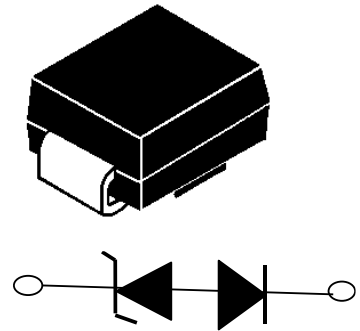




600W Surface Mount Low Capacitance Transient Voltage Suppressors

SMB



Features

- Peak power dissipation 600W @10 x 1000 us Pulse
- Low Capacitance and excellent clamping capability.
- Glass passivated junction.
- Fast response time: typically less than 1ps from 0 Volts to BV min
- Typical I_R less than 1uA when V_{BR} min above 12V.
- IEC 61000-4-2 ESD 30KV(Air), 30KV(Contact)
- ESD protection of data lines in accordance with IEC 61000-4-2
- EFT protection of data lines in accordance with IEC 61000-4-4
- RoHS compliant
- Lead-free finish

Mechanical Characteristics

- CASE: SMB Molded Plastic
- Mounting Position: Any
- Polarity: by cathode band denotes uni-directional device, none cathode band denotes bi-directional device.
- Terminal: Solder plated

Maximum Ratings and Characteristics @ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Value	Units
Peak Pulse Power Dissipation on 10/1000 us Waveform (Note 1, FIG.1)	P_{PPM}	Min 600	W
Peak Pulse Current of on 10/1000us Waveform (Note 1, FIG.3)	I_{PPM}	See Table 1	A
Operating Junction Temperature Range	T_J	-55 to 150	°C
Storage Temperature Range	T_{STG}	-55 to 150	°C

Notes:

1. Non-repetitive current pulse, per Fig.3 and derated above $T_A=25^\circ\text{C}$ per Fig.2.

SLCB Series

Electrical Specification (T_A=25@25°C unless otherwise specified)

Type Number	Reverse Stand-Off Voltage	Breakdown Voltage Min. @I _T	Breakdown Voltage Max. @ I _T	Test Current	Maximum Clamping Voltage @I _{PP}	Peak Pulse Current	Reverse Leakage @V _{RMW}	Maximum Capacitance @0V 1MHZ
(Uni)	V _{RWM} (V)	V _{BR MIN} (V)	V _{BR MAX} (V)	I _T (mA)	V _C (V)	I _{PP} (A)	I _R (uA)	C _J (pF)
SLCB6.5A	6.5	7.22	8.30	1.0	11.2	53.6	1000	100
SLCB7.0 A	7.0	7.78	8.95	1.0	12.0	50.0	500	100
SLCB7.5 A	7.5	8.33	9.58	1.0	12.9	46.5	250	100
SLCB 8.0A	8.0	8.89	10.23	1.0	13.6	44.1	100	100
SLCB8.5 A	8.5	9.44	10.82	1.0	14.4	41.7	50.0	100
SLCB9.0 A	9.0	10.0	11.5	1.0	15.4	39.0	10.0	100
SLCB 10 A	10	11.1	12.8	1.0	17.0	35.3	5.0	100
SLCB 11A	11	12.2	14.0	1.0	18.2	33.0	5.0	100
SLCB 12 A	12	13.3	15.3	1.0	19.9	30.2	5.0	100
SLCB13 A	13	14.4	16.5	1.0	21.5	27.9	5.0	100
SLCB 14 A	14	15.6	17.9	1.0	23.2	25.9	5.0	100
SLCB15 A	15	16.7	19.2	1.0	24.4	24.6	5.0	100
SLCB16 A	16	17.8	20.5	1.0	26.0	23.1	5.0	50
SLCB 17 A	17	18.9	21.7	1.0	27.6	21.7	5.0	50
SLCB18 A	18	20.0	23.3	1.0	29.2	20.5	5.0	50
SLCB20 A	20	22.2	25.5	1.0	32.4	18.5	5.0	50
SLCB22 A	22	24.4	28.0	1.0	35.5	16.9	5.0	50
SLCB 24A	24	26.7	30.7	1.0	38.9	15.4	5.0	50

