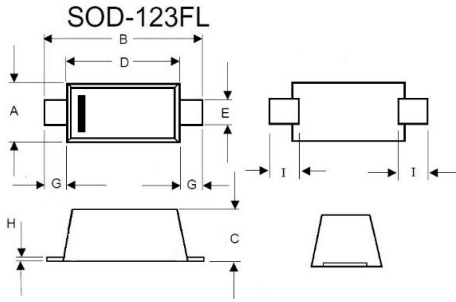


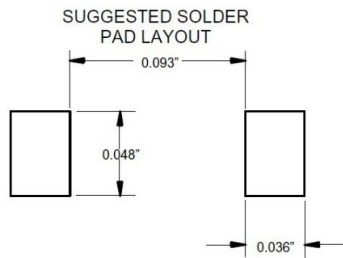
P4KASMF SERIES
SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR
STAND-OFF VOLTAGE - 5.0 TO 85 Volts
400 Watt Peak Pulse Power



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.055	.075	1.40	1.90	
B	.140	.152	3.55	3.85	
C	.035	.053	0.90	1.35	
D	.100	.122	2.55	3.10	
E	.020	.041	0.50	1.05	
G	.010	.022	0.25	0.55	
H	.004	.010	0.10	0.25	
I	.016	.028	0.40	0.70	

FEATURES

- ⊙ For surface mounted applications in order to optimize board space
- ⊙ Halogen-Free
- ⊙ RoHS compliant
- ⊙ Small, High Thermal Efficiency
- ⊙ Low clamping capability
- ⊙ Glass passivated junction
- ⊙ Fast response time: typically less than 1.0ps from 0 Volts to V(BR)
- ⊙ High Temperature soldering: 260°C/40 seconds at terminals
- ⊙ AEC-Q101 qualified
- ⊙ Plastic package has Underwriters Laboratory Flammability 94V-O
- ⊙ Matte Tin Lead-free plated



MECHANICAL DATA

Case: JEDEC SOD-123FL. Molded plastic over glass passivated junction
Terminal: Solderable per MIL-STD-750, Method 2026
Polarity: Color band denoted positive end (cathode)
Standard Packaging: 8mm tape (EIA STD RS-481)
Weight: 0.00052 ounce, 0.0148 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) (Note 2,3)	I _{FSM}	50	Amps
ESD Voltage(HBM)	V _{ESD}	>16	KV
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 5.0mm²(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.

P4KSMF SERIES
SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR
STAND-OFF VOLTAGE - 5.0 TO 85 Volts
400 Watt Peak Pulse Power

