

Features

- Uni Polar Unit
- Low Leakage
- Very Fast Response Time
- Excellent Clamping Capability
- Halogen Free. "Green" Device (Note 1)
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant (Note 2) ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings

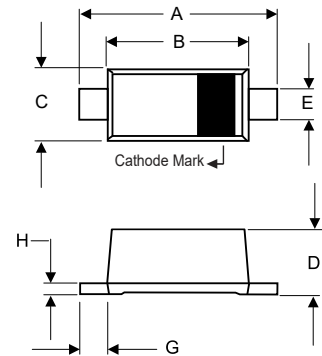
- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C

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 3
Maximum instantaneous forward voltage at 25A for unidirectional only	V _F	3.5V	
IEC61000-4-2(ESD)	Air Contact	±30KV ±30KV	

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
 2. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.
 3. Measured on 8.3 ms single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum.

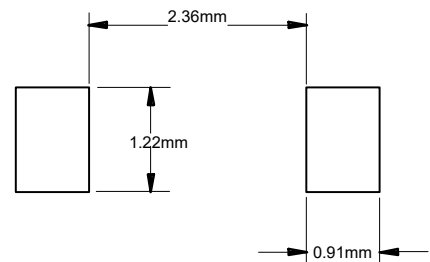
**400 Watt TVS
5.0 to 85 VOLTS**

SOD-123FL



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
		Min(V)	Max(V)					
Uni	$V_{RWM}(V)$	Min(V)	Max(V)	$I_T(mA)$	$V_C(V)$	$I_{PP}(A)$	$I_R(\mu A)$	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

