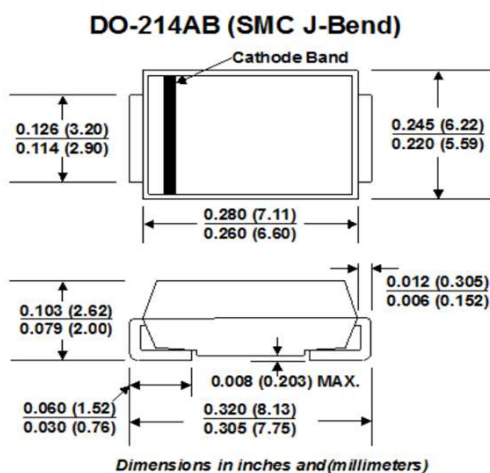


**3KASMC SERIES**  
**SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR**  
**STAND-OFF VOLTAGE - 5 TO 85 Volts**  
**3000 Watt Peak Pulse Power**



**FEATURES**

- ⊙ For surface mounted applications in order to optimize board space
- ⊙ Halogen-Free
- ⊙ RoHS compliant
- ⊙ Typical maximum temperature coefficient  $\Delta V_{BR}=0.1\% \times V_{BR} @ 25^{\circ}\text{C} \times \Delta T$
- ⊙ Low profile package
- ⊙ Built-in strain relief
- ⊙ Glass passivated junction
- ⊙ Low inductance
- ⊙ Excellent clamping capability
- ⊙ Repetition Rate (duty cycle):0.01%
- ⊙ 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 denoted positive end (cathode) except Bidirectional

**Standard Packaging:** 16mm tape (EIA STD RS-481)

**Weight:** 0.009 ounce, 0.25gram

**MAXIMUM RATINGS AND CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.

RATING	SYMBOL	VALUE	UNITS
Peak Pulse Power Dissipation on 10/1000 $\mu$ s waveform (Note 1,2), FIG.1)	$P_{PPM}$	Minimum 3000	Watts
Peak Pulse Current of on 10/1000 $\mu$ s 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)	$I_{FSM}$	300	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  $T_A = 25^{\circ}\text{C}$  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.

**3KASMC SERIES**  
**SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR**  
**STAND-OFF VOLTAGE - 5 TO 85 Volts**  
**3000 Watt Peak Pulse Power**

