Features

- Uni Polar Unit
- Low Leakage
- Very Fast Response Time
- Excellent Clamping Capability
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix Designates RoHS Compliant. See Ordering Information)

400 Watt TVS
5.0 to 170 VOLTS

Maximum Ratings

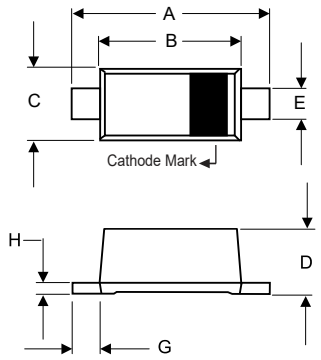
- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C

Peak Pulse Power Dissipation with a 10/1000μs Waveform	P_{PP}	400W	
Power Dissipation On Infinite Heatsink	P_D	1.0W	T_L=75°C
Peak forward surge current, 8.3 ms single half sine-wave unidirectional only	I_{FSM}	40A	Note 2
Maximum instantaneous forward voltage at 25A for unidirectional only	V_F	3.5V	

Note:

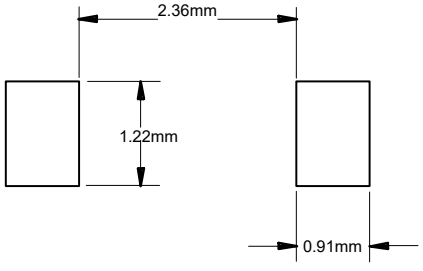
1. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.
2. Measured on 8.3 ms single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum.

SOD-123FL



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.130	0.152	3.30	3.85	
B	0.100	0.122	2.55	3.10	
C	0.055	0.075	1.40	1.90	
D	0.035	0.053	0.90	1.35	
E	0.020	0.041	0.50	1.05	
G	0.010	----	0.25	----	
H	----	0.010	----	0.25	

SUGGESTED SOLDER PAD LAYOUT



Electrical Characteristics @ 25°C Unless Otherwise Specified

MCC Part Number	Working Peak Reverse Voltage	Breakdown Voltage V_{BR}(V)		Test Current	Maximum Clamping Voltage @I_{PP}	Maximum Reverse Surge Current	Maximum Reverse Leakage @V_{RWM}	Device Marking Code
Uni	V_{RWM}(V)	Min(V)	Max(V)	I_T(mA)	V_C(V)	I_{PP}(A)	I_R(μA)	Uni
SM4F5.0A	5.0	6.40	7.00	10	9.20	43.50	800	F5.0
SM4F6.0A	6.0	6.67	7.37	10	10.3	38.80	800	F6.0
SM4F6.5A	6.5	7.22	7.98	10	11.2	35.70	500	F6.5
SM4F7.0A	7.0	7.78	8.60	10	12.0	33.30	200	F7.0
SM4F7.5A	7.5	8.33	9.21	1	12.9	31.00	100	F7.5
SM4F8.0A	8.0	8.89	9.83	1	13.6	29.40	50	F8.0
SM4F8.5A	8.5	9.44	10.40	1	14.4	27.70	20	F8.5
SM4F9.0A	9.0	10.00	11.10	1	15.4	26.00	10	F9.0
SM4F10A	10.0	11.10	12.30	1	17.0	23.50	5	F10
SM4F11A	11.0	12.20	13.50	1	18.2	21.98	1	F11
SM4F12A	12.0	13.30	14.70	1	19.9	20.10	1	F12
SM4F13A	13.0	14.40	15.90	1	21.5	18.60	1	F13
SM4F14A	14.0	15.60	17.20	1	23.2	17.24	1	F14
SM4F15A	15.0	16.70	18.50	1	24.4	16.39	1	F15
SM4F16A	16.0	17.80	19.70	1	26.0	15.38	1	F16
SM4F17A	17.0	18.90	20.90	1	27.6	14.49	1	F17
SM4F18A	18.0	20.00	22.10	1	29.2	13.70	1	F18
SM4F19A	19.0	21.10	23.30	1	30.8	13.00	1	F19
SM4F20A	20.0	22.20	24.50	1	32.4	12.35	1	F20
SM4F22A	22.0	24.40	26.90	1	35.5	11.27	1	F22
SM4F24A	24.0	26.70	29.50	1	38.9	10.28	1	F24
SM4F26A	26.0	28.90	31.90	1	42.1	9.50	1	F26
SM4F28A	28.0	31.10	34.40	1	45.4	8.81	1	F28
SM4F30A	30.0	33.30	36.80	1	48.4	8.26	1	F30
SM4F33A	33.0	36.70	40.60	1	53.3	7.50	1	F33
SM4F36A	36.0	40.00	44.20	1	58.1	6.88	1	F36
SM4F40A	40.0	44.40	49.10	1	64.5	6.20	1	F40
SM4F43A	43.0	47.80	52.80	1	69.4	5.70	1	F43
SM4F45A	45.0	50.00	55.30	1	72.7	5.50	1	F45
SM4F48A	48.0	53.30	58.90	1	77.4	5.20	1	F48
SM4F51A	51.0	56.70	62.70	1	82.4	4.90	1	F51
SM4F54A	54.0	60.00	66.30	1	87.1	4.60	1	F54
SM4F58A	58.0	64.40	71.20	1	93.6	4.30	1	F58
SM4F60A	60.0	66.70	73.70	1	96.8	4.10	1	F60
SM4F64A	64.0	71.10	78.60	1	103	3.90	1	F64
SM4F70A	70.0	77.80	86.00	1	113	3.50	1	F70
SM4F75A	75.0	83.30	92.10	1	121	3.30	1	F75
SM4F78A	78.0	86.70	95.80	1	126	2.20	1	F78
SM4F85A	85.0	94.40	104	1	137	2.90	1	F85
SM4F90A	90.0	100	111	1	146	2.70	1	F90
SM4F100A	100	111	123	1	162	2.50	1	F100
SM4F110A	110	122	135	1	177	2.30	1	F110
SM4F120A	120	133	147	1	193	2.10	1	F120
SM4F130A	130	144	159	1	209	1.90	1	F130
SM4F150A	150	167	185	1	243	1.60	1	F150
SM4F160A	160	178	197	1	259	1.50	1	F160
SM4F170A	170	189	209	1	275	1.50	1	F170

