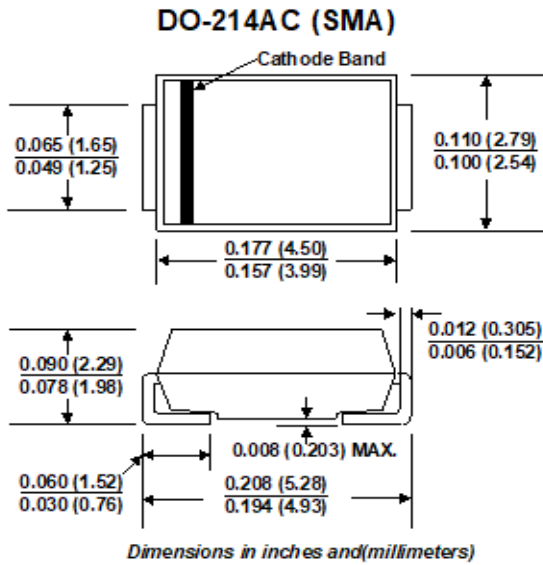


P4KASMA SERIES
SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR
STAND-OFF VOLTAGE - 5.0 TO 220 Volts
400 Watt Peak Pulse Power



FEATURES

- ⊙ For surface mounted applications in order to optimize board space
- ⊙ Halogen-Free
- ⊙ RoHS compliant
- ⊙ Typical maximum temperature coefficient $\Delta V_{BR}=0.1\% \times V_{BR} @ 25^{\circ}C \times \Delta T$
- ⊙ 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-0
- ⊙ Matte Tin Lead-free plated

MECHANICAL DATA

Case: JEDEC DO214AC. 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: 12mm tape (EIA STD RS-481)

Weight: 0.002 ounce, 0.061 gram

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 400	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) (Note2,3)	I _{FSM}	40	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 5.0mm x 5.0mm (0.03mm thick) Copper Pads to each terminal

3.8.3ms single half sine-wave , or equivalent square wave, Duty cycle = 4 pulses per minutes maximum.

P4KASMA SERIES
SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR
STAND-OFF VOLTAGE - 5.0 TO 220 Volts
400 Watt Peak Pulse Power

P4KASMA 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 $@ I_{pp} V_c(V)$	PEAK PULSE CURRENT $I_{pp} (A)$	REVERSE LEAKAGE $@ V_{RWM} I_R (\mu A)$
UNI-POLAR	BI-POLAR	UNI	BI		MIN	MAX				
5.0A	5.0CA	AAP	AAB	5.0	6.40	7.00	10	9.2	43.5	800
6.0A	6.0CA	ABP	ABB	6.0	6.67	7.37	10	10.3	38.8	800
6.5A	6.5CA	ACP	ACB	6.5	7.22	7.98	10	11.2	35.7	500
7.0A	7.0CA	ADP	ADB	7.0	7.78	8.60	10	12.0	33.3	200
7.5A	7.5CA	AEP	AEB	7.5	8.33	9.21	1	12.9	31.0	100
8.0A	8.0CA	AGP	AGB	8.0	8.89	9.83	1	13.6	29.4	50
8.5A	8.5CA	AKP	AKB	8.5	9.44	10.40	1	14.4	27.8	20
9.0A	9.0CA	AMP	AMB	9.0	10.00	11.10	1	15.4	26.0	10
10A	10CA	APP	APB	10.0	11.10	12.30	1	17.0	23.5	5
11A	11CA	ARP	ARB	11.0	12.20	13.50	1	18.2	22.0	1
12A	12CA	ATP	ATB	12.0	13.30	14.70	1	19.9	20.1	1
13A	13CA	AVP	AVB	13.0	14.40	15.90	1	21.5	18.6	1