3KASMC PART NUMBER		DEVICE MARKING CODE		REVERSE STAND-OFF VOLTAGE V <sub>RWM</sub> (V)	BREAKDOWN VOLTAGE V <sub>BR</sub> (V) @I <sub>T</sub>		TEST CURRENT I <sub>T</sub> (mA)	MAXIMUM CLAMPING VOLTAGE @I <sub>pp</sub> V <sub>c</sub> (V) (10/1000uS)	PEAK PULSE CURRENT I <sub>pp</sub> (A) (10/1000uS)	MAXIMUM CLAMPING VOLTAGE @I <sub>pp</sub> V <sub>c</sub> (V) (8/20uS)	PEAK PULSE CURRENT I <sub>pp</sub> (A) (8/20uS)	REVERSE LEAKAGE @ V <sub>RWM</sub> I <sub>R</sub> (μA)
UNI- POLAR	BI-POLAR	UNI	BI		MIN	MAX						
5.0A	5.0CA	LDE	HDE	5.0	6.40	7.00	10	9.2	326.1	12.0	1630.5	800.0
6.0A	6.0CA	LDG	HDG	6.0	6.67	7.37	10	10.3	291.3	13.4	1456.5	800.0
6.5A	6.5CA	LDK	HDK	6.5	7.22	7.98	10	11.2	267.9	14.6	1339.5	500.0
7.0A	7.0CA	LDM	HDM	7.0	7.78	8.60	10	12.0	250.0	15.6	1250.0	200.0
7.5A	7.5CA	LDP	HDP	7.5	8.33	9.21	1	12.9	232.6	16.8	1163.0	100.0
8.0A	8.0CA	LDR	HDR	8.0	8.89	9.83	1	13.6	220.6	17.7	1103.0	50.0
8.5A	8.5CA	LDT	HDT	8.5	9.44	10.40	1	14.4	208.3	18.7	1041.5	20.0
9.0A	9.0CA	LDV	HDV	9.0	10.00	11.10	1	15.4	194.8	20.0	974.0	10.0
10A	10CA	LDX	HDX	10.0	11.10	12.30	1	17.0	176.5	22.1	882.5	5.0
11A	11CA	LDZ	HDZ	11.0	12.20	13.50	1	18.2	164.8	23.7	824.0	2.0
12A	12CA	LEE	HEE	12.0	13.30	14.70	1	19.9	150.8	25.9	754.0	2.0
13A	13CA	LEG	HEG	13.0	14.40	15.90	1	21.5	139.5	28.0	697.5	2.0
14A	14CA	LEK	HEK	14.0	15.60	17.20	1	23.2	129.3	30.2	646.5	2.0
15A	15CA	LEM	HEM	15.0	16.70	18.50	1	24.4	123.0	31.7	615.0	2.0
16A	16CA	LEP	HEP	16.0	17.80	19.70	1	26.0	115.4	33.8	577.0	2.0
17A	17CA	LER	HER	17.0	18.90	20.90	1	27.6	108.7	35.9	543.5	2.0
18A	18CA	LET	HET	18.0	20.00	22.10	1	29.2	102.7	38.0	513.5	2.0
20A	20CA	LEV	HEV	20.0	22.20	24.50	1	32.4	92.6	42.1	463.0	2.0
22A	22CA	LEX	HEX	22.0	24.40	26.90	1	35.5	84.5	46.2	422.5	2.0
24A	24CA	LEZ	HEZ	24.0	26.70	29.50	1	38.9	77.1	50.6	385.5	2.0
26A	26CA	LFE	HFE	26.0	28.90	31.90	1	42.1	71.3	54.7	356.5	2.0
28A	28CA	LFG	HFG	28.0	31.10	34.40	1	45.4	66.1	59.0	330.5	2.0
30A	30CA	LFK	HFK	30.0	33.30	36.80	1	48.4	62.0	62.9	310.0	2.0
33A	33CA	LFM	HFM	33.0	36.70	40.60	1	53.3	56.3	69.3	281.5	2.0
36A	36CA	LFP	HFP	36.0	40.00	44.20	1	58.1	51.6	75.5	258.0	2.0
40A	40CA	LFR	HFR	40.0	44.40	49.10	1	64.5	46.5	83.9	232.5	2.0
43A	43CA	LFT	HFT	43.0	47.80	52.80	1	69.4	43.2	90.2	216.0	2.0
45A	45CA	LFV	HFV	45.0	50.00	55.30	1	72.7	41.3	94.5	206.5	2.0
48A	48CA	LFX	HFX	48.0	53.30	58.90	1	77.4	38.8	100.6	194.0	2.0
51A	51CA	LFZ	HFZ	51.0	56.70	62.70	1	82.4	36.4	107.1	182.0	2.0
54A	54CA	LGE	HGE	54.0	60.00	66.30	1	87.1	34.4	113.2	172.0	2.0
58A	58CA	LGG	HGG	58.0	64.40	71.20	1	93.6	32.1	121.7	160.5	2.0
60A	60CA	LGK	HGK	60.0	66.70	73.70	1	96.8	31.0	125.8	155.0	2.0
64A	64CA	LGM	HGM	64.0	71.10	78.60	1	103.0	29.1	133.9	145.5	2.0
70A	70CA	LGP	HGP	70.0	77.80	86.00	1	113.0	26.5	146.9	132.5	2.0
75A	75CA	LGR	HGR	75.0	83.30	92.10	1	121.0	24.8	157.3	124.0	2.0
78A	78CA	LGT	HGT	78.0	86.70	95.80	1	126.0	23.8	163.8	119.0	2.0
85A	85CA	LGV	HGV	85.0	94.40	104.00	1	137.0	21.9	178.1	109.5	2.0
90A		LGX		90.0	100.00	111.00	1	146.0	20.5	189.8	102.5	2.0
100A		LGZ		100.0	111.00	123.00	1	162.0	18.5	210.6	92.5	2.0
110A		LHE		110.0	122.00	135.00	1	177.0	16.9	230.1	84.5	2.0
120A		LHG		120.0	133.00	147.00	1	193.0	15.5	250.9	77.5	2.0
130A		LHK		130.0	144.00	159.00	1	209.0	14.4	271.7	72.0	2.0
150A		LHM		150.0	167.00	185.00	1	243.0	12.3	315.9	61.5	2.0
160A		LHP		160.0	178.00	197.00	1	259.0	11.6	336.7	58.0	2.0
170A		LHR		170.0	189.00	209.00	1	275.0	10.9	357.5	54.5	2.0

