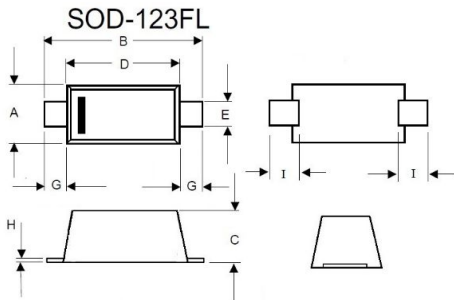


SMF4L SERIES

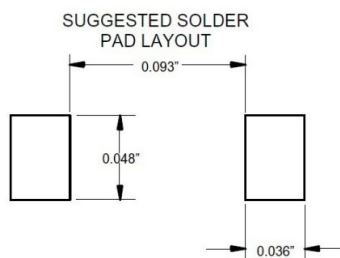
SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR STAND-OFF VOLTAGE - 5.0 TO 85 Volts 400 Watt Peak Pulse Power



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
- ⊙ 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.

SMF4L SERIES

SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR

STAND-OFF VOLTAGE - 5.0 TO 85 Volts

400 Watt Peak Pulse Power

SMF4L 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				
SMF4L5.0A	KE	5.0	6.40	7.00	10	9.2	43.50	400
SMF4L6.0A	KG	6.0	6.67	7.37	10	10.3	38.90	400
SMF4L6.5A	KK	6.5	7.22	7.98	10	11.2	35.80	250
SMF4L7.0A	KM	7.0	7.78	8.60	10	12.0	33.40	100
SMF4L7.5A	KP	7.5	8.33	9.21	1	12.9	31.10	50
SMF4L8.0A	KR	8.0	8.89	9.83	1	13.6	29.50	25
SMF4L8.5A	KT	8.5	9.44	10.40	1	14.4	27.80	10
SMF4L9.0A	KV	9.0	10.00	11.10	1	15.4	26.00	5
SMF4L10A	KX	10.0	11.10	12.30	1	17.0	23.60	2.5
SMF4L11A	KZ	11.0	12.20	13.50	1	18.2	22.00	2.5
SMF4L12A	LE	12.0	13.30	14.70	1	19.9	20.20	1
SMF4L13A	LG	13.0	14.40	15.90	1	21.5	18.70	1
SMF4L14A	LK	14.0	15.60	17.20	1	23.2	17.30	1
SMF4L15A	LM	15.0	16.70	18.50	1	24.4	16.40	1
SMF4L16A	LP	16.0	17.80	19.70	1	26.0	15.40	1
SMF4L17A	LR	17.0	18.90	20.90	1	27.6	14.50	1
SMF4L18A	LT	18.0	20.00	22.10	1	29.2	13.70	1
SMF4L20A	LV	20.0	22.20	24.50	1	32.4	12.40	1
SMF4L22A	LX	22.0	24.40	26.90	1	35.5	11.30	1
SMF4L24A	LZ	24.0	26.70	29.50	1	38.9	10.30	1
SMF4L26A	ME	26.0	28.90	31.90	1	42.1	9.60	1
SMF4L28A	MG	28.0	31.10	34.40	1	45.4	8.90	1
SMF4L30A	MK	30.0	33.30	36.80	1	48.4	8.30	1
SMF4L33A	MM	33.0	36.70	40.60	1	53.3	7.60	1
SMF4L36A	MP	36.0	40.00	44.20	1	58.1	6.90	1
SMF4L40A	MR	40.0	44.40	49.10	1	64.5	6.25	1
SMF4L43A	MT	43.0	47.80	52.80	1	69.4	5.80	1
SMF4L45A	MV	45.0	50.00	55.30	1	72.7	5.52	1
SMF4L48A	MX	48.0	53.30	58.90	1	77.4	5.20	1
SMF4L51A	MZ	51.0	56.70	62.70	1	82.4	4.90	1
SMF4L54A	NE	54.0	60.00	66.30	1	87.1	4.60	1
SMF4L58A	NG	58.0	64.40	71.20	1	93.6	4.30	1
SMF4L60A	NK	60.0	66.70	73.70	1	96.8	4.15	1
SMF4L64A	NM	64.0	71.10	78.60	1	103.0	3.90	1
SMF4L70A	NP	70.0	77.80	86.00	1	113.0	3.55	1
SMF4L75A	NR	75.0	83.30	92.10	1	121.0	3.32	1
SMF4L78A	NT	78.0	86.70	95.80	1	126.0	3.18	1
SMF4L85A	NV	85.0	94.40	104.00	1	137.0	2.93	1

SMF4L SERIES

RATINGS AND CHARACTERISTIC CURVES

Ratings and

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

Fig. 1 - Peak Pulse Power Rating

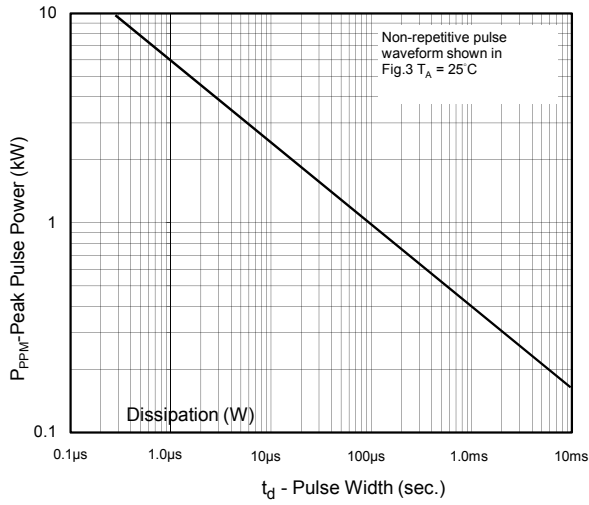


Fig. 2 - Pulse Derating Curve

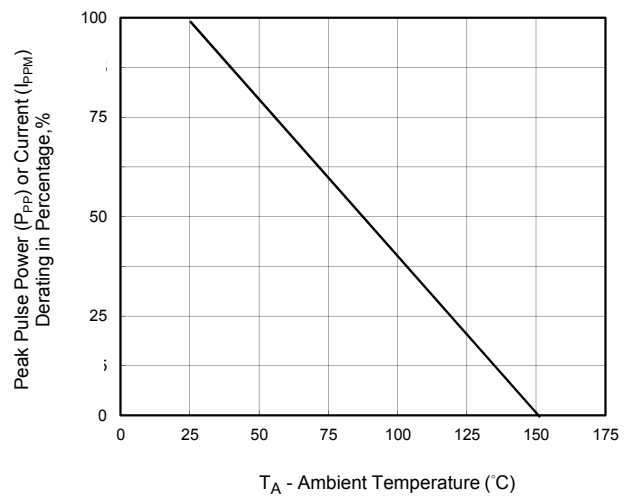


Fig. 3 - Pulse Waveform

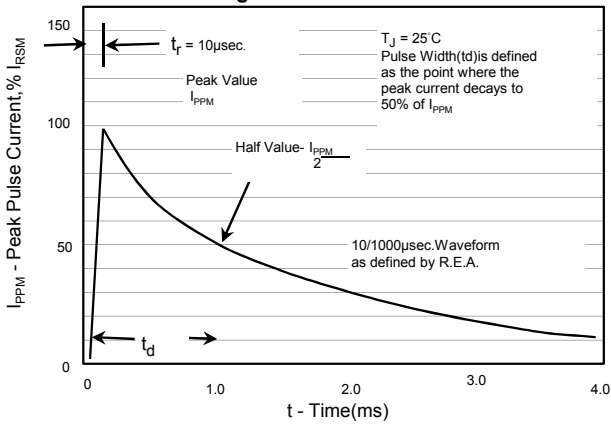


Fig. 4 - Steady State Power Derating Curve

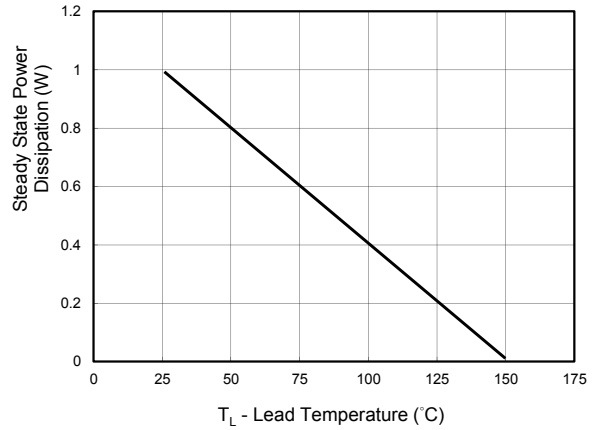
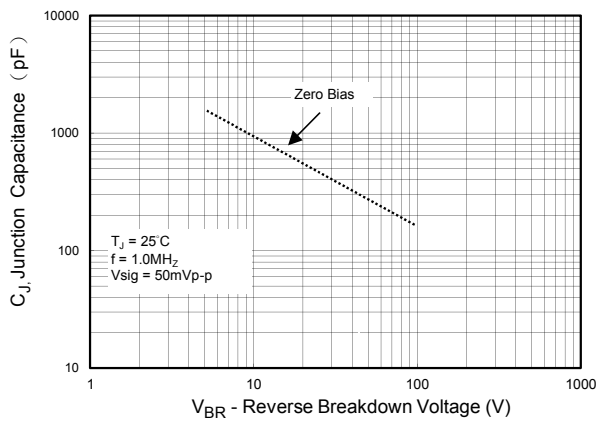


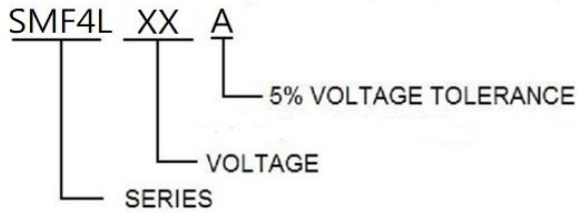
Fig. 5 Typical Junction Capacitance



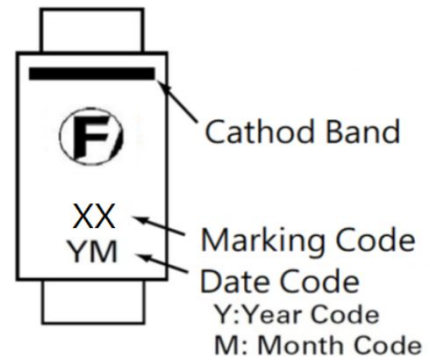
SMF4L SERIES

SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR

Part Numbering System



Part Marking System



Packaging

Part number	Component Package	Quantity	Packaging Option	Packaging Specification
SMF4LxxX	SOD-123FL	2500	Tape & Reel - 8mm/ 7" tape	EIA STD RS-481