P4KSMF 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 @ $V_{RWM} I_R$ (μA)
			MIN	MAX				
P4KSMF5.0A	KEQ	5.0	6.40	7.00	10	9.2	21.7	400
P4KSMF6.0A	KGQ	6.0	6.67	7.37	10	10.3	19.4	400
P4KSMF6.5A	KKQ	6.5	7.22	7.98	10	11.2	17.9	250
P4KSMF7.0A	KMQ	7.0	7.78	8.60	10	12.0	16.7	100
P4KSMF7.5A	KPQ	7.5	8.33	9.21	1	12.9	15.5	50
P4KSMF8.0A	KRQ	8.0	8.89	9.83	1	13.6	14.7	25
P4KSMF8.5A	KTQ	8.5	9.44	10.40	1	14.4	13.9	10
P4KSMF9.0A	KVQ	9.0	10.00	11.10	1	15.4	13.0	5
P4KSMF10A	KXQ	10.0	11.10	12.30	1	17.0	11.8	2.5
P4KSMF11A	KZQ	11.0	12.20	13.50	1	18.2	11.0	2.5
P4KSMF12A	LEQ	12.0	13.30	14.70	1	19.9	20.1	1
P4KSMF13A	LGQ	13.0	14.40	15.90	1	21.5	18.6	1
P4KSMF14A	LKQ	14.0	15.60	17.20	1	23.2	17.2	1
P4KSMF15A	LMQ	15.0	16.70	18.50	1	24.4	16.4	1
P4KSMF16A	LPQ	16.0	17.80	19.70	1	26.0	15.4	1
P4KSMF17A	LRQ	17.0	18.90	20.90	1	27.6	14.5	1
P4KSMF18A	LTQ	18.0	20.00	22.10	1	29.2	13.7	1
P4KSMF20A	LVQ	20.0	22.20	24.50	1	32.4	12.3	1
P4KSMF22A	LXQ	22.0	24.40	26.90	1	35.5	11.3	1
P4KSMF24A	LZQ	24.0	26.70	29.50	1	38.9	10.3	1
P4KSMF26A	MEQ	26.0	28.90	31.90	1	42.1	9.5	1
P4KSMF28A	MGQ	28.0	31.10	34.40	1	45.4	8.8	1
P4KSMF30A	MKQ	30.0	33.30	36.80	1	48.4	8.3	1
P4KSMF33A	MMQ	33.0	36.70	40.60	1	53.3	7.5	1
P4KSMF36A	MPQ	36.0	40.00	44.20	1	58.1	6.9	1
P4KSMF40A	MRQ	40.0	44.40	49.10	1	64.5	6.2	1
P4KSMF43A	MTQ	43.0	47.80	52.80	1	69.4	5.8	1
P4KSMF45A	MVQ	45.0	50.00	55.30	1	72.7	5.5	1
P4KSMF48A	MXQ	48.0	53.30	58.90	1	77.4	5.2	1
P4KSMF51A	MZQ	51.0	56.70	62.70	1	82.4	4.9	1
P4KSMF54A	NEQ	54.0	60.00	66.30	1	87.1	4.6	1
P4KSMF58A	NGQ	58.0	64.40	71.20	1	93.6	4.3	1
P4KSMF60A	NKQ	60.0	66.70	73.70	1	96.8	3.6	1
P4KSMF64A	NMQ	64.0	71.10	78.60	1	103.0	3.4	1
P4KSMF70A	NPQ	70.0	77.80	86.00	1	113.0	3.0	1
P4KSMF75A	NRQ	75.0	83.30	92.10	1	121.0	2.8	1
P4KSMF78A	NTQ	78.0	86.70	95.80	1	126.0	2.8	1
P4KSMF85A	NVQ	85.0	94.40	104.00	1	137.0	2.6	1