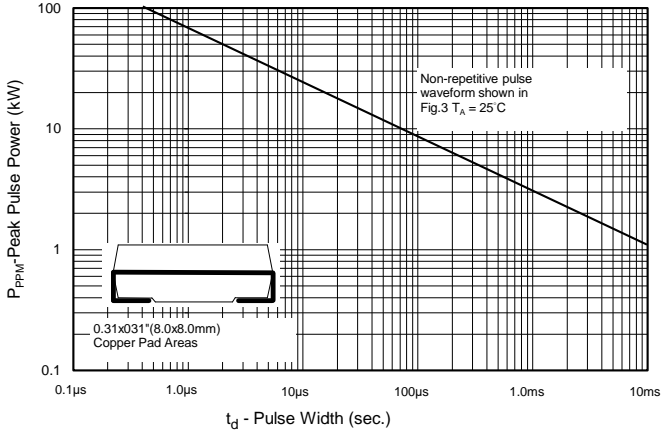
For bidirectional type having V<sub>rwm</sub> of 10 volts and less, the IR limit is double.

# 3KASMC SERIES

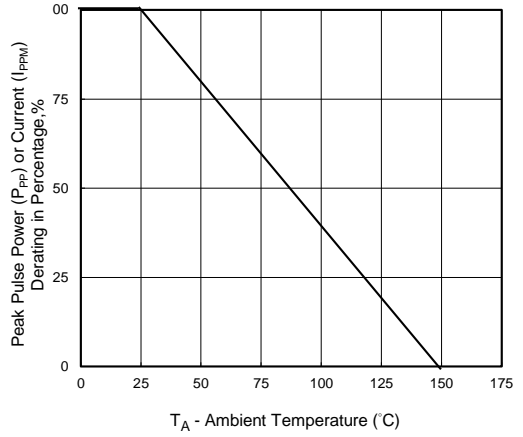
## RATINGS AND CHARACTERISTIC CURVES

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

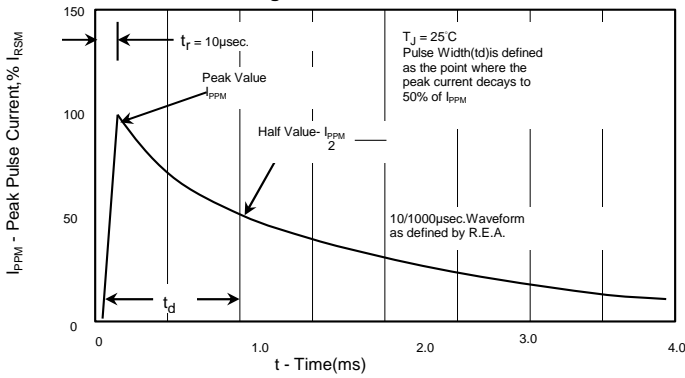
**Fig. 1 - Peak Pulse Power Rating Curve**



