62
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 @ $T_A=25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Pulse Power Dissipation 10/1000 μS Waveform (Note 1, 2) Figure 3	PPPM	3000 Minimum	W
Peak Pulse Current on 10/1000 μS 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_j, T_{STG}	-55 to +150	$^\circ\text{C}$

- Note: 1. Non-repetitive current pulse, per Figure 4 and derated above $T_A = 25^\circ\text{C}$ per Figure 1.
 2. Mounted on 8.0mm² copper pads to each terminal.
 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

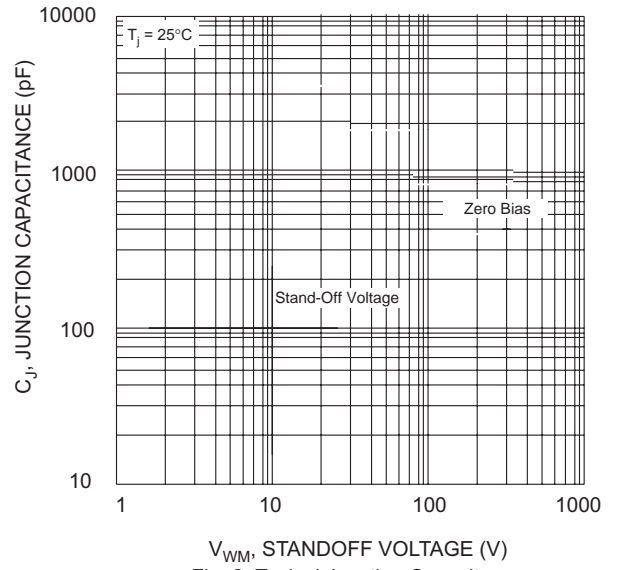


Fig. 2 Typical Junction Capacitance



Fig. 3 Pulse Rating Curve



Fig. 4 Pulse Waveform

ORDERING INFORMATION

Product No.♦	Package Type	Shipping Quantity
3.0SMCJxx-T1	SMC	500/Tape & Reel
3.0SMCJxx-T3	SMC	3000/Tape & Reel
3.0SMCJxxA-T1	SMC	500/Tape & Reel
3.0SMCJxxA-T3	SMC	3000/Tape & Reel
3.0SMCJxxC-T1	SMC	500/Tape & Reel
3.0SMCJxxC-T3	SMC	3000/Tape & Reel
3.0SMCJxxCA-T1	SMC	500/Tape & Reel
3.0SMCJxxCA-T3	SMC	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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We power your everyday.