Features

- For surface mounted applications
- Low Profile Package
- Halogen Free. "Green" Device (Note 1)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant (Note 2)("P" Suffix Designates RoHS Compliant. See Ordering Information)

200Watt TVS 6.5 to 58 Volts

Maximum Ratings

Parameter	Symbol	Value	Unit
Peak Pulse Power Surge Current with a 10/1000μs Waveform (Note 3)	I_{PPM}	See Next Table	A
Peak Pulse Power Dissipation(Note 3)	P_{PPM}	200	W
PowerDissipatoin on Infinite Heatsink at T_L= 75°C	P_D	1	W
Maximum instantaneous forward Voltage at I_F=1A	V_F	1.2	V

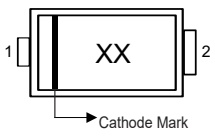
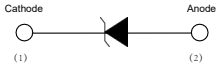
Thermal Characteristics(@ 25°C Unless Otherwise Specified)

Parameter	Symbol	Rating	Unit
Operating Junction Temperature Range	T_J	-55 to +150	˚C
Storage Temperature Range	T_{STG}	-55 to +150	˚C
Typical Thermal Resistance Junction to Lead	$R_{\theta JL}$	100	℃/W
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	300	℃/W

Note:

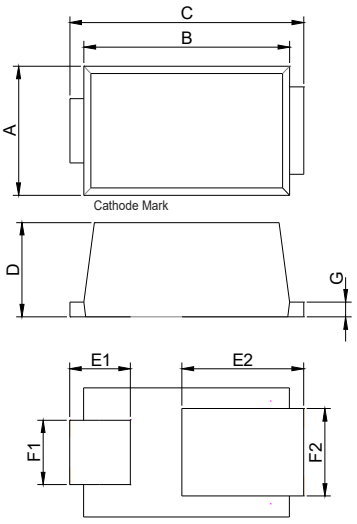
1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
2. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.
3. Non-repetitive current pulse, per Fig.3 and derated above TA=25 °C per Fig.4.
4. 8.3ms, single half sine wave duty cycle = 4 pulses per Minutes maximum.
5. Mounted on P.C.B. with 5mm*5mm copper pad areas.

Internal Structure

Description	Simplified outline	Graphic symbol
Uni-directional		

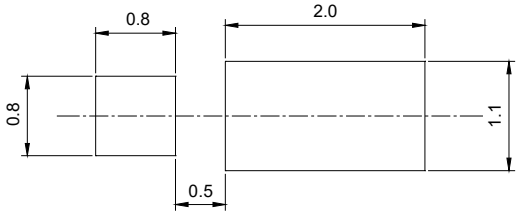
XX = Marking code

SOD-323HE-B



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.047	0.055	1.20	1.40	
B	0.083	0.091	2.10	2.30	
C	0.091	0.106	2.30	2.70	
D	0.035	0.039	0.90	1.00	
E1	0.022	0.030	0.55	0.75	
E2	0.043	0.059	1.10	1.50	
F1	0.022	0.030	0.55	0.75	
F2	0.031	0.039	0.78	0.98	
G	0.005	0.011	0.12	0.27	

Suggested Solder Pad Layout(mm)



Electrical Characteristics @ 25°C Unless Otherwise Specified

MCC Part Number	Working Peak Reverse Voltage	Breakdown Voltage V_{BR} @I_T			Maximun Clamping Voltage @I_{PP}	Maximum Reverse Surge Current	Maximum Reverse Leakage @V_{RWM}	Device Marking Code
	V_{RWM}(V)	Min (V)	Max (V)	I_T (mA)	V_C(V)	I_{PP}(A)	I_R(μA)	
SMHEB6.5A	6.5	7.22	7.98	10	11.2	17.86	250	HK
SMHEB7.0A	7	7.78	8.6	10	12	16.67	100	HM
SMHEB7.5A	7.5	8.33	9.21	1	12.9	15.50	50	HP
SMHEB8.0A	8	8.89	9.83	1	13.6	14.71	25	HR
SMHEB8.5A	8.5	9.44	10.4	1	14.4	13.89	10	HT
SMHEB9.0A	9	10	11.1	1	15.4	12.99	5	HV
SMHEB10A	10	11.1	12.3	1	17	11.76	2.5	HX
SMHEB11A	11	12.2	13.5	1	18.2	10.99	2.5	HZ
SMHEB12A	12	13.3	14.7	1	19.9	10.05	2.5	JE
SMHEB13A	13	14.4	15.9	1	21.5	9.30	1	JG
SMHEB14A	14	15.6	17.2	1	23.2	8.62	1	JK
SMHEB15A	15	16.7	18.5	1	24.4	8.20	1	JM
SMHEB16A	16	17.8	19.7	1	26	7.69	1	JP
SMHEB17A	17	18.9	20.9	1	27.6	7.25	1	JR
SMHEB18A	18	20	22.1	1	29.2	6.85	1	JT
SMHEB19A	19	21.1	23.3	1	30.6	6.54	1	JV
SMHEB20A	20	22.2	24.5	1	32.4	6.17	1	JX
SMHEB22A	22	24.4	26.9	1	35.5	5.63	1	JZ
SMHEB24A	24	26.7	29.5	1	38.9	5.14	1	KE
SMHEB26A	26	28.9	31.9	1	42.1	4.75	1	KG
SMHEB28A	28	31.1	34.4	1	45.4	4.41	1	KK
SMHEB30A	30	33.3	36.8	1	48.4	4.13	1	KM
SMHEB33A	33	36.7	40.6	1	53.3	3.75	1	KP
SMHEB36A	36	40	44.2	1	58.1	3.44	1	KR
SMHEB40A	40	44.4	49.1	1	64.5	3.10	1	KT
SMHEB43A	43	47.8	52.8	1	69.4	2.88	1	KV
SMHEB45A	45	50	55.3	1	72.7	2.75	1	KX
SMHEB48A	48	53.3	58.9	1	77.4	2.58	1	KZ
SMHEB51A	51	56.7	62.7	1	82.4	2.43	1	ME
SMHEB54A	54	60	66.3	1	87.1	2.30	1	MG
SMHEB58A	58	64.4	71.2	1	93.6	2.14	1	MK