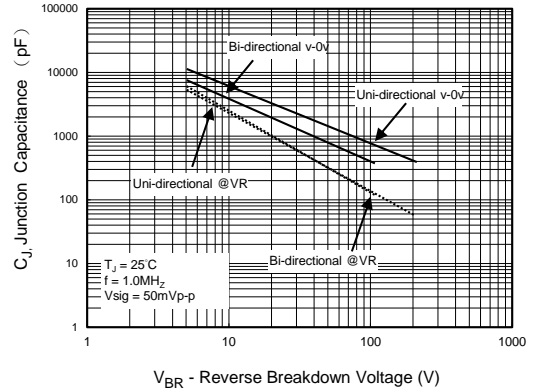
**Fig.2 - Pulse Derating Curve**



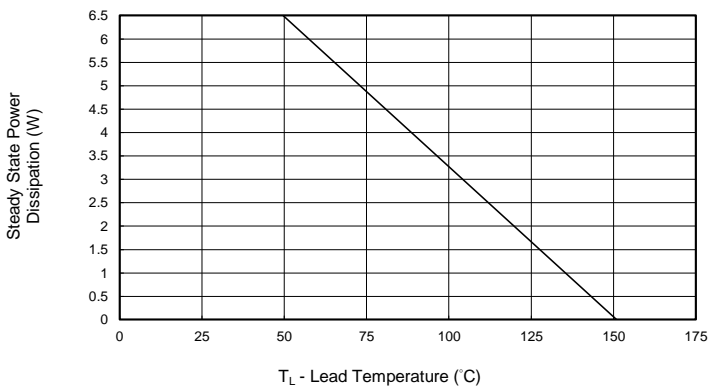
**Fig.3 - Pulse Waveform**



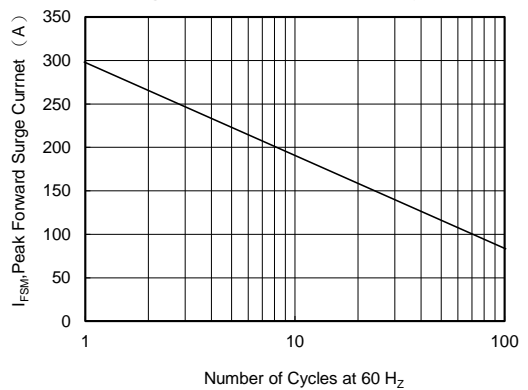
**Fig. 4 - Typical Junction Capacitance**



**Fig. 5 - Steady State Power Derating Curve**



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

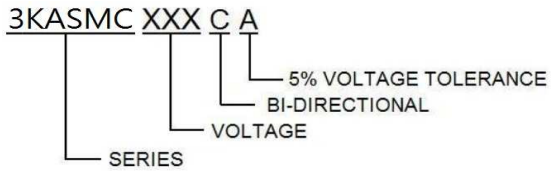


## 3KASMC SERIES

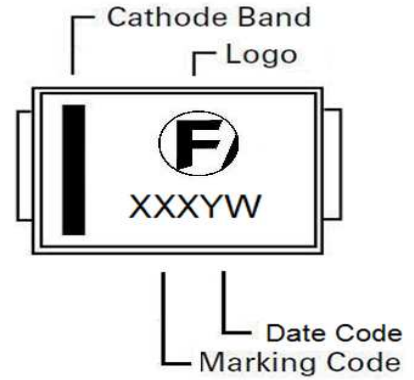
---

### SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR

#### Part Numbering System



#### Part Marking System



#### Packaging

Part number	Component Package	Quantity	Packaging Option	Packaging Specification
3KASMC xxxXX	DO-214AB	3000	Tape & Reel - 16mm/13" tape	EIA STD RS-481
3KASMC xxxXX	DO-214AB	500	Tape & Reel - 16mm/ 7" tape	EIA STD RS-481