14A	14CA	AWP	AWB	14.0	15.60	17.20	1	23.2	17.2	1
15A	15CA	AXP	AXB	15.0	16.70	18.50	1	24.4	16.4	1
16A	16CA	AZP	AZB	16.0	17.80	19.70	1	26.0	15.4	1
17A	17CA	BDP	BDB	17.0	18.90	20.90	1	27.6	14.5	1
18A	18CA	BEP	BEB	18.0	20.00	22.10	1	29.2	13.7	1
20A	20CA	BGP	BGB	20.0	22.20	24.50	1	32.4	12.3	1
22A	22CA	BKP	BKB	22.0	24.40	26.90	1	35.5	11.3	1
24A	24CA	BMP	BMB	24.0	26.70	29.50	1	38.9	10.3	1
26A	26CA	BNP	BNB	26.0	28.90	31.90	1	42.1	9.5	1
28A	28CA	BPP	BPB	28.0	31.10	34.40	1	45.4	8.8	1
30A	30CA	BRP	BRB	30.0	33.30	36.80	1	48.4	8.3	1
33A	33CA	BTP	BTB	33.0	36.70	40.60	1	53.3	7.5	1
36A	36CA	BVP	BVB	36.0	40.00	44.20	1	58.1	6.9	1
40A	40CA	BXP	BXB	40.0	44.40	49.10	1	64.5	6.2	1
43A	43CA	BZP	BZB	43.0	47.80	52.80	1	69.4	5.8	1
45A	45CA	CAP	CAB	45.0	50.00	55.30	1	72.7	5.5	1
48A	48CA	CBP	CBB	48.0	53.30	58.90	1	77.4	5.2	1
51A	51CA	CCP	CCB	51.0	56.70	62.70	1	82.4	4.9	1
54A	54CA	CDP	CDB	54.0	60.00	66.30	1	87.1	4.6	1
58A	58CA	CEP	CEB	58.0	64.40	71.20	1	93.6	4.3	1
60A	60CA	CGP	CGB	60.0	66.70	73.70	1	96.8	4.1	1
64A	64CA	CKP	CKB	64.0	71.10	78.60	1	103.0	3.9	1
70A	70CA	CMP	CMB	70.0	77.80	86.00	1	113.0	3.5	1
75A	75CA	CPP	CPB	75.0	83.30	92.10	1	121.0	3.3	1
78A	78CA	CRP	CRB	78.0	86.70	95.80	1	126.0	3.2	1
85A	85CA	CTP	CTB	85.0	94.40	104.00	1	137.0	2.9	1
90A	90CA	CVP	CVB	90.0	100.00	111.00	1	146.0	2.7	1
100A	100CA	CXP	CXB	100.0	111.00	123.00	1	162.0	2.5	1
110A	110CA	CZP	CZB	110.0	122.00	135.00	1	177.0	2.3	1
120A	120CA	DEP	DEB	120.0	133.00	147.00	1	193.0	2.1	1
130A	130CA	DGP	DGB	130.0	144.00	159.00	1	209.0	1.9	1
150A	150CA	DKP	DKB	150.0	167.00	185.00	1	243.0	1.6	1
160A	160CA	DMP	DMB	160.0	178.00	197.00	1	259.0	1.5	1
170A	170CA	DPP	DPB	170.0	189.00	209.00	1	275.0	1.5	1
180A	180CA	DRP	DRB	180.0	201.00	222.00	1	292.0	1.4	1
190A	190CA	DTP	DTB	190.0	211.00	232.00	1	308.0	1.3	1
200A	200CA	DVP	DVB	200.0	224.00	247.00	1	324.0	1.2	1
220A	220CA	DXP	DXB	220.0	246.00	272.00	1	356.0	1.1	1

