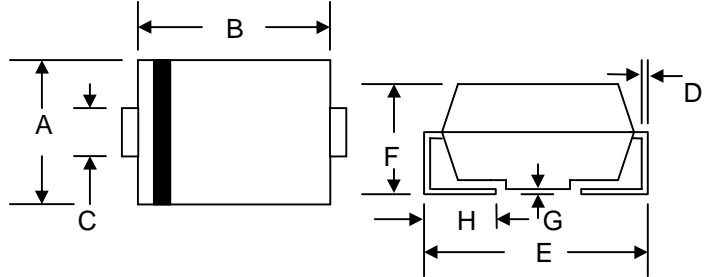


Features

- Glass Passivated Die Construction
- 3000W Peak Pulse Power Dissipation
- 180V – 220V 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: SMC/DO-214AB, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band Except Bi-Directional
- Marking: Device Code
- Weight: 0.21 grams (approx.)
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 5**

SMC/DO-214AB		
Dim	Min	Max
A	5.59	6.22
B	6.60	7.11
C	2.75	3.25
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		

Datasheet.Directory

"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 pad to each terminal.
 3. Measured on 8.3ms single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minutes maximum.

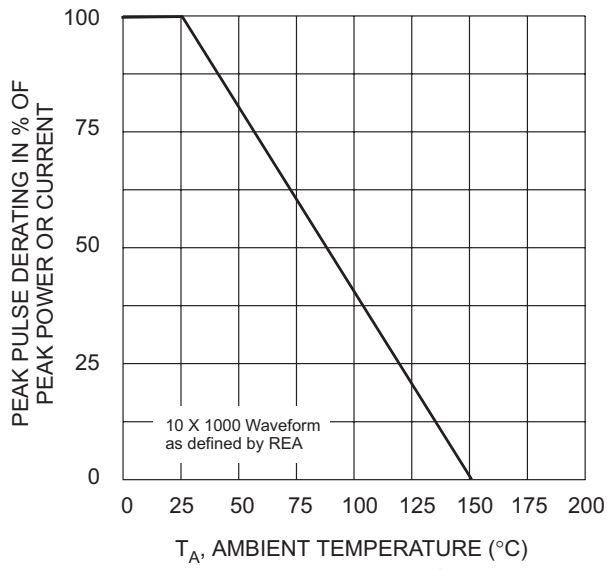


Fig. 1 Pulse Derating Curve

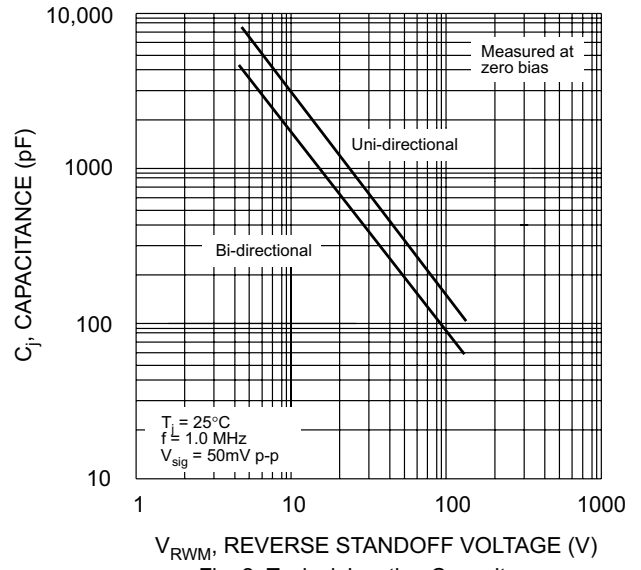


Fig. 2 Typical Junction Capacitance

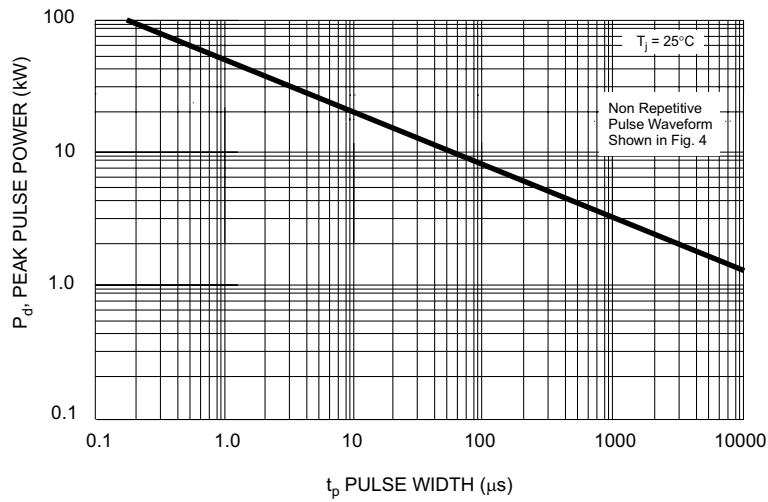


