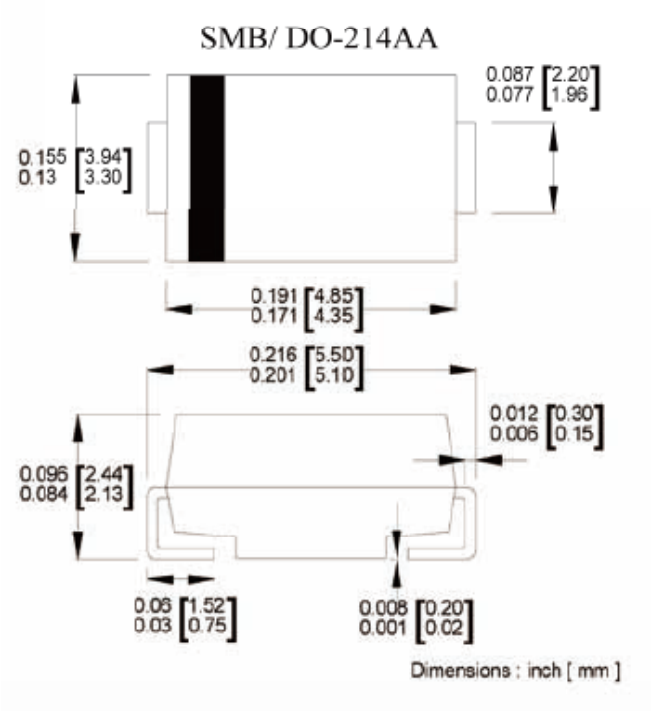
SACB Series

Transitent Voltage Suppressors



Features

·Glass passivated chip
·500W peak pulse power capability with a 10/1000 μs waveform, repetitive rate (duty cycle): 0.01%
·Low leakage
·Excellent clamping capability
·Very fast response time
·RoHS compliant

Mechanical Data

·Case: Molded plastic
·Epoxy: UL 94V-0 rate flame retardant
·Lead: Solderable per MIL-STD-750, method 2026 guranteed
·Polarity: Color band denotes TVS cathode end
·Mounting position: Any

Maximum Ratings (T_A=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak power dissipation with a 10/1000μs waveform(1)	P_{PP}	500	W
Power dissipation on infinite heatsink at T_L=75°C (Fig.2)	P_D	3	W
Peak pulse current with a 10/1000μs waveform (Fig.2)(1)	I_{PP}	See Next Table	A
Operating junction and storage temperature range	T_J, T_{STG}	-55 ~ +150	°C

Note:

(1) Non-repetitive current pulse per Fig.3 and derated above T_A=25°C per Fig.2

Ratings and Characteristics Curves (T_A=25℃ unless otherwise noted)

