

## Transient Voltage Suppressor

### FEATURES

- ◆ Excellent clamping capability
- ◆ Low leakage current
- ◆ Low capacitance
- ◆ High surge capability
- ◆ Glass passivated chip
- ◆ Epoxy resin package
- ◆ Built-in strain relief
- ◆ Will not fatigue
- ◆ RoHS Compliant
- ◆ Fast response time:  
typically less than 1.0ps from 0 Volts to VBR min

### APPLications

- ◆ Telecom
- ◆ Computer
- ◆ Industrial electronic
- ◆ Consumer electronic

### Maximum Ratings and Electrical characteristics

Ratings at 25 ambient temperature unless o °C therwise specified.

Parameter	Symbol	Value	Unit
Peak Pulse Power Dissipation	$P_{PPM}$	600	W
Steady State Power Dissipation	PD	5	W
Peak Forward Surge Current	$I_{FSM}$	100	A
Maximum Instantaneous Forward Voltage at 50A	$V_{FM}$	3.5/5	V
Typical Thermal Resistance Junction to Lead	$R_{\theta JL}$	20	°C/W
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	100	°C/W
Operating Junction Temperature and Storage Temperature Range	$T^J, T_{STG}$	-50 to +150	°C

#### NOTES:

Notes1: Non-repetitive current pulse , 10/1000us Waveform.

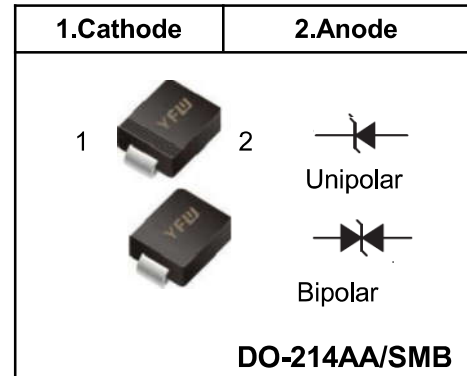
Notes2: Mounted on copper pad area of 5x5mm to each terminal.

Notes3: Infinite HeatS ink atTA=50°C

Notes4: Measured on 8.3ms single half sine wave or equivalent square wave, duty cycle=4 perm inute maximum.

Notes5: For UnidirectionalOnly,  $V_{FM} < 3.5V$  for  $V_{BR} \leq 200V$  and  $V_{FM} < 5.0V$  for  $V_{BR} \geq 201V$ .

### Pinning



**Electrical Characteristics**

Part Number	Device Marking Code	Reverse Stand-off Voltage	Breakdown Voltage $V_{BR @ T}$		Test Current	Max. Clamping Voltage @ $I_{PP}$	Max. Peak Pulse Current	Max. Reverse Leakage @ $V_{RWM}$
		$V_{RWM}(V)$	Min.(V)	Max.(V)	$I_T(mA)$	$V_{C MAX.}(V)$	$I_{PP}(A)$	$I_R(\mu A)$
SMBJ3.3A	3.3A	3.3	5.2	6.0	10	7.3	82.2	200
SMBJ3.3CA	3.3CA	3.3	5.2	6.5	10	8.0	82.2	200

