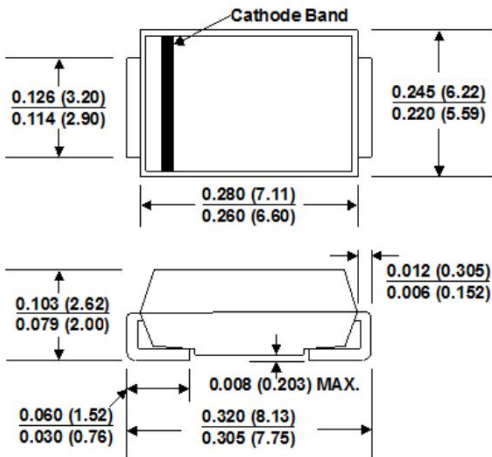


1.5KASMC SERIES

SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR STAND-OFF VOLTAGE - 12 TO 58 Volts 1500 Watt Peak Pulse Power

DO-214AB (SMC J-Bend)



Dimensions in inches and (millimeters)

FEATURES

- ⊙ For surface mounted applications in order to optimize board space
- ⊙ Halogen-Free
- ⊙ RoHS compliant
- ⊙ Typical maximum temperature coefficient $\Delta V_{BR}=0.1\% \times V_{BR} @ 25^{\circ}C \times \Delta T$
- ⊙ Low profile package
- ⊙ Built-in strain relief
- ⊙ Glass passivated junction
- ⊙ Low inductance
- ⊙ Excellent clamping capability
- ⊙ Repetition Rate(duty cycle):0.05%
- ⊙ Fast response time: typically less than 1.0ps from 0 Volts to BV
- ⊙ AEC-Q101 qualified
- ⊙ High temperature soldering: 260°C/40 seconds at terminals
- ⊙ Plastic package has Underwriters Laboratory Flammability 94V-O
- ⊙ Matte Tin Lead-free plated

MECHANICAL DATA

Case: JEDEC DO214AB. Molded plastic over glass passivated junction
Terminal: Solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes positive end (cathode) except Bidirectional
Standard Packaging: 16mm tape(EIA STD RS-481)
Weight: 0.007ounce, 0.21gram

MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

RATING	SYMBOL	VALUE	UNITS
Peak Pulse Power Dissipation on 10/1000μs waveform (Note 1,2,FIG.1)	P _{PPM}	Minimum 1500	Watts
Peak Pulse Current of on 10/1000μs waveform (Note 1,FIG.3)	I _{PPM}	SEE TABLE 1	Amps
Peak Forward Surge Current,8.3ms Single Half Sine-Wave Superimposed on Rated Load,(JEDEC Method) (Note 2,3)	I _{FSM}	200	Amps
Operating junction and Storage Temperature Range	T _J , T _{STG}	-55 to + 150	°C

Notes :

- 1.Non-repetitive current pulse , per Fig. 3 and derated above T_A = 25°C per Fig. 2 .
- 2.Mounted on 8.0mm x 8.0mm Copper Pads to each terminal
- 3.8.3ms single half sine-wave , or equivalent square wave, Duty cycle = 4 pulses per minutes maximum.