Curve Characteristics

Fig. 1 - Peak Pulse Power Rating Curve

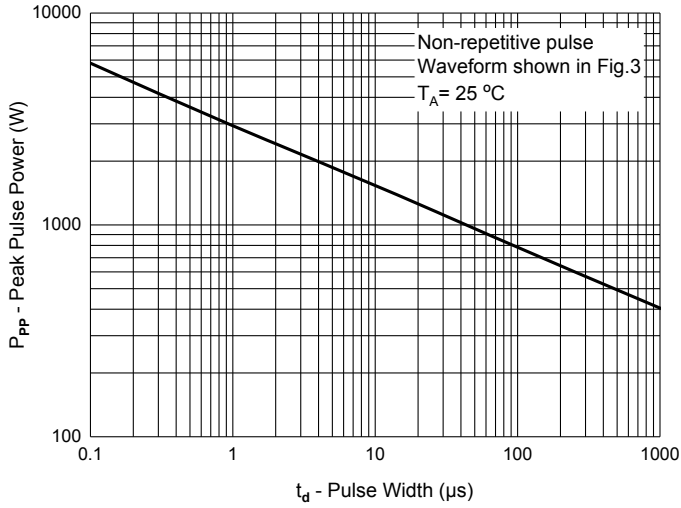


Fig. 2 - Typical Junction Capacitance

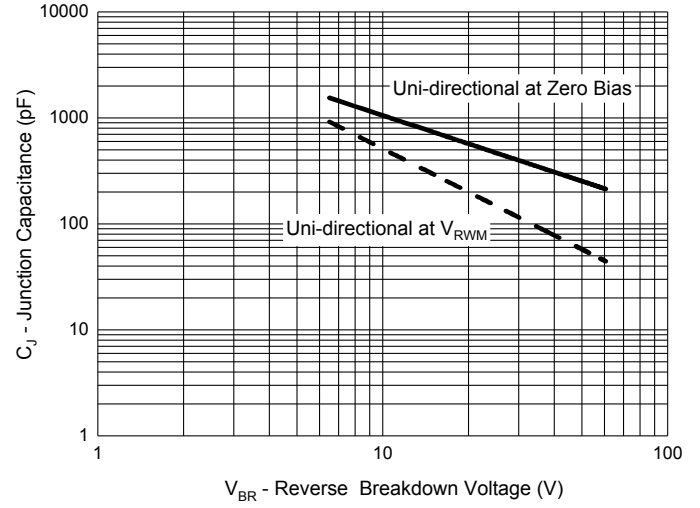


Fig. 3 - Pulse Waveform

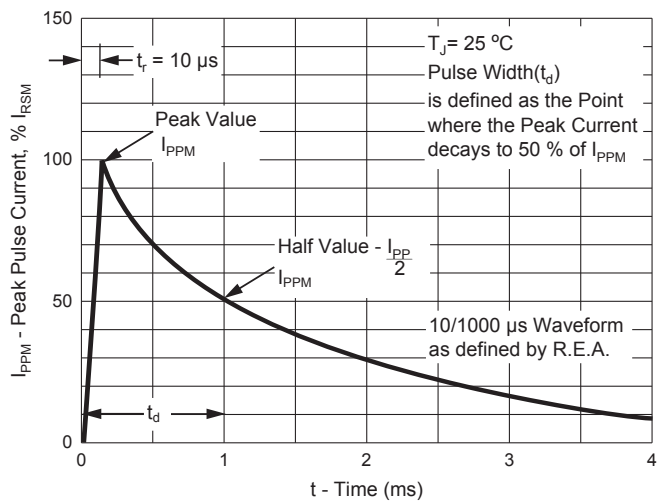
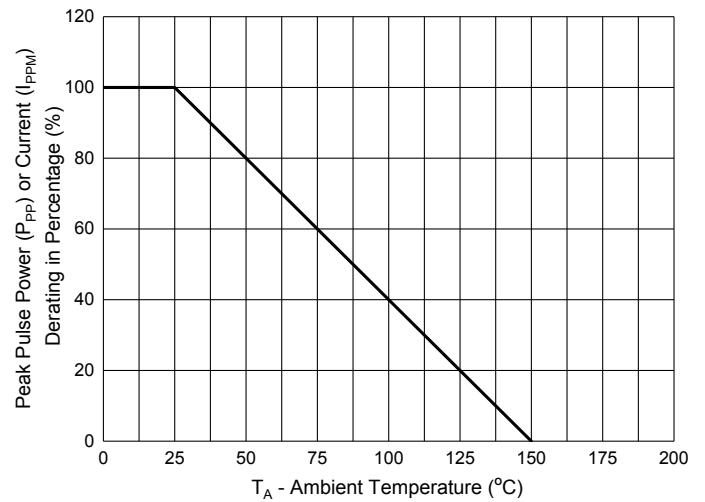


Fig. 4 - Pulse Derating Curve



Ordering Information

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

*****IMPORTANT NOTICE*****

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. *Micro Commercial Components Corp.* does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold *Micro Commercial Components Corp.* and all the companies whose products are represented on our website, harmless against all damages.

*****LIFE SUPPORT*****

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

*****CUSTOMER AWARENESS*****

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [ESD Suppressors / TVS Diodes](#) category:

Click to view products by [Micro Commercial Components \(MCC\)](#) manufacturer:

Other Similar products are found below :

[NTE4902](#) [P4SMAJ15A](#) [P4SMAJ26A](#) [SMAJ400CA-TP](#) [TGL34-47CA](#) [ESDAULC45-1BF4](#) [SM1605E3/TR13](#) [SMF20A-TP](#) [P4SMAJ12A](#)
[CPDUR24V-HF](#) [CPDQC5V0USP-HF](#) [CPDQC5V0-HF](#) [MPLAD30KP45CAE3](#) [MMBZ27VCLQ-7-F](#) [MMAD1108/TR13](#) [MPLAD30KP24A](#)
[ACPDQC5V0R-HF](#) [DFLT170A-7](#) [NTE4900](#) [NTE4926](#) [NTE4938](#) [SMF22A-TP](#) [SMF12A-TP](#) [SLVU2.8-TP](#) [SMLJ6.5CA-TP](#) [SMAJ6.5CA-](#)
[TP](#) [MMAD1108E3/TR13](#) [D5V0M1U2LP3-7](#) [SMAJ400A-TP](#) [AOZ8811DT-03](#) [AOZ8831DI-05](#) [AOZ8831DT-03](#) [SMAJ188CA](#) [3SMC33CA](#)
[BK](#) [CPDQC3V3C-HF](#) [CPDQC12VE-HF](#) [MPLAD30KP170CA](#) [82357120100](#) [5.0SMLJ15CA-TP](#) [5KP18A-TP](#) [P6KE8.2A-TP](#)
[MPLAD30KP43CAE3](#) [SMAJ43A-TP](#) [D5V0F6U8LP33-7](#) [TVS5501V10MUT5G](#) [5.0SMLJ24CA-TP](#) [SMAJ110CA-TP](#) [MPLAD15KP75CAE3](#)
[MMAD1103e3/TR13](#) [DFLT40AQ-7](#)