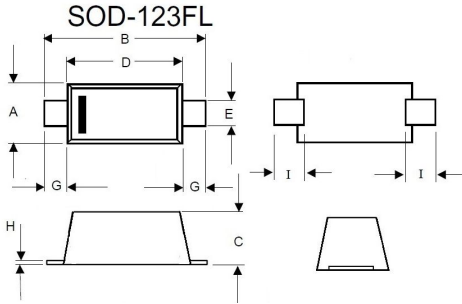


SMF SERIES

SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR

STAND-OFF VOLTAGE - 5.0 TO 170 Volts

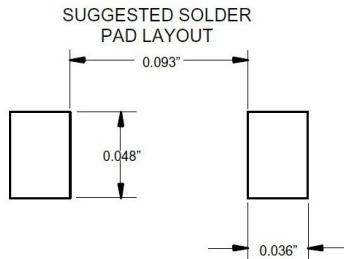
200 Watt Peak Pulse Power



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 ,FIG.1)	P _{PPM}	Minimum 200	Watts
Peak Pulse Current of on 10/1000µs waveform (Note 1,FIG.3)	I _{PPM}	SEE TABLE 1	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 .

SMF SERIES

SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR

STAND-OFF VOLTAGE - 5.0 TO 170 Volts

200 Watt Peak Pulse Power

SMF 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				
SMF5.0A	5.0A	5.0	6.40	7.00	10	9.2	21.80	400
SMF6.0A	6.0A	6.0	6.67	7.37	10	10.3	19.50	400
SMF6.5A	6.5A	6.5	7.22	7.98	10	11.2	17.90	250
SMF7.0A	7.0A	7.0	7.78	8.60	10	12.0	16.70	100
SMF7.5A	7.5A	7.5	8.33	9.21	1	12.9	15.60	50
SMF8.0A	8.0A	8.0	8.89	9.83	1	13.6	14.80	25
SMF8.5A	8.5A	8.5	9.44	10.40	1	14.4	13.90	10
SMF9.0A	9.0A	9.0	10.00	11.10	1	15.4	13.00	5
SMF10A	10A	10.0	11.10	12.30	1	17.0	11.80	2.5
SMF11A	11A	11.0	12.20	13.50	1	18.2	11.00	2.5
SMF12A	12A	12.0	13.30	14.70	1	19.9	10.10	2.5
SMF13A	13A	13.0	14.40	15.90	1	21.5	9.35	1
SMF14A	14A	14.0	15.60	17.20	1	23.2	8.70	1
SMF15A	15A	15.0	16.70	18.50	1	24.4	8.20	1
SMF16A	16A	16.0	17.80	19.70	1	26.0	7.70	1
SMF17A	17A	17.0	18.90	20.90	1	27.6	7.25	1
SMF18A	18A	18.0	20.00	22.10	1	29.2	6.85	1
SMF20A	20A	20.0	22.20	24.50	1	32.4	6.20	1
SMF22A	22A	22.0	24.40	26.90	1	35.5	5.65	1
SMF24A	24A	24.0	26.70	29.50	1	38.9	5.15	1
SMF26A	26A	26.0	28.90	31.90	1	42.1	4.80	1
SMF28A	28A	28.0	31.10	34.40	1	45.4	4.45	1
SMF30A	30A	30.0	33.30	36.80	1	48.4	4.15	1
SMF33A	33A	33.0	36.70	40.60	1	53.3	3.80	1
SMF36A	36A	36.0	40.00	44.20	1	58.1	3.50	1
SMF40A	40A	40.0	44.40	49.10	1	64.5	3.11	1
SMF43A	43A	43.0	47.80	52.80	1	69.4	2.90	1
SMF45A	45A	45.0	50.00	55.30	1	72.7	2.80	1
SMF48A	48A	48.0	53.30	58.90	1	77.4	2.60	1
SMF51A	51A	51.0	56.70	62.70	1	82.4	2.43	1
SMF54A	54A	54.0	60.00	66.30	1	87.1	2.30	1
SMF58A	58A	58.0	64.40	71.20	1	93.6	2.14	1
SMF60A	60A	60.0	66.70	73.70	1	96.8	2.10	1
SMF64A	64A	64.0	71.10	78.60	1	103.0	1.95	1
SMF70A	70A	70.0	77.80	86.00	1	113.0	1.77	1
SMF75A	75A	75.0	83.30	92.10	1	121.0	1.66	1
SMF78A	78A	78.0	86.70	95.80	1	126.0	1.59	1
SMF85A	85A	85.0	94.40	104.00	1	137.0	1.46	1
SMF90A	90A	90.0	100.00	111.00	1	146.0	1.37	1
SMF100A	100A	100.0	111.00	123.00	1	162.0	1.24	1
SMF110A	110A	110.0	122.00	135.00	1	177.0	1.13	1
SMF120A	120A	120.0	133.00	147.00	1	193.0	1.04	1
SMF130A	130A	130.0	144.00	159.00	1	209.0	0.96	1
SMF150A	150A	150.0	167.00	185.00	1	243.0	0.83	1
SMF160A	160A	160.0	178.00	197.00	1	259.0	0.78	1
SMF170A	170A	170.0	189.00	209.00	1	275.0	0.73	1

