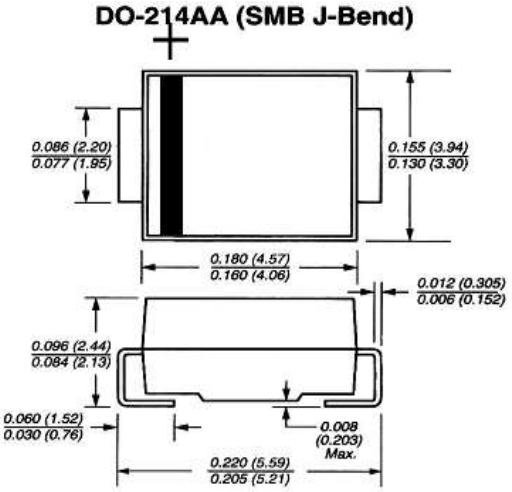
SACB SERIES

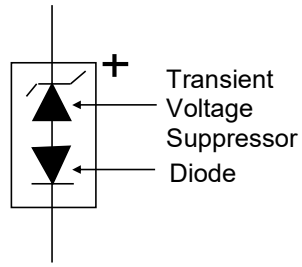
LOW CAPACITANCE TRANSIENT VOLTAGE SUPPRESSOR
STAND-OFF VOLTAGE5.0 - 50 Volts
500 watt Peak Pulse Power



Dimensions in inches and (millimeters)

FEATURES

- ◎ Halogen-Free
- ◎ RoHS compliant
- ◎ Typical maximum temperature coefficient $\triangle V_{BR}$=0.1%xV_{BR}@25℃x$\triangle$T
- ◎ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◎ Glass passivated junction
- ◎ 500W Peak Pulse Power capability with a 10/1000us waveform,repetition rate (duty cycle): 0.01%
- ◎ Excellent clamping capability
- ◎ Low incremental surge resistance
- ◎ Fast response time: typically less than 1.0ns from 0 Volts to V(BR)
- ◎ Ideal for data line applications
- ◎ High Temperature solderting: 260°C/40 seconds at terminals
- ◎ Matte Tin Lead-free plated



Schematic

MECHANICAL DATA

Case：JEDEC DO214AA. Molded plastic over glass passivated junction
Terminal： Solder plated, solderable per MIL-STD-750, Method 2026
Polarity：The band denotes TVS cathode
Standard Packaging：12mm tape(EIA STD RS-481)
Weight： 0.003ounce, 0.093gram

MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

RATING	SYMBOL	VALUE	UNITS
Peak Pulse Power Dissipation With a 10/1000μs waveform (Note 1,FIG.1)	P_{PPM}	Minimum 500	Watts
Peak Power Pules Surge Current With a 10/1000μs Waveform (Note 1.FIG.3)	I_{PPM}	SEE TABLE 1	Amps
Power Dissipation on infinite heat sink at T_L = 50℃	$P_{M(AV)}$	3	Watts
Operating junction and Storage Temperature Range	T_J , T_{STG}	-55 to + 150	℃

Note：
1.Non-repetitive current pulse , per Fig. 3 and derated above TA = 25℃ per Fig. 2 .

SACB SERIES

LOW CAPACITANCE TRANSIENT VOLTAGE SUPPRESSOR

STAND-OFF VOLTAGE- 5.0 - 50 Volts

500 watt Peak Pulse Power

SACB PART NUMBER	Marking Code	STAND-OFF VOLTAGE (NOTE1) V_{WM} (VOLTS)	MINIMUM BREAKDOWN VOLTAGE AT I_T=1.0mA V(BR) (VOLTS)	MAXIMUM REVERSE LEAKAGE AT V_{WM} I_R(uA)	MAXIMUM CLAMPING VOLTAGE AT Ipp=5.0A V_C (V)	MAXIMUM PEAK PULSE CURRENT PER FIG.3 Ipp (AMPS)	MAXIMUM JUNCTION CAPACITANCE AT 0 VOLTS (pF)	WORKING INVERSE BLOCKING VOLTAGE V_{WIB} (VOLTS)	INVERSE BLOCKING LEAKAGE CURRENT V_{WIB} IIB(mA)	PEAK INVERSE BLOCKING VOLTAGE V_{PIB} (VOLTS)
SACB5.0	SKE	5.0	7.6	300	10.0	44.0	45	75	1.0	100
SACB6.0	SKG	6.0	7.9	300	11.2	41.0	45	75	1.0	100
SACB7.0	SKM	7.0	8.3	300	12.6	38.0	45	75	1.0	100
SACB8.0	SKR	8.0	8.9	100	13.4	36.0	45	75	1.0	100
SACB8.5	SKT	8.5	9.44	50	14.0	34.0	45	75	1.0	100
SACB10	SKX	10.0	11.10	5	16.3	29.0	45	75	1.0	100
SACB12	SLE	12.0	13.30	5	19.0	25.0	45	75	1.0	100
SACB15	SLM	15.0	16.70	5	23.6	20.0	45	75	1.0	100
SACB18	SLT	18.0	20.00	5	28.8	15.0	45	75	1.0	100
SACB22	SLX	22.0	24.40	5	35.4	14.0	45	75	1.0	100
SACB26	SME	26.0	28.90	5	42.3	11.1	45	75	1.0	100
SACB30	SMK	30.0	33.30	5	48.6	10.0	45	75	1.0	100
SACB36	SMP	36.0	40.00	5	60.0	8.6	45	75	1.0	100
SACB45	SMV	45.0	50.00	5	77.0	6.8	45	150	1.0	200
SACB50	SMZ	50.0	55.50	5	88.0	5.8	45	150	1.0	200