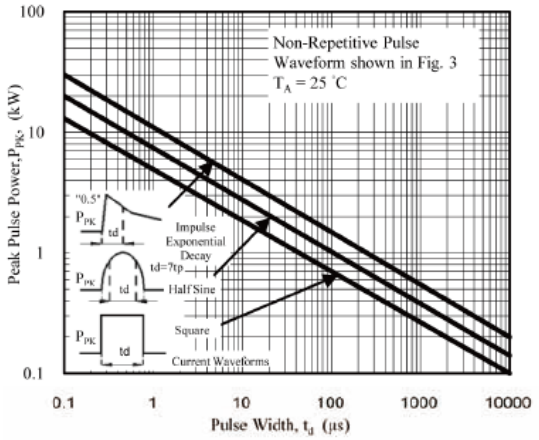


Fig. 1 - Peak Pulse Power Rating Curve

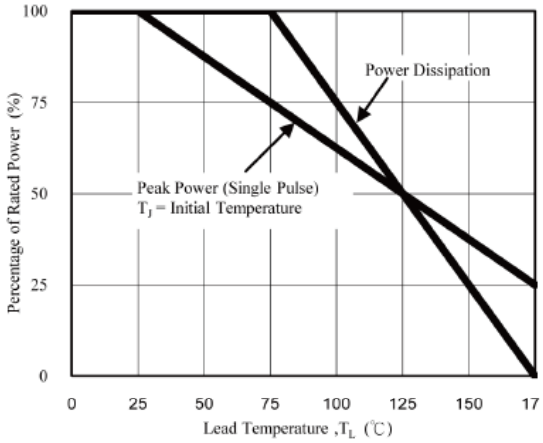


Fig. 2 - Power Derating Curve

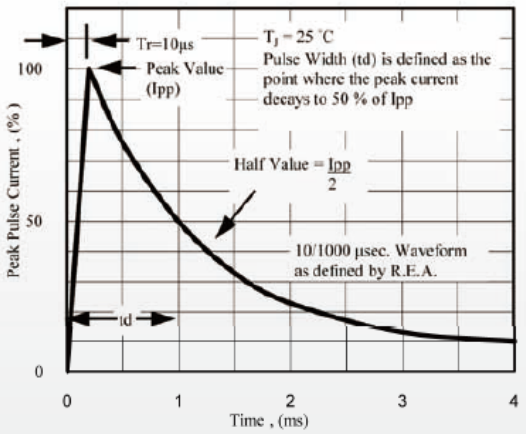
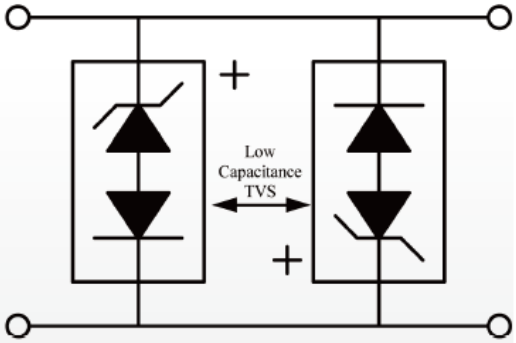


Fig. 3 - Pulse Waveform

Surge Current



Application Note: Device must be used with two units in parallel, opposite in polarity as shown in circuit for AC signal line protection.

Fig. 4 - AC Line Protection Application

Electrical Characteristics (T_A=25°C unless otherwise noted)

Part Number	Device Marking Code	Stand-Off Voltage	Minimum Breakdown Voltage	Maximum Reverse Leakage	Maximum Clamping Voltage	Maximum Reverse Surge Current	Maximum Junction Capacitance	Working Inverse Blocking Voltage	Inverse Blocking Leakage Current	Peak Inverse Voltage
		V_{WM}	V_{BR} @ I_T=1mA	I_R @ V_{WM}	V_C @ I_{PP}	I_{PP}	@ 0V	V_{WM}	I_{IB} @ V_{WIB}	V_{PIB}
		(V)	(mA)	(μA)	(V)	(A)	(pF)	(V)	(mA)	(V)
SACB5.0	SAD	5.0	7.6	300	10.0	44.00	45	75	1	100
SACB6.0	SAE	6.0	7.9	300	11.2	41.00	45	75	1	100
SACB7.0	SAF	7.0	8.3	300	12.6	38.00	45	75	1	100
SACB8.0	SAG	8.0	8.9	100	13.4	36.00	45	75	1	100
SACB8.5	SAH	8.5	9.4	50	14.0	34.00	45	75	1	100
SACB10	SAK	10.0	11.1	5	16.3	29.00	45	75	1	100
SACB12	SAL	12.0	13.3	5	19.0	25.00	45	75	1	100
SACB15	SAM	15.0	16.7	5	23.6	20.00	45	75	1	100
SACB18	SAN	18.0	20.0	5	28.8	15.00	45	75	1	100
SACB22	SAP	22.0	24.4	5	35.4	14.00	45	75	1	100
SACB26	SAQ	26.0	28.9	5	42.3	11.00	45	75	1	100
SACB30	SAR	30.0	33.3	5	48.6	10.00	45	75	1	100
SACB36	SAS	36.0	40.0	5	60.0	8.60	45	75	1	100
SACB45	SAT	45.0	50.0	5	77.0	6.80	45	150	1	200
SACB50	SAU	50.0	55.5	5	88.0	5.80	45	150	1	200