1.5KASMC SERIES

SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR

STAND-OFF VOLTAGE - 12 TO 58 Volts

1500 Watt Peak Pulse Power

1.5KASMC PART NUMBER		DEVICE MARKING CODE		REVERSE STAND-OFF VOLTAGE $V_{RWM}(V)$	BREAKDOWN VOLTAGE $V_{BR}(V) @ I_T$		TEST CURRENT I_T (mA)	MAXIMUM CLAMPING VOLTAGE @Ipp $V_c(V)$	PEAK PULSE CURRENT Ipp (A)	REVERSE LEAKAGE @ $V_{RWM} I_R(\mu A)$
UNI-POLAR	BI-POLAR	UNI	BI		MIN	MAX				
12A	12CA	SEE	FEE	12.0	13.30	14.70	1	19.9	75.4	1
13A	13CA	SEG	FEG	13.0	14.40	15.90	1	21.5	69.8	1
14A	14CA	SEK	FEK	14.0	15.60	17.20	1	23.2	64.7	1
15A	15CA	SEM	FEM	15.0	16.70	18.50	1	24.4	61.5	1
16A	16CA	SEP	FEP	16.0	17.80	19.70	1	26.0	57.7	1
17A	17CA	SER	FER	17.0	18.90	20.90	1	27.6	54.4	1
18A	18CA	SET	FET	18.0	20.00	22.10	1	29.2	51.4	1
20A	20CA	SEV	FEV	20.0	22.20	24.50	1	32.4	46.3	1
22A	22CA	SEX	FEX	22.0	24.40	26.90	1	35.5	42.3	1
24A	24CA	SEZ	FEZ	24.0	26.70	29.50	1	38.9	38.6	1
26A	26CA	SFE	FFE	26.0	28.90	31.90	1	42.1	35.7	1
28A	28CA	SFG	FFG	28.0	31.10	34.40	1	45.4	33.1	1
30A	30CA	SFK	FFK	30.0	33.30	36.80	1	48.4	31.0	1
33A	33CA	SFM	FFM	33.0	36.70	40.60	1	53.3	28.2	1
36A	36CA	SFP	FFP	36.0	40.00	44.20	1	58.1	25.9	1
40A	40CA	SFR	FFR	40.0	44.40	49.10	1	64.5	23.3	1
43A	43CA	SFT	FFT	43.0	47.80	52.80	1	69.4	21.7	1
45A	45CA	SFV	FFV	45.0	50.00	55.30	1	72.7	20.6	1
48A	48CA	SFX	FFX	48.0	53.30	58.90	1	77.4	19.4	1
51A	51CA	SFZ	FFZ	51.0	56.70	62.70	1	82.4	18.2	1
54A	54CA	SGE	FGE	54.0	60.00	66.30	1	87.1	17.3	1
58A	58CA	SGG	FGG	58.0	64.40	71.20	1	93.6	16.1	1