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

Pig.1 - Peak Pulse Power Rating Curve

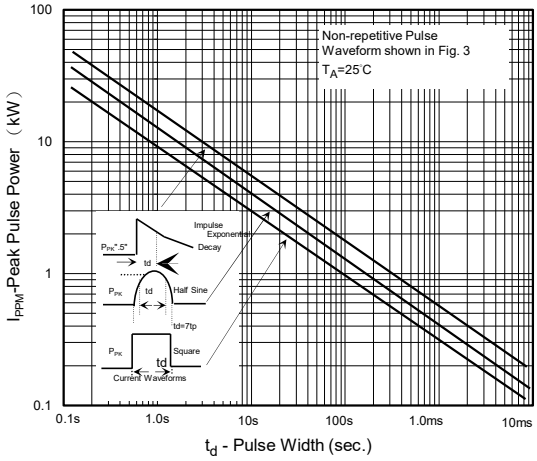


Fig.2-Power Derating Curve

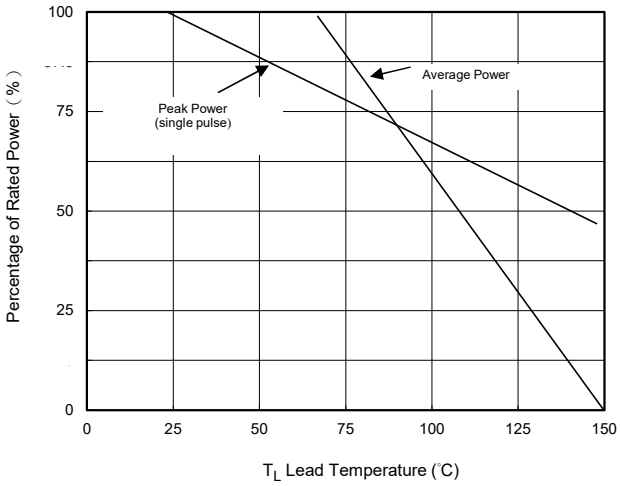


Fig.3 - Pulse Waveform

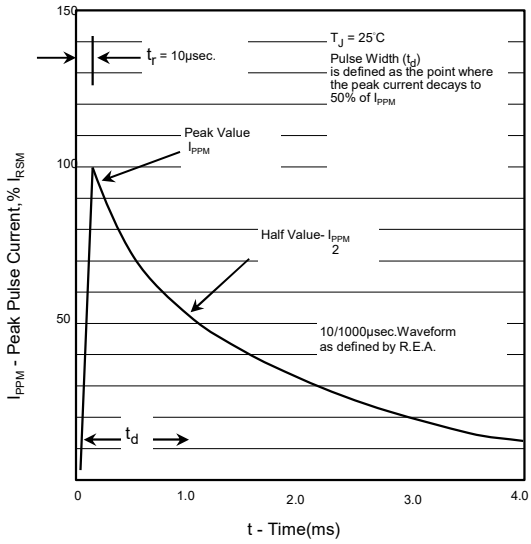
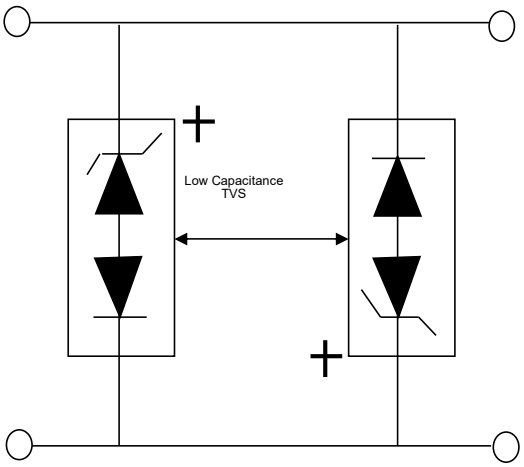
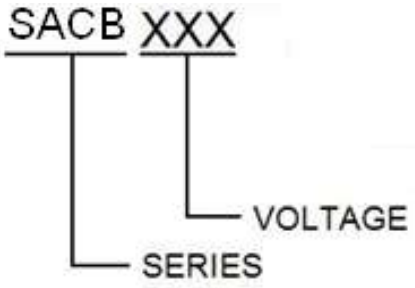


Fig. 4 - AC Line Protection Application

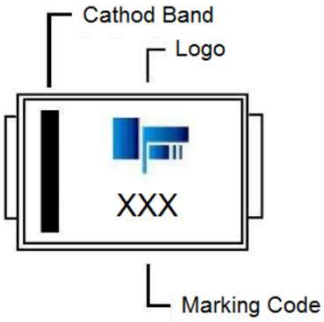


Application Note: Device must be used with two units in parallel,opposite in polarity as shown in circuit for AC signal line protection.

Part Numbering System



Part Marking System



Packaging

Part number	Component Package	Quantity	Packaging Option	Packaging Specification
SACBxxx	DO-214AA	3000	Tape & Reel - 12mm/13" tape	EIA STD RS-481
SACBxxx	DO-214AA	500	Tape & Reel - 12mm/ 7" tape	EIA STD RS-481