P4KSMF SERIES

RATINGS AND CHARACTERISTIC CURVES

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

Fig. 1 - Peak Pulse Power Rating

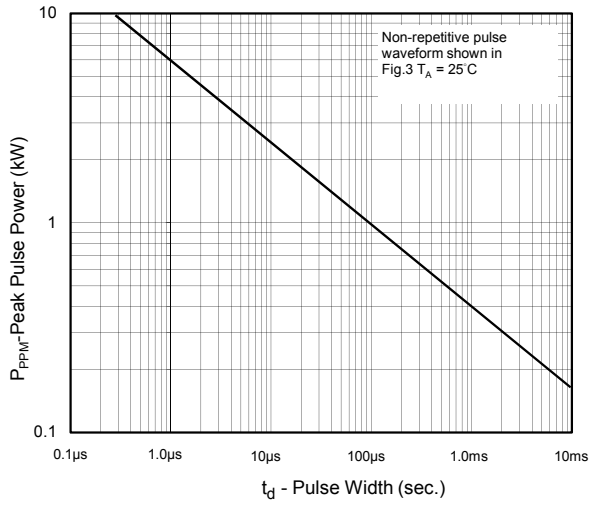


Fig. 2 - Pulse Derating Curve

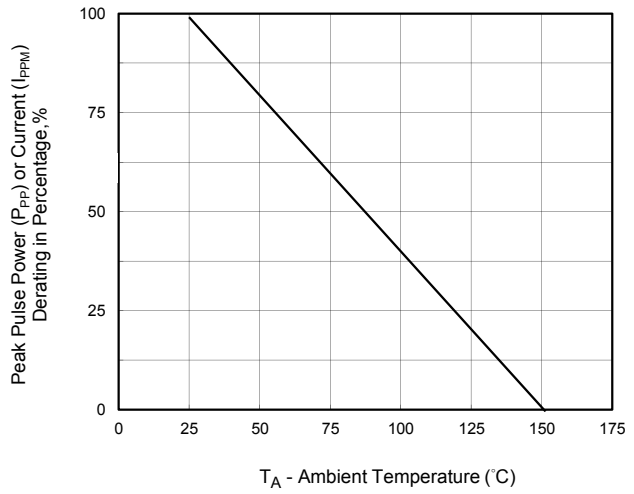


Fig. 3 - Pulse Waveform

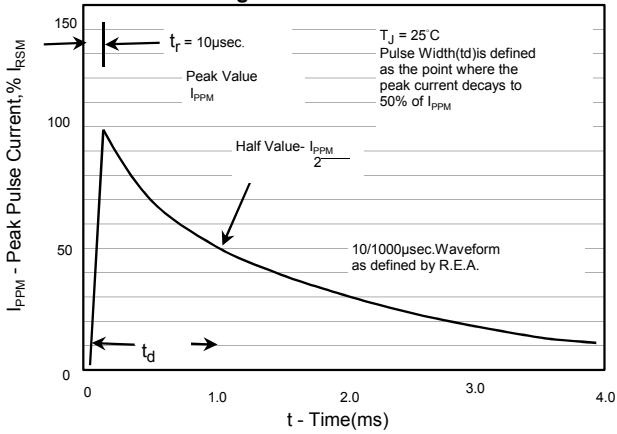


Fig. 4 - Steady State Power Derating Curve

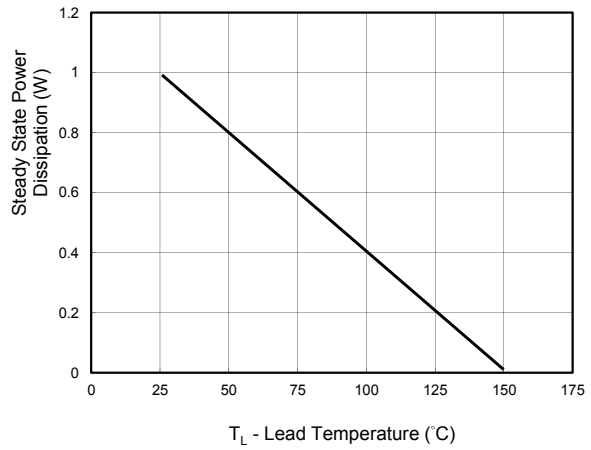
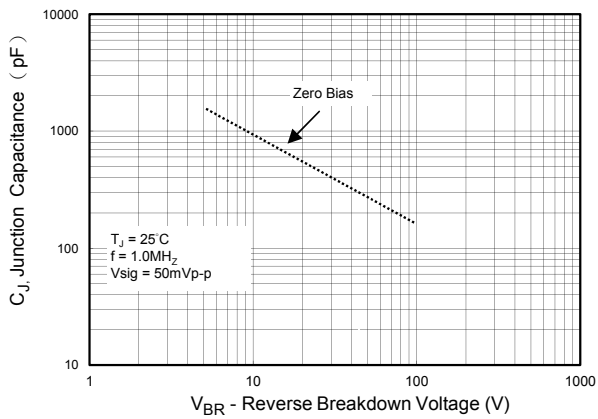


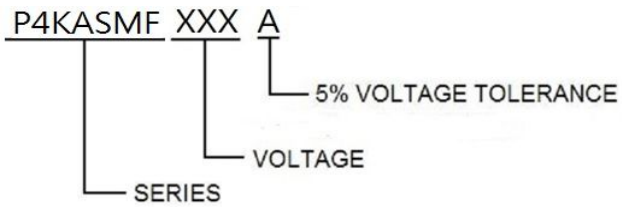
Fig. 5 Typical Junction Capacitance



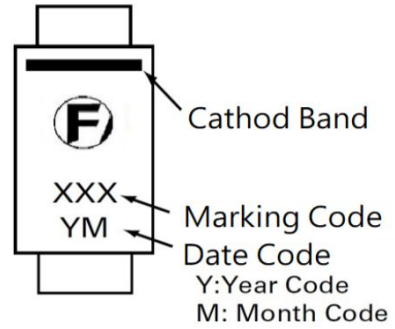
P4KASMF SERIES

SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR

Part Numbering System



Part Marking System



Packaging

Part number	Component Package	Quantity	Packaging Option	Packaging Specification
P4KASMFxxxX	SOD-123FL	2500	Tape & Reel - 8mm/ 7" tape	EIA STD RS-481