1.5KASMC SERIES

RATINGS AND CHARACTERISTIC CURVES

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

Fig. 1 - Peak Pulse Power Rating

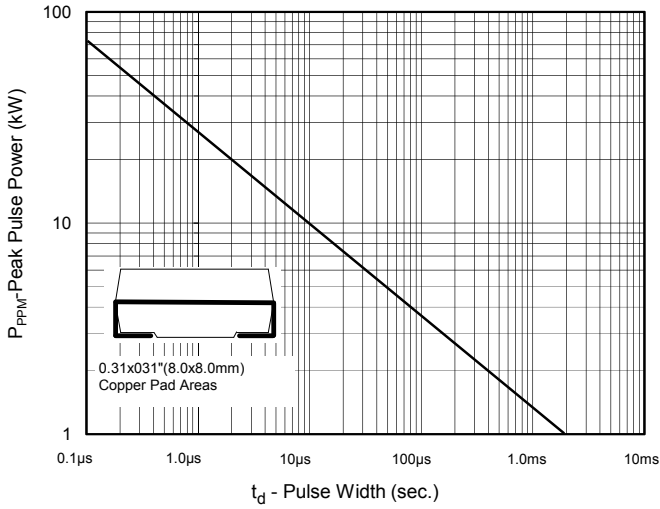


Fig.2 - Pulse Derating Curve

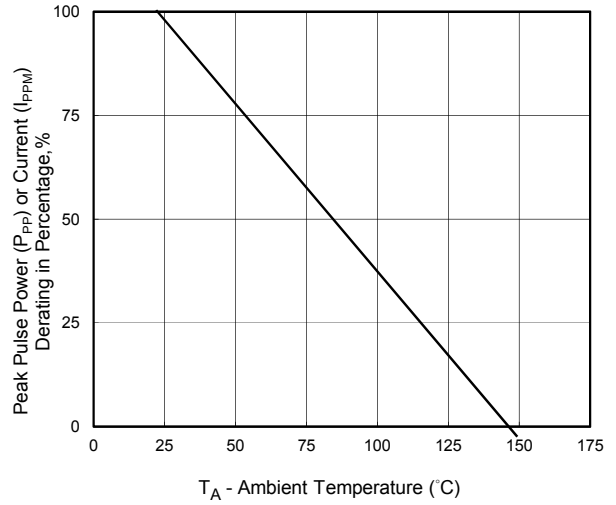


Fig.3 - Pulse Waveform

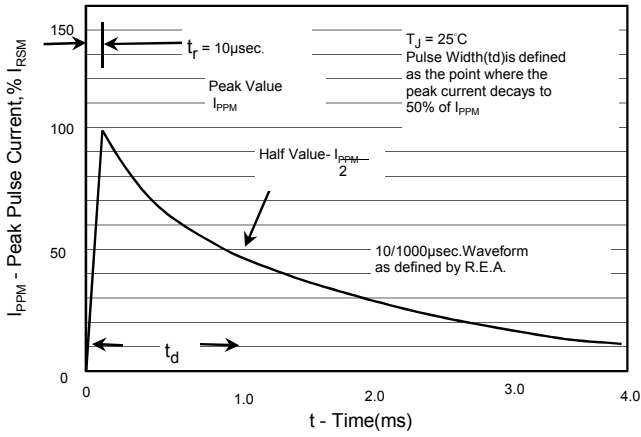


Fig. 4 - Typical Junction Capacitance

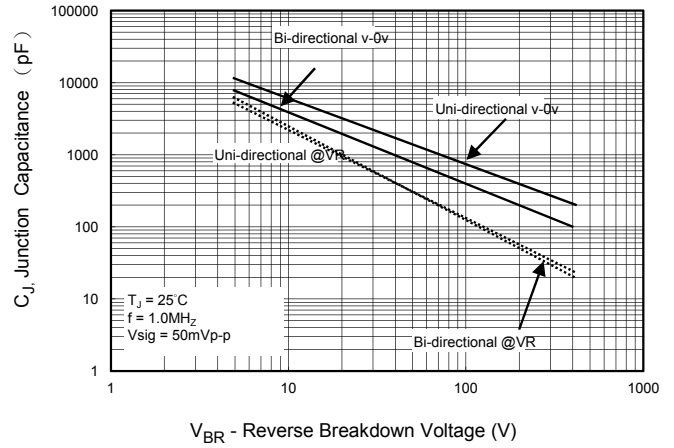


Fig. 5 - Steady State Power Derating Curve

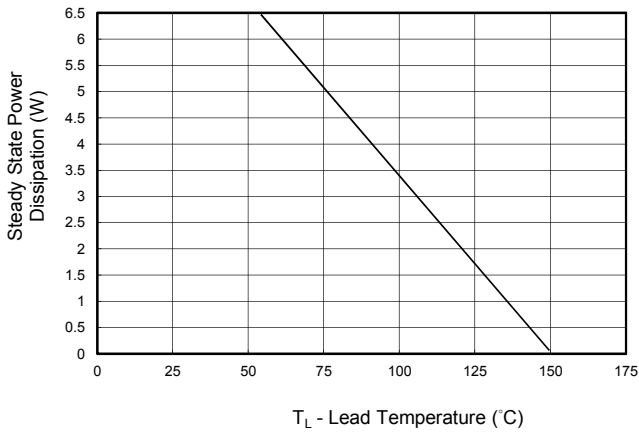
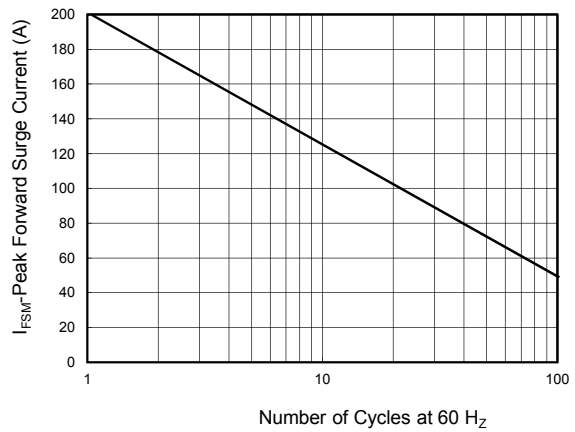


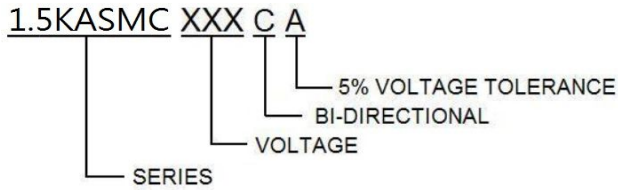
Fig.6 - Maximum Non-repetitive Forward Surge current uni-directional only



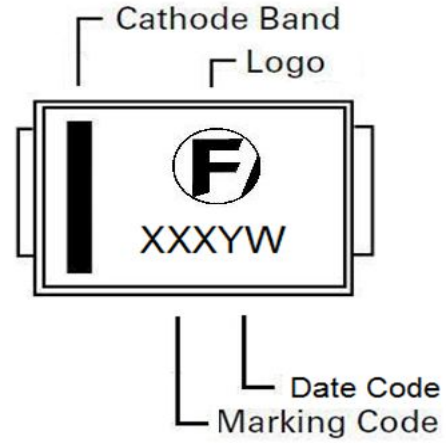
1.5KASMC SERIES

SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR

Part Numbering System



Part Marking System



Packaging

Part number	Component Package	Quantity	Packaging Option	Packaging Specification
1.5KASM C xxxXX	DO-214AB	3000	Tape & Reel - 16mm/13" tape	EIA STD RS-481
1.5KASM C xxxXX	DO-214AB	500	Tape & Reel - 16mm/ 7" tape	EIA STD RS-481