SMF SERIES

RATINGS AND CHARACTERISTIC CURVES

Ratings and

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

Fig. 1 - Peak Pulse Power Rating

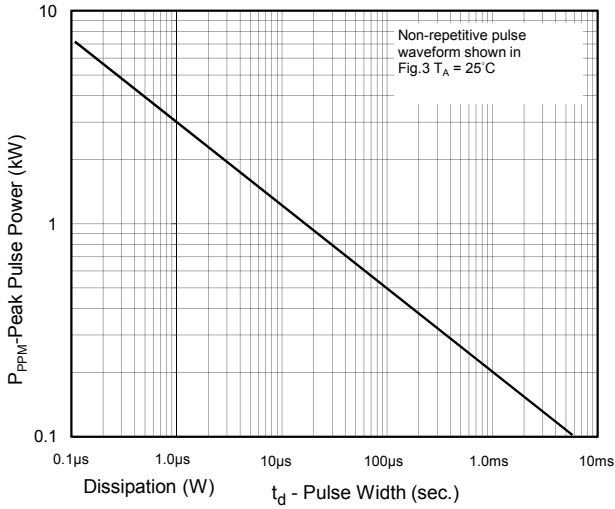


Fig. 2 - Pulse Derating Curve

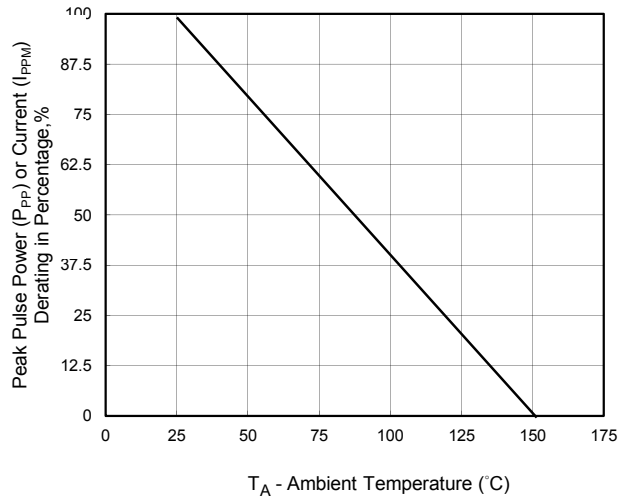


Fig. 3 - Pulse Waveform

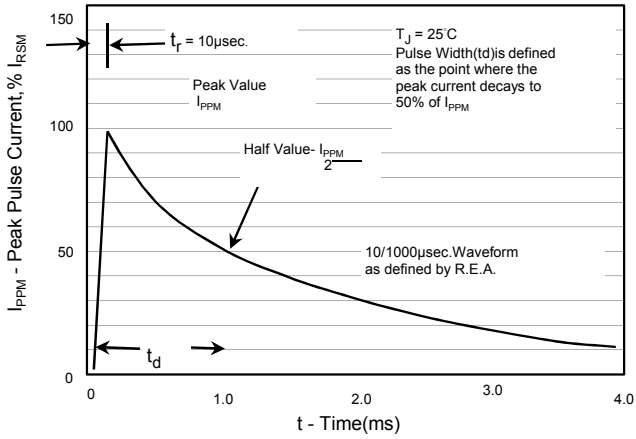
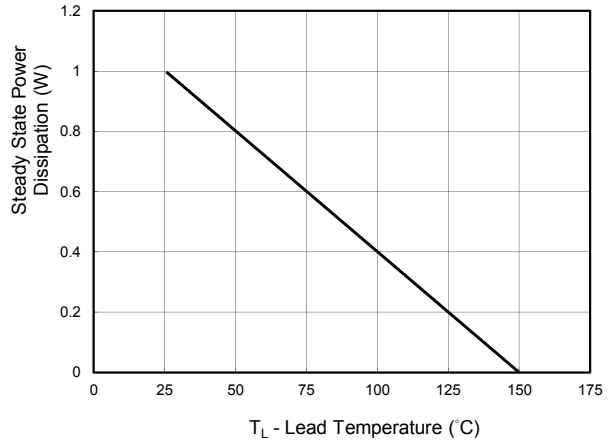


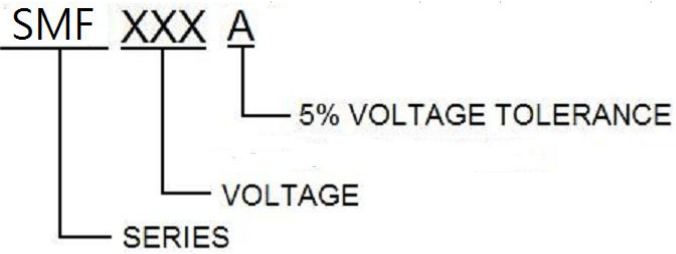
Fig. 4 - Steady State Power Derating Curve



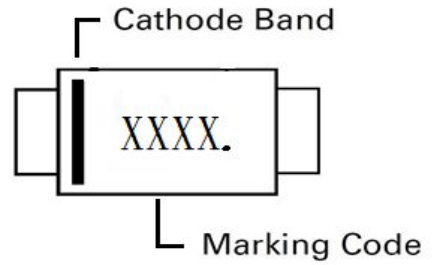
SMF SERIES

SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR

Part Numbering System



Part Marking System



Packaging

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