

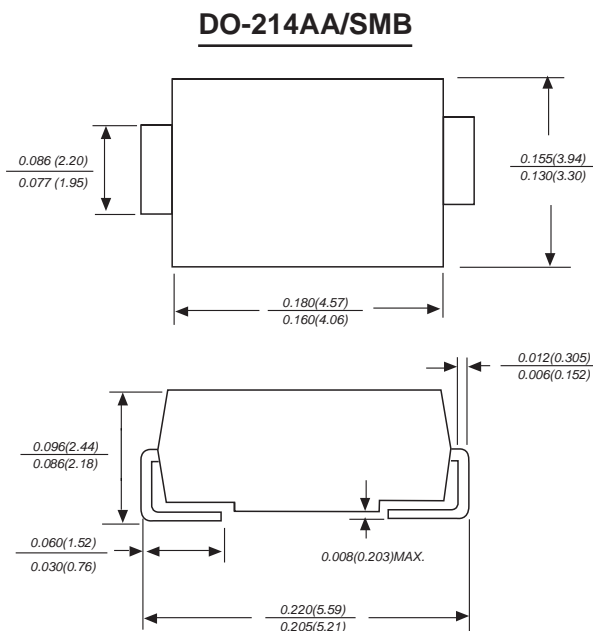
Surface Mount Transient Voltage Suppressors (TVS)

Features

- Working peak reverse voltage range – 3.3V.
- Low profile package.
- Excellent clamping capability.
- Fast response time: typically less than 1 ns for Uni-direction. from 0 Volts to BV min
- Plastic material has UL flammability classification 94V-O
- RoHS compliant in lead-free versions

Mechanical Data

- Case: SMB/DO-214AA, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.093 grams (approx.)



Dimensions in inches and (millimeters)

Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Value	Units
Peak Pulse Current of on 10/1000us Waveform (Note 1, FIG.3)	I_{PPM}	See Table 1	Amps
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load, (JEDEC Method) (Note 2. 3)	I_{FSM}	100	Amps
Operating Junction Temperature Range	T_J	-55 to 150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to 150	$^\circ\text{C}$

Notes:

1. Non-repetitive current pulse, per Fig.3 and derated above $T_A=25^\circ\text{C}$ per Fig.2.
2. Mounted on 5.0mm² (0.03mm thick) Copper Pads to each terminal.
3. 8.3 ms single half sine-wave, or equivalent square wave, Duty cycle=4 pluses per minute maximum.

ELECTRICAL CHARACTERISTICS $T_A = 25^\circ\text{C}$, continued

Type Number	Marking	Breakdown Voltage Min. @ I_T	Test Current	Reverse Stand-Off Voltage	Maximum Reverse Leakage @ V_{RMW}	Maximum Clamping Voltage @ I_{PP} 10/1000us	Peak Pulse Current
		$V_{BR\ MIN}(V)$	$I_T (mA)$	$V_{RMW}(V)$	$I_R(\mu A)$	$V_C(V)$	$I_{PP}(A)$
SMBJ3.3A	KC	4.1	1.0	3.3	200.0	7.3	50.0

Characteristic Curves $T_A = 25^\circ\text{C}$ unless otherwise noted

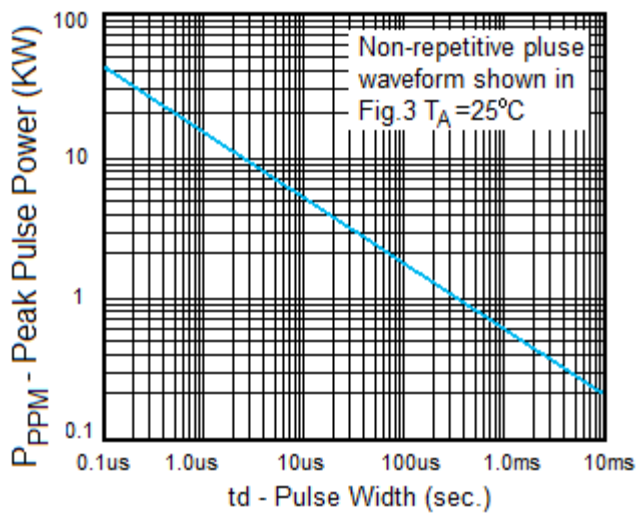


Fig. 1 Peak Pulse Power Rating

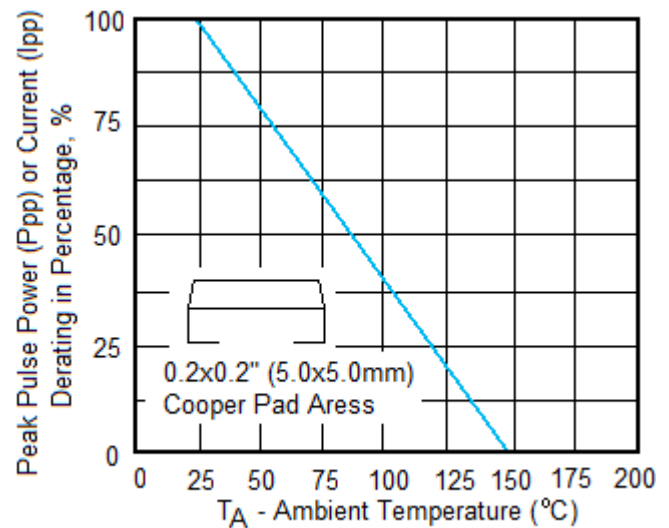


Fig.2 Pulse Derating Curve

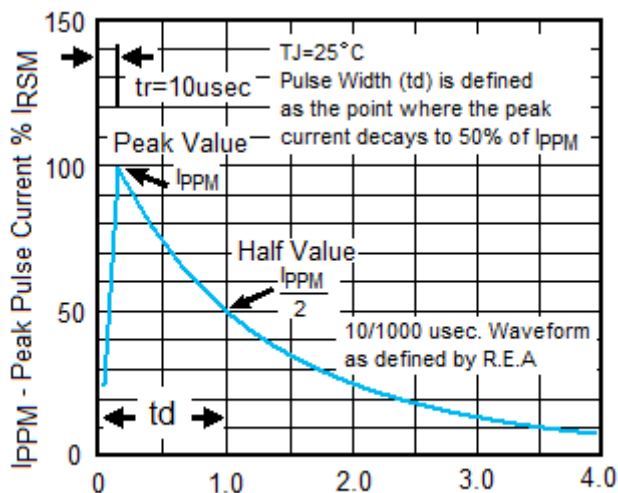


Fig.3 Pulse Waveform



Disclaimer

The information presented in this document is for reference only. Jiangsu Boye Chuangxin Semiconductor Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Boye Chuangxin or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website <http://www.bycxdiode.com>, Or consult the nearest Sales Office for further assistance.