

## Features

- Stand-off Voltage 24 Volts
- Response Time is Typically < 1ns
- Low Leakage Current
- Halogen Free. "Green" Device (Note 1)
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant (Note2) ("P" Suffix Designates Compliant. See Ordering Information)

## Maximum Ratings

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

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Peak Pulse Power (1.2/50µs-8/20µs@2Ω Waveform)	P <sub>PP</sub>	5500W
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V <sub>ESD</sub>	±30KV ±30KV
Peak Forward Surge Current on 1.2/50µs-8/20µs@2Ω Waveform	I <sub>PP</sub>	185A

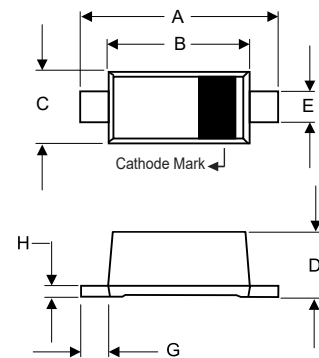
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.  
2. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

## Internal Structure



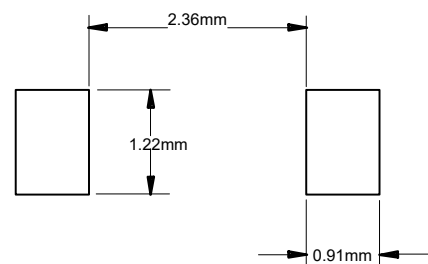
# 5500 Watt TVS

## SOD-123FL



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	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	Reverse Stand-off Voltage $V_{WM}$	Breakdown Voltage $V_{(BR)} @ I_T$ (Volts)			Maximum Clamping Voltage $V_C @ I_{PP}$	Peak Pluse Current $I_{PP}^{(3)}$	Maximum Reverse Leakage $I_D @ V_{WM}$	Marking Code
	Volts	Min	Max	$I_T$ (mA)	Volts	(Amps)	( $\mu$ A)	
SMF24BH	24.0	26.7	29.5	1	32	185	1.0	24BF

Note: 3. Peak Pulse Current (Surge Waveform: 1.2/50 $\mu$ s-8/20 $\mu$ s@2 $\Omega$ )

Curve Characteristics

Fig.1 - Pulse Waveform (1.2/50us)

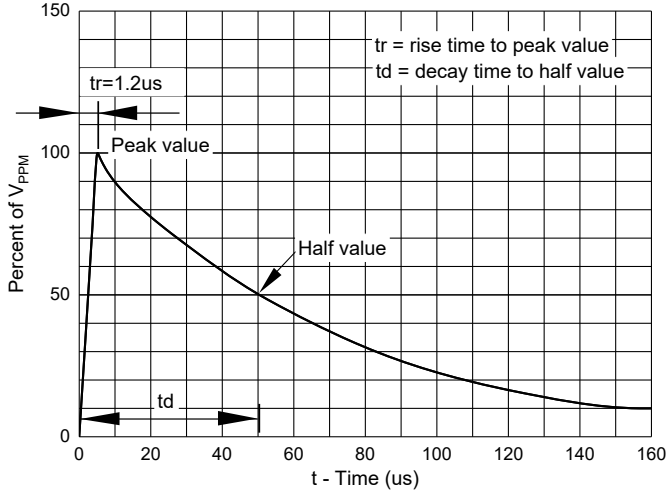


Fig.2 - ESD Clamping (30kV contact)

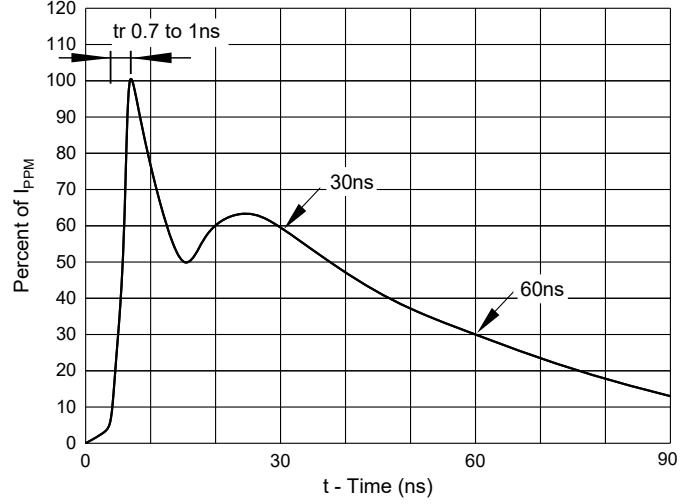
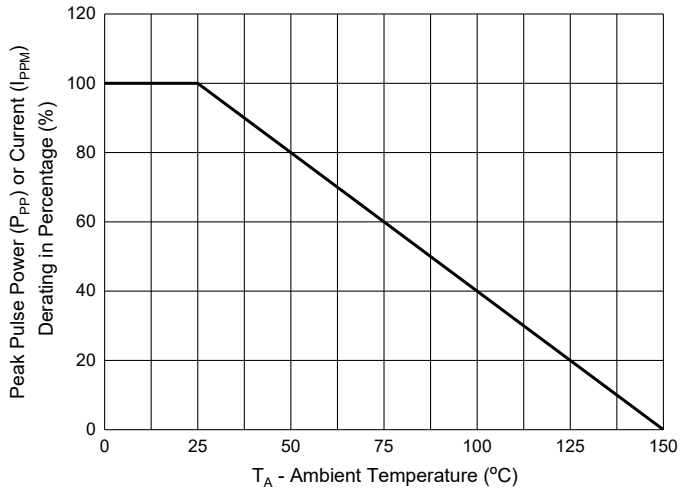


Fig. 3 - Pulse Derating Curve



## Ordering Information

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

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

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