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

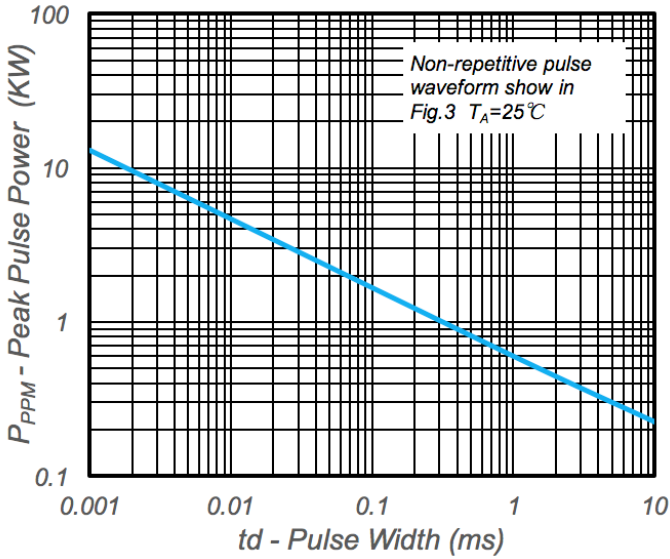


Fig.1 - Peak Pulse Power Rating

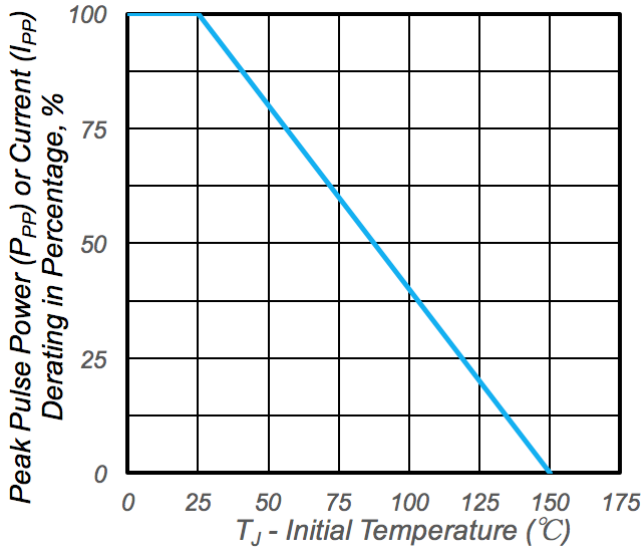


Fig.2 - Pulse Derating Curve

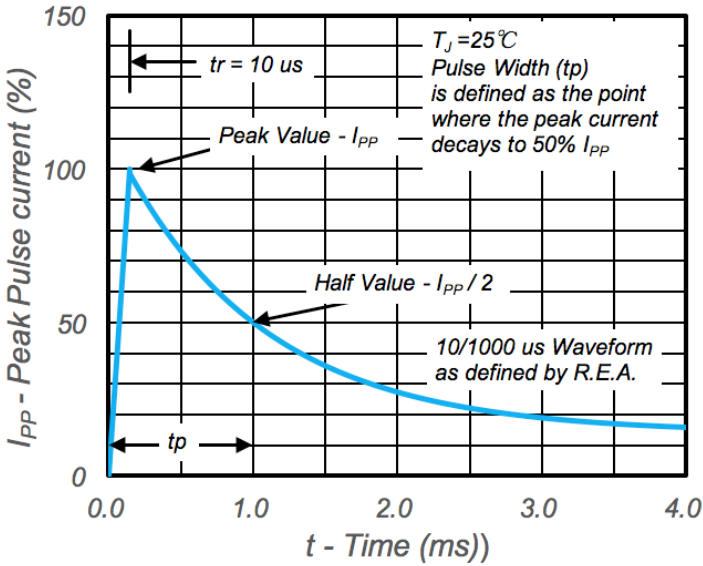
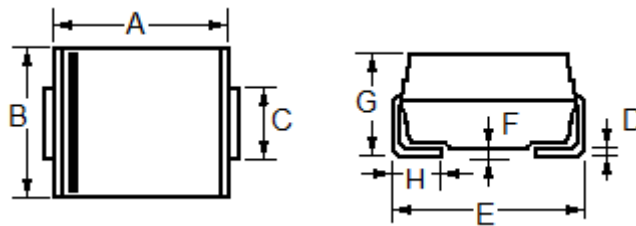


Fig.3 - Pulse Waveform

Package Outline Dimensions and Pad Layouts

DO-214AA (SMB)



Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	4.06	4.57	0.160	0.180
B	3.30	3.94	0.130	0.155
C	1.78	2.20	0.070	0.086
D	0.13	0.31	0.006	0.012
E	5.08	5.59	0.200	0.220
F	----	0.20	----	0.008
G	1.95	2.62	0.077	0.103
H	0.76	1.52	0.030	0.060