Curve Characteristics

Fig.1-Peak Pulse Power Rating Curve

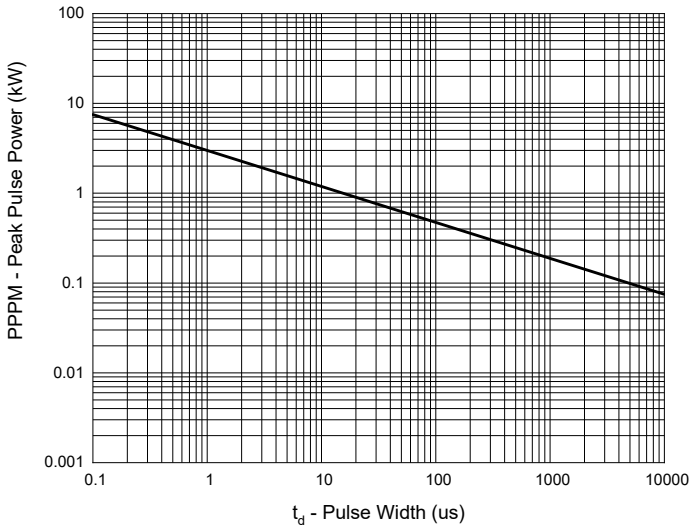


Fig. 2 - Typical Junction Capacitance

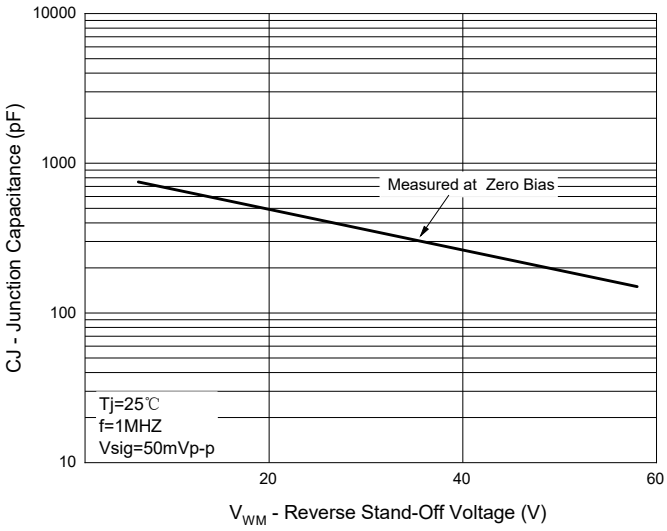


Fig. 3 - Pulse Waveform

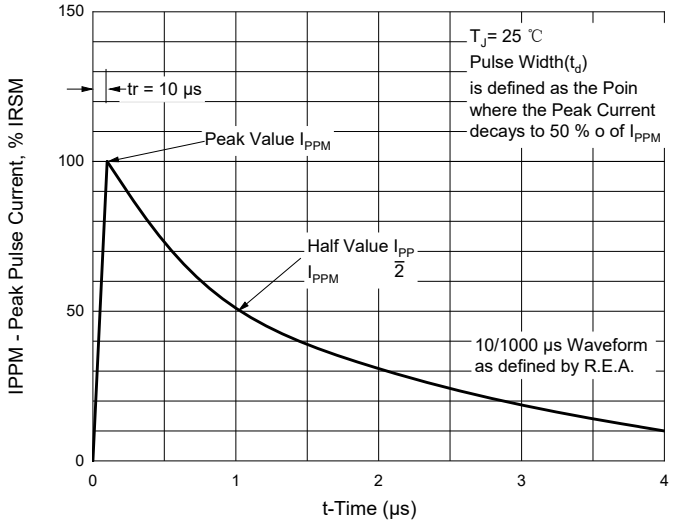
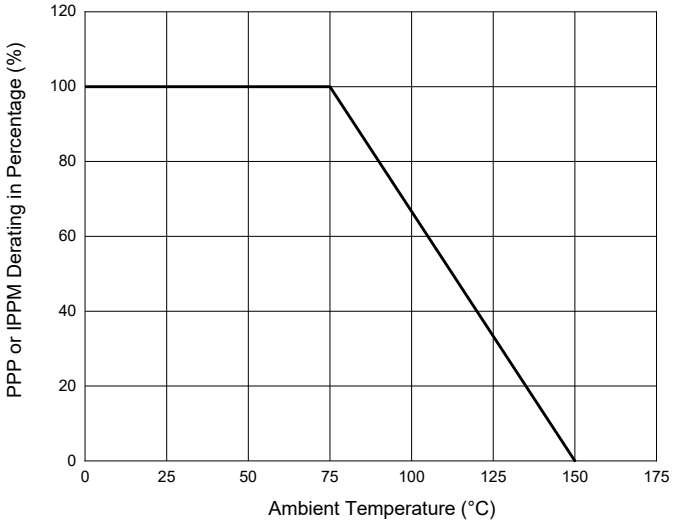


Fig. 4 - Pulse Derating Curve



Ordering Information

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