For bidirectional type having V_{RWM} of 10 volts and less, the IR limit is double.

P4KASMA SERIES

RATINGS AND CHARACTERISTIC CURVES

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

Fig. 1 - Peak Pulse Power Rating

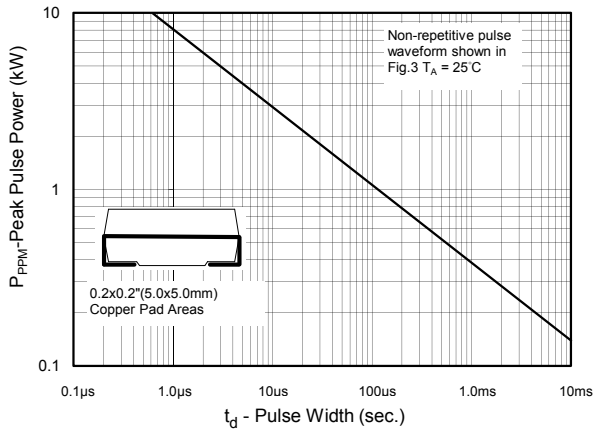


Fig. 2 - Pulse Derating Curve

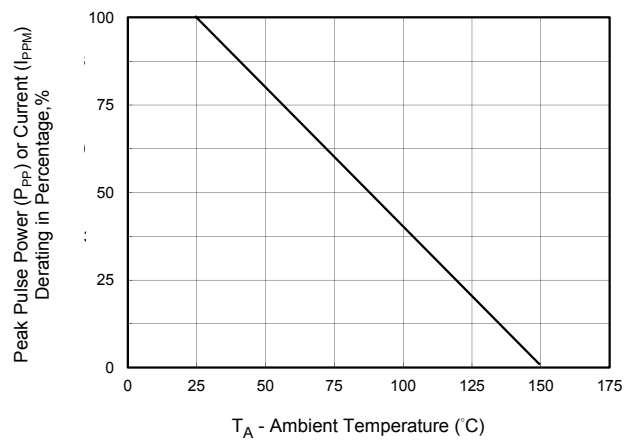


Fig. 3 - Pulse Waveform

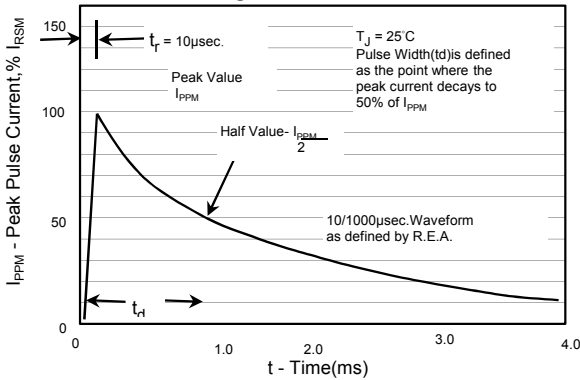


Fig. 4 - Typical Junction Capacitance

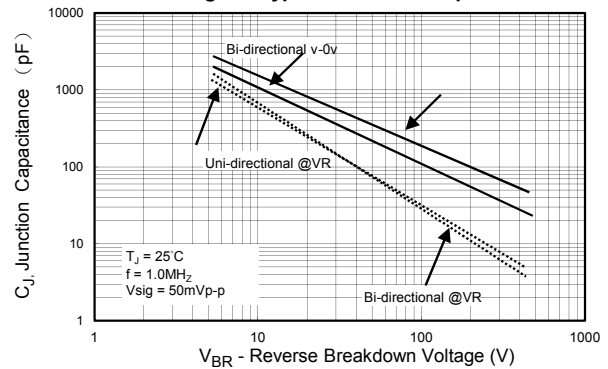


Fig. 5 - Steady State Power Derating Curve

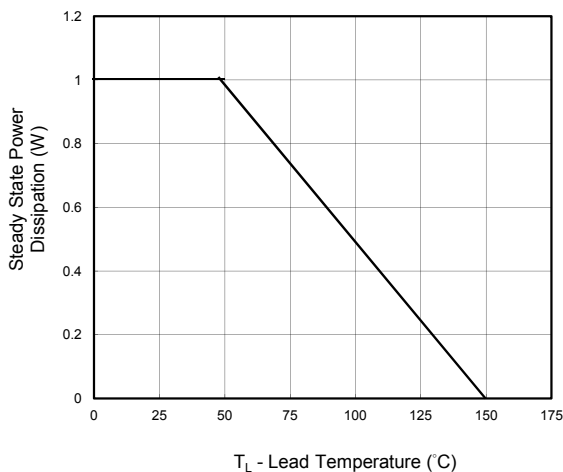
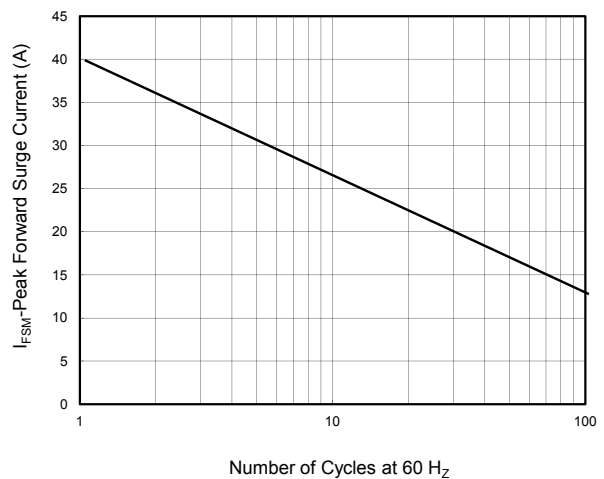


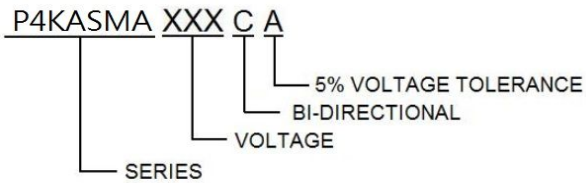
Fig. 6 - Maximum Non-repetitive Forward Surge current uni-directional only



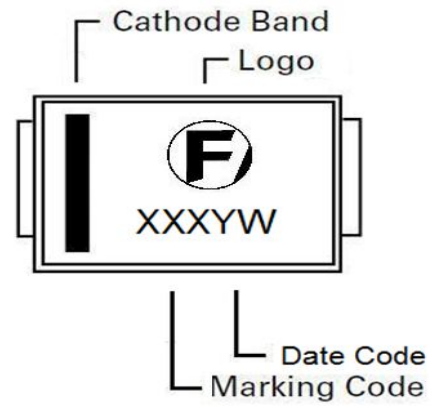
P4KASMA SERIES

SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR

Part Numbering System



Part Marking System



Packaging

Part number	Component Package	Quantity	Packaging Option	Packaging Specification
P4KASMAxxxXX	DO-214AC	5000	Tape & Reel - 12mm/13" tape	EIA STD RS-481
P4KASMAxxxXX	DO-214AC	1000	Tape & Reel - 12mm/ 7" tape	EIA STD RS-481