

Features

- For Surface Mount Applications
- 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 (Note2) ("P" Suffix Designates RoHS Compliant. See Ordering Information)
- ESD protection of data lines in accordance with IEC 61000-4-2, $\pm 30\text{kV(Air)}, \pm 30\text{kV (Contact)}$

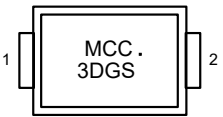
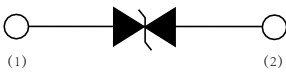
Maximum Ratings

Parameter	Symbol	Value	Unit
Peak Pulse Power Surge Current with a 10/1000 μs Waveform	I_{PPM}	See Next Table	A
Peak Pulse Power Dissipation	P_{PPM}	3000	W
Power Dissipation on Infinite Heatsink at $T_L = 75^\circ\text{C}$	P_D	5	W
Operating Junction Temperature Range	T_J	-55 to +150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ\text{C}$

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. Mounted on 0.2 x 0.2" (5.0 x 5.0 mm) copper pads to each terminal.

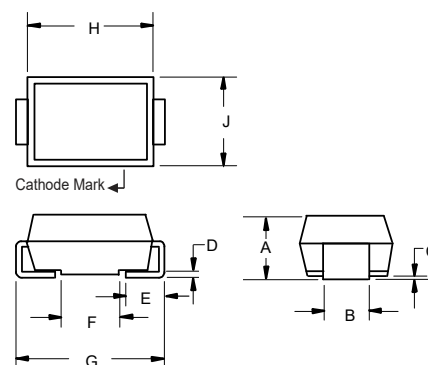
Internal Structure

Description	Simplified outline	Graphic symbol
Bi-directional		

■: The locations of the dots represent different product lines

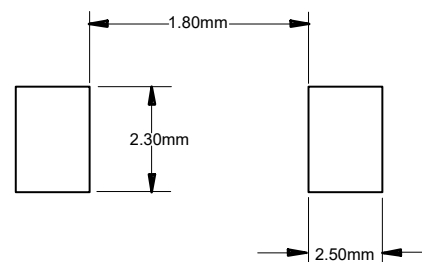
3000 Watt TVS 58V

SMB (DO-214AA) (LEAD FRAME)



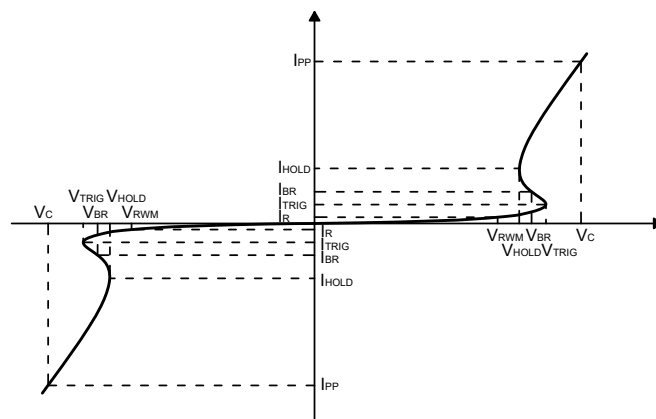
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.079	0.103	2.00	2.62	
B	0.075	0.087	1.91	2.21	
C	0.002	0.008	0.05	0.20	
D	0.006	0.012	0.15	0.31	
E	0.030	0.060	0.76	1.52	
F	0.065	0.091	1.65	2.32	
G	0.200	0.220	5.08	5.59	
H	0.160	0.191	4.06	4.85	
J	0.130	0.155	3.30	3.94	

Suggested Solder Pad Layout



Electrical Characteristics Curve

Symbol	Parameter
V_{RWM}	Peak Reverse Working Voltage
I_R	Reverse Leakage Current @ VRWM
V_{BR}	Breakdown Voltage @ IT
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ IPP
V_{TRIG}	Reverse Trigger Voltage
I_{TRIG}	Reverse Trigger Current
V_{HOLD}	Reverse Holding Voltage
I_{HOLD}	Reverse Holding Current