Fig. 3 Pulse Rating Curve

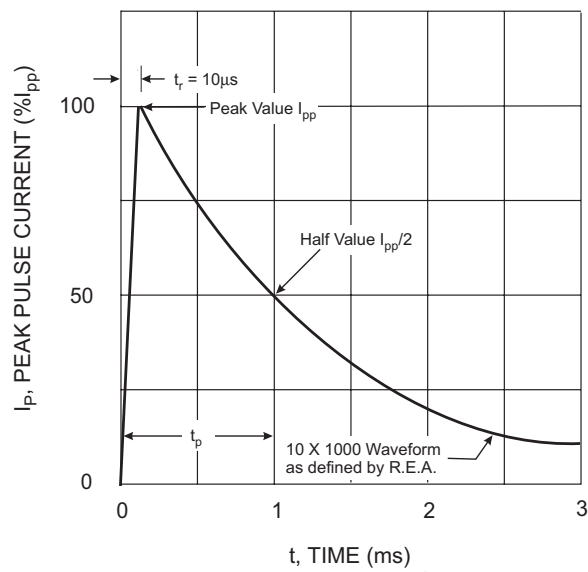


Fig. 4 Pulse Waveform

UNI-DIRECTIONAL 3000 WATT SURFACE MOUNT TVS

UNI-DIRECTIONAL PART NO.	DEVICE MARKING CODE	REVERSE STAND-OFF VOLTAGE VRWM (V)	BREAKDOWN VOLTAGE VBR (V) MIN. @IT	BREAKDOWN VOLTAGE VBR (V) MAX. @IT	TEST CURRENT IT (mA)	MAXIMUM CLAMPING VOLTAGE @Ipp Vc (V)	PEAK PULSE CURRENT Ipp (A)	REVERSE LEAKAGE @VRWM IR (uA)
3.0SMCJ180	HHS	180.00	198.00	253.80	1	322.0	9.3	5
3.0SMCJ180A	HHT	180.00	198.00	230.40	1	292.0	10.3	5
3.0SMCJ190	HHU	190.00	209.00	267.90	1	340.0	8.8	5
3.0SMCJ190A	HHV	190.00	209.00	243.20	1	308.0	9.7	5
3.0SMCJ200	HHW	200.00	220.00	282.00	1	358.0	8.4	5
3.0SMCJ200A	HHX	200.00	220.00	256.00	1	324.0	9.3	5
3.0SMCJ210	HHY	210.00	231.00	296.10	1	376.0	7.8	5
3.0SMCJ210A	HHZ	210.00	231.00	268.80	1	340.0	8.8	5
3.0SMCJ220	HID	220.00	242.00	310.20	1	394.0	7.6	5
3.0SMCJ220A	HIE	220.00	242.00	281.60	1	356.0	8.4	5