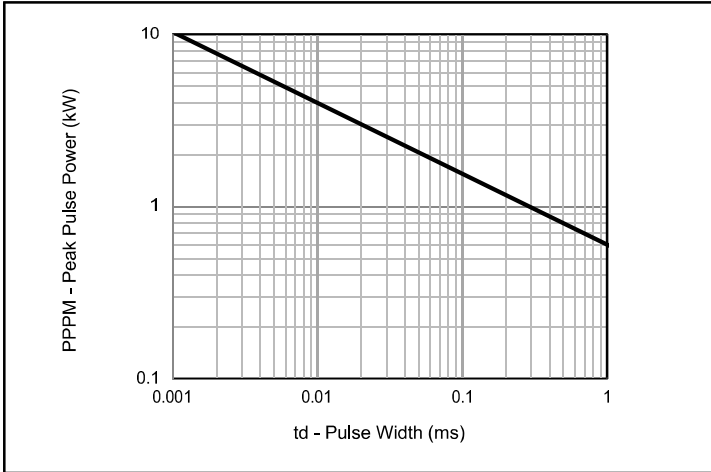
**Ratings and Characteristic Curves**


Fig.1 - Peak Pulse Power Rating

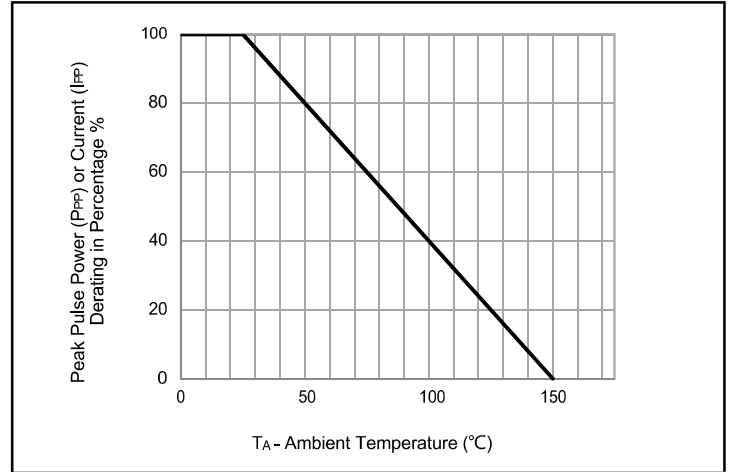


Fig.2 - Pulse Derating Curve

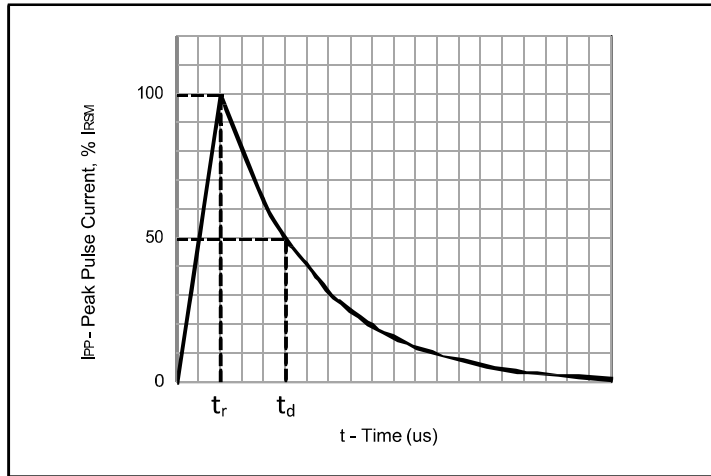


Fig.3 - Pulse Waveform

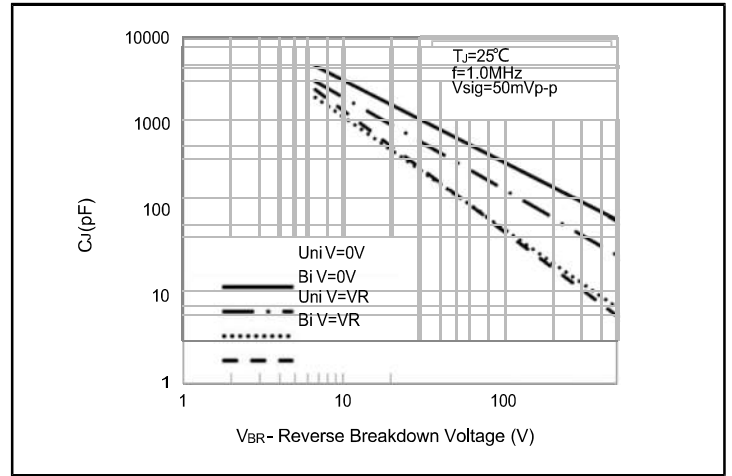


Fig.4 - Typical Junction Capacitance

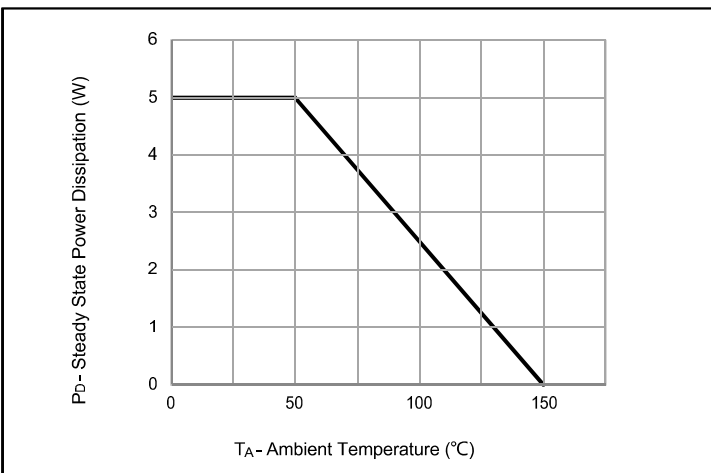


Fig.5 - Steady State Power Dissipation Derating Curve

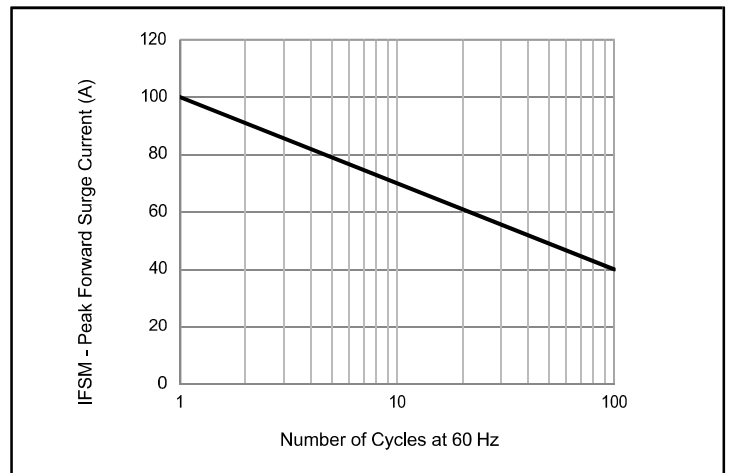
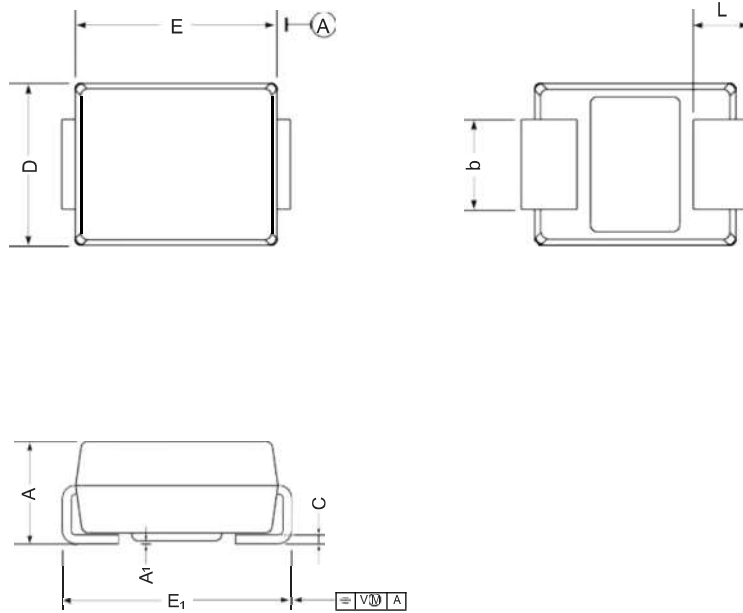


Fig.6 - Maximum Non-Repetitive Peak Forward Surge Current Uni-Directional Only

**Package Outline**

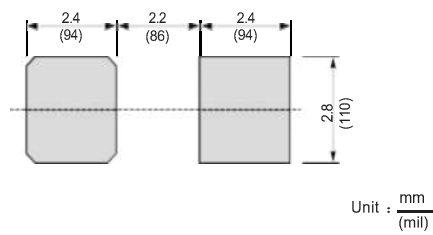
**DO-214AA SMB**

Plastic surface mounted package; 2 leads



UNIT		A	E	D	E <sub>1</sub>	A <sub>1</sub>	L	C	b
mm	max	2.44	4.70	3.94	5.59	0.20	1.5	0.305	2.2
	min	2.13	4.06	3.3	5.08	0.05	0.8	0.152	1.9
mil	max	96	185	155	220	7.9	59	12	87
	min	84	160	130	200	2.0	32	6	75

**The recommended mounting pad size**



**Summary of Packing Options**

Package	Packing Description	Packing Quantity	Industry Standard
DO-214AA SMB	Tape/Reel, 13" reel	3000	EIA-481-1

单击下面可查看定价，库存，交付和生命周期等信息

[>>YFW\(佑风微\)](#)