Electrical Characteristics @ 25°C Unless Otherwise Specified

MCC Part Number	Working Peak Reverse Voltage	Breakdown Voltage VBR @IT			Clamping Voltage VC@IPP	Maximum Reverse Surge Current	Maximum Reverse Leakage @VRWM	Device Marking Code
	V _{RWM(V)}	Min (V)	Max (V)	IT (mA)	Max(V)	IPP(A)	IR(μA)	
3.0SMBJS58CA	58	64.4	71.2	1	93.6	32.1	5	3DGS

Curve Characteristics

Fig. 1 - Peak Pulse Power Rating Curve

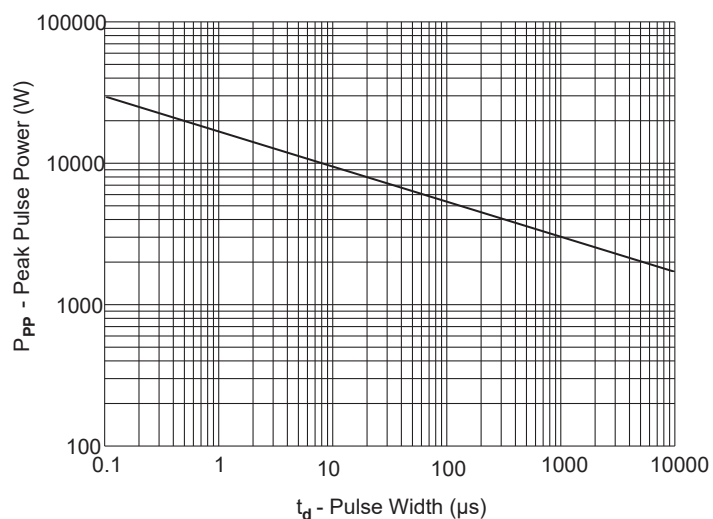


Fig. 2- Pulse Derating Curve

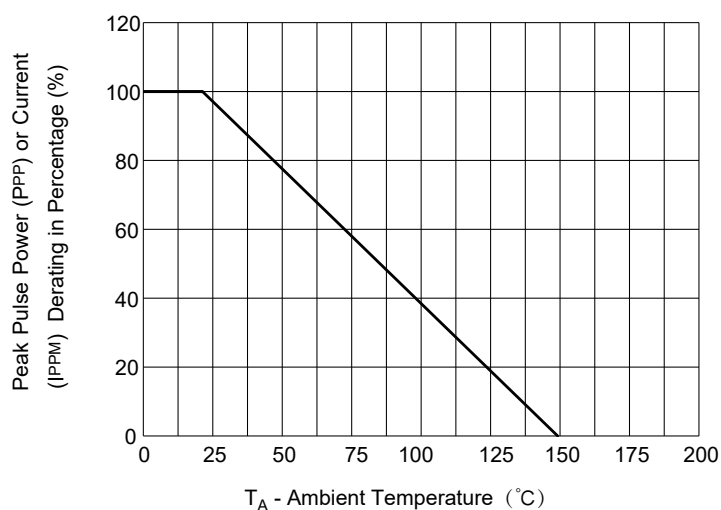
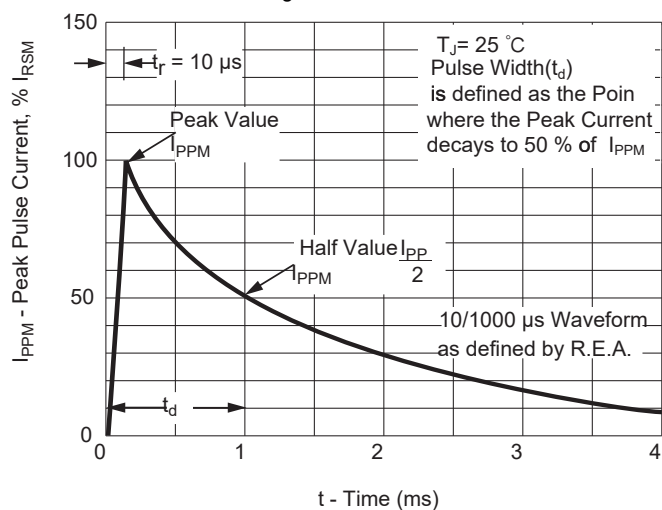


Fig. 3 - Pulse Waveform



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel:3Kpcs/Reel

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