BI-DIRECTIONAL 3000 WATT SURFACE MOUNT TVS

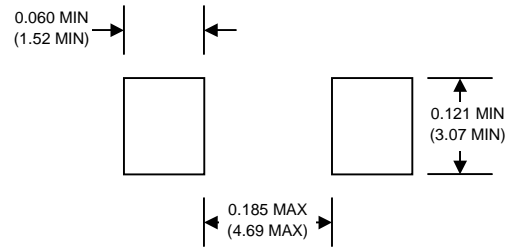
BI-DIRECTIONAL PART NO.	DEVICE MARKING CODE	REVERSE STAND-OFF VOLTAGE VRWM (V)	BREAKDOWN VOLTAGE VBR (V) MIN. @IT	BREAKDOWN VOLTAGE VBR (V) MAX. @IT	TEST CURRENT IT (mA)	MAXIMUM CLAMPING VOLTAGE @Ipp Vc (V)	PEAK PULSE CURRENT Ipp (A)	REVERSE LEAKAGE @VRWM IR (uA)
3.0SMCJ180C	IHS	180.00	198.00	253.80	1	322.0	9.3	5
3.0SMCJ180CA	IHT	180.00	198.00	230.40	1	292.0	10.3	5
3.0SMCJ190C	IHU	190.00	209.00	267.90	1	340.0	8.8	5
3.0SMCJ190CA	IHV	190.00	209.00	243.20	1	308.0	9.7	5
3.0SMCJ200C	IHW	200.00	220.00	282.00	1	358.0	8.4	5
3.0SMCJ200CA	IHX	200.00	220.00	256.00	1	324.0	9.3	5
3.0SMCJ210C	IHY	210.00	231.00	296.10	1	376.0	7.8	5
3.0SMCJ210CA	IHZ	210.00	231.00	268.80	1	340.0	8.8	5
3.0SMCJ220C	IID	220.00	242.00	310.20	1	394.0	7.6	5
3.0SMCJ220CA	IIE	220.00	242.00	281.60	1	356.0	8.4	5

MARKING INFORMATION



Cathode = Polarity Band Except Bi-Directional Types
 WTE = Manufacturer's Logo
 xxx = Device Code, See Page 3

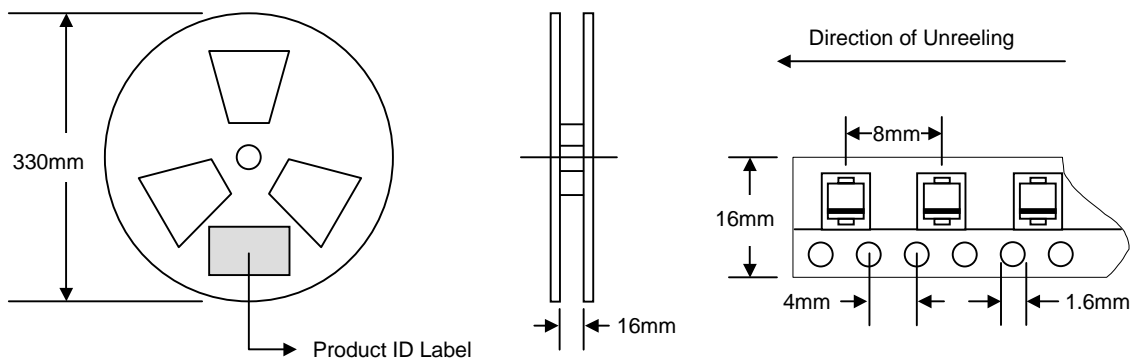
RECOMMENDED FOOTPRINT



inches(mm)

PACKAGING INFORMATION

TAPE & REEL



Reel Diameter (mm)	Quantity (PCS)	Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
330	3,000	340 x 337 x 45	6,000	370 x 370 x 420	48,000	19.0

Note: 1. Paper reel, white or gray color.
 2. Components are packed in accordance with EIA standard 481-1 and 481-2.

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
3.0SMCJxx-T3	SMC	3000/Tape & Reel

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order RoHS / Lead Free version, add "-LF" suffix to part number above. For example, 3.0SMCJ180-T3-LF.**

Won-Top Electronics Co., Ltd (WTE) has checked all information carefully and believes it to be correct and accurate. However, WTE cannot assume any responsibility for inaccuracies. Furthermore, this information does not give the purchaser of semiconductor devices any license under patent rights to manufacturer. WTE reserves the right to change any or all information herein without further notice.

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.

Won-Top Electronics Co., Ltd.

No. 44 Yu Kang North 3rd Road, Chine Chen Dist., Kaohsiung, Taiwan

Phone: 886-7-822-5408 or 886-7-822-5410

Fax: 886-7-822-5417

Email: sales@wontop.com

Internet: <http://www.wontop.com>

We power your everyday.