Curve Characteristics

Fig. 1 - Peak Pulse Power Rating Curve

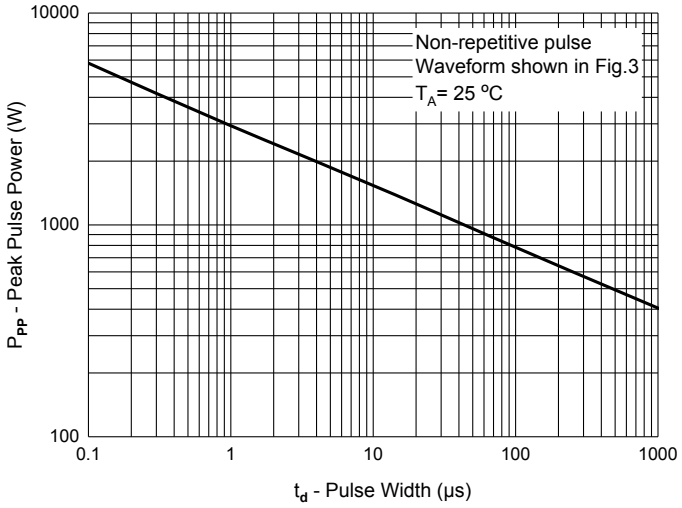


Fig. 2 - Typical Junction Capacitance

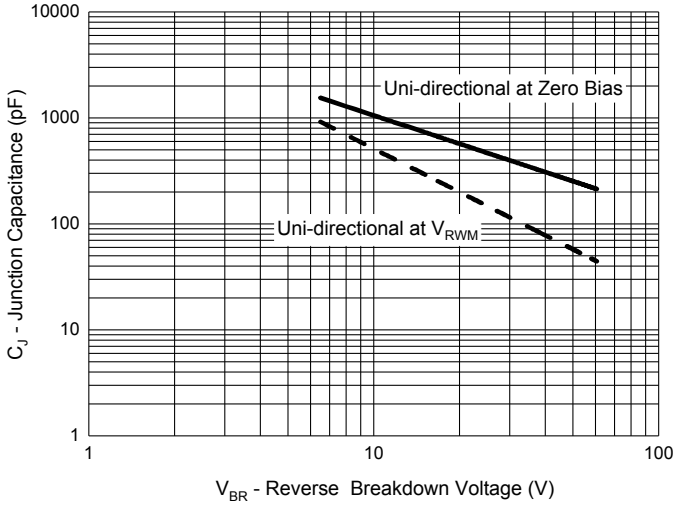


Fig. 3 - Pulse Waveform

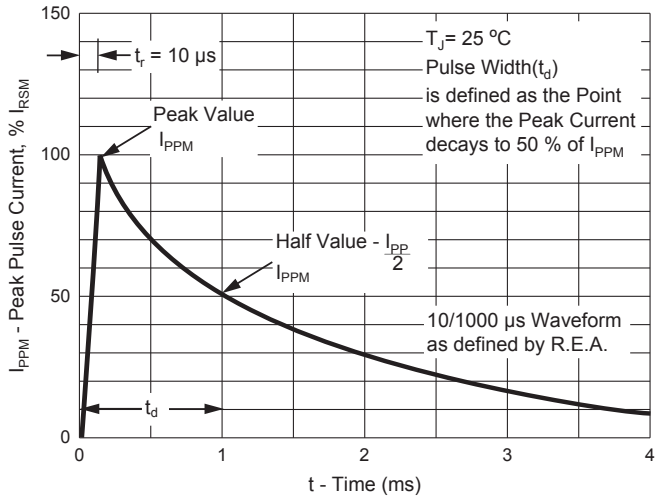
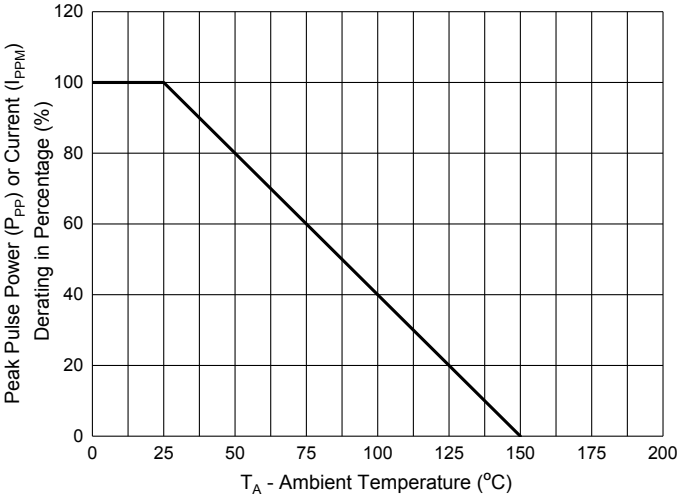


Fig. 4 - Pulse Derating Curve



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel:2.5Kpcs/Reel

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF