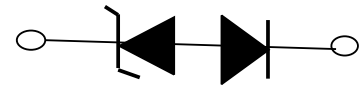
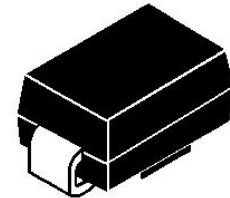


1500W Surface Mount Low Capacitance Transient Voltage Suppressors

SMC



Features

- Peak power dissipation 1500W @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: SMC Molded Plastic
- Mounting Position: Any
- Polarity: by cathode band denotes uni-directional device, only uni-directional devices offered.
- 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 1500	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

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)
SLCD6.5A	6.5	7.22	8.30	1.0	11.2	100.0	1000	100
SLCD7.0 A	7.0	7.78	8.95	1.0	12.0	100.0	500	100
SLCD7.5 A	7.5	8.33	9.58	1.0	12.9	100.0	250	100
SLCD 8.0A	8.0	8.89	10.23	1.0	13.6	100.0	100	100
SLCD8.5 A	8.5	9.44	10.82	1.0	14.4	100.0	50.0	100
SLCD9.0 A	9.0	10.0	11.5	1.0	15.4	97.4	10.0	100
SLCD10 A	10	11.1	12.8	1.0	17.0	88.2	5.0	100
SLCD11A	11	12.2	14.0	1.0	18.2	82.4	5.0	100
SLCD12 A	12	13.3	15.3	1.0	19.9	75.4	5.0	100
SLCD13 A	13	14.4	16.5	1.0	21.5	69.8	5.0	100
SLCD14 A	14	15.6	17.9	1.0	23.2	64.7	5.0	100
SLCD15 A	15	16.7	19.2	1.0	24.4	61.5	5.0	100
SLCD16 A	16	17.8	20.5	1.0	26.0	57.7	5.0	100
SLCD17 A	17	18.9	21.7	1.0	27.6	54.3	5.0	100
SLCD18 A	18	20.0	23.3	1.0	29.2	51.4	5.0	100
SLCD20 A	20	22.2	25.5	1.0	32.4	46.3	5.0	100
SLCD22 A	22	24.4	28.0	1.0	35.5	42.3	5.0	100
SLCD24A	24	26.7	30.7	1.0	38.9	38.6	5.0	100

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

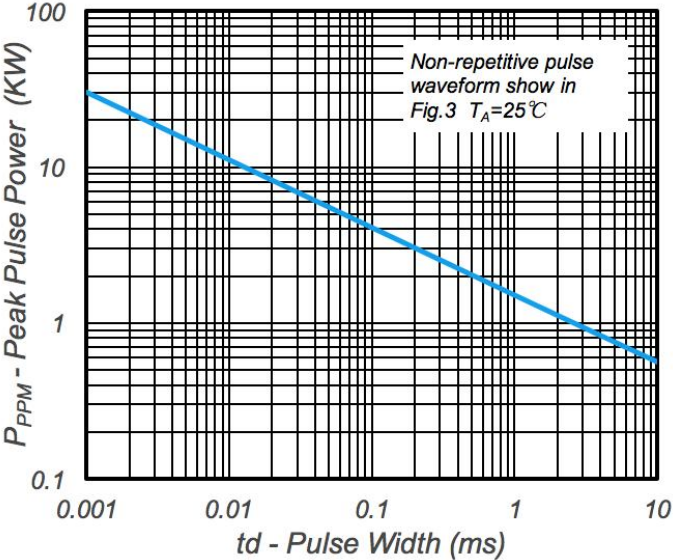


Fig.1 - Peak Pulse Power Rating

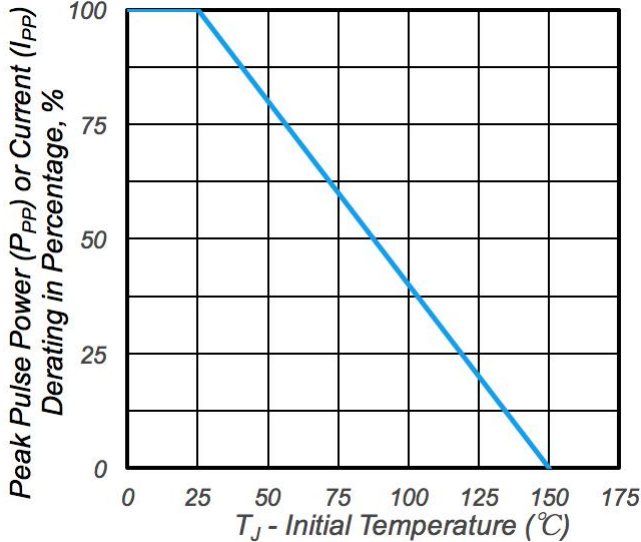


Fig.2 - Pulse Derating Curve

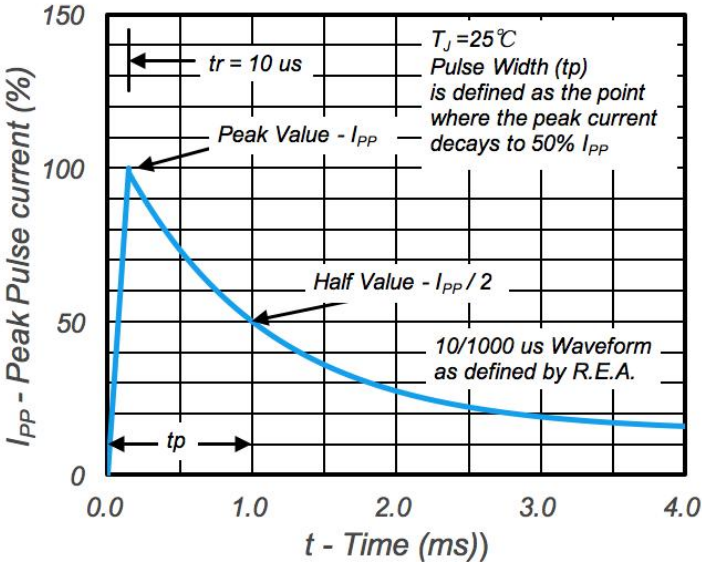
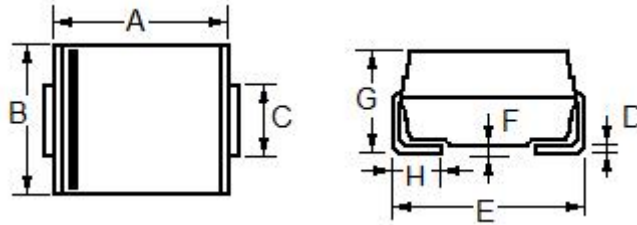


Fig.3 - Pulse Waveform

Package Outline Dimensions

DO-214AB (SMC)



Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	6.60	7.11	0.260	0.280
B	5.59	6.22	0.220	0.245
C	2.90	3.20	0.114	0.126
D	0.125	0.305	0.006	0.012
E	7.60	8.13	0.299	0.320
F	----	0.203	----	0.008
G	2.06	2.62	0.079	0.103
H	0.76	1.52	0.030	0.060