

Features

- AEC-Q101 Qualified
- Meet ISO7637-2 5a Surge Specification
- Low Leakage
- Glass Passivated Junction
- Excellent Clamping Capability
- Bi-directional Polarity
- 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)

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +175°C
- Storage Temperature Range: -55°C to +175°C

Peak Pulse Power Surge Current with a 10/1000µs Waveform	I_{PPM}	See the Table	Note 2
Peak Pulse Power Dissipation with a 10/1000µs Waveform	P_{PPM}	6600W	Note 2
Peak Pulse Power Dissipation with a 10/10000µs Waveform	P_{PPM}	3650W	Note 2
Power Dissipation On Infinite Heatsink	P_D	8.0W	$T_L=25^\circ C$

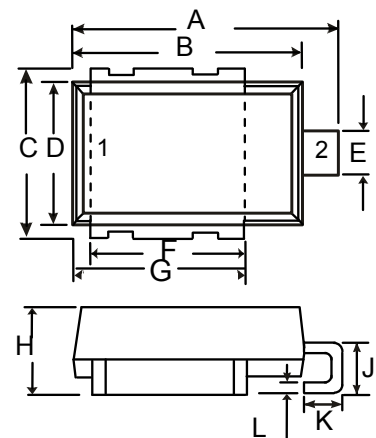
Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7a.
2. Non-repetitive current pulse, per Fig.3 and derated above $T_A=25^\circ C$ per Fig.4

Pin Configuration:



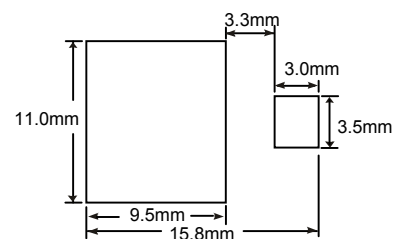
**6600 Watt
TVS
14 to 43 Volts**

DO-218AB



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.590	0.630	15.00	16.00	
B	0.524	0.539	13.30	13.70	
C	0.374	0.413	9.50	10.50	
D	0.323	0.339	8.20	8.60	
E	0.091	0.114	2.30	2.90	
F	0.343	0.366	8.70	9.30	
G	0.382	0.406	9.70	10.30	
H	0.189	0.205	4.80	5.20	
J	0.098	0.138	2.50	3.50	
K	0.067	0.106	1.70	2.70	
L	0.020	0.028	0.50	0.70	

SUGGESTED SOLDER PAD LAYOUT



Electrical Characteristics @ 25°C Unless Otherwise Specified

MCC Part Number	Breakdown Voltage V_{BR} @ I_T			Maximum Reverse Leakage I_R @ V_{RWM} (μA)	Maximum I_R @ V_{RWM} $T_J=150$ (μA)	Working Peak Reverse Voltage V_{RWM} (V)	Maximum Reverse Surge Current I_{PP} (A) ⁽¹⁾	Maximum Clamping Voltage V_C @ I_{PP} (V)
	Min (V)	Max (V)	I_T (mA)					
SM8S14CA	15.60	17.20	5	10	150	14	284.0	23.2
SM8S15CA	16.70	18.50	5	10	150	15	270.0	24.4
SM8S16CA	17.80	19.70	5	10	150	16	254.0	26.0
SM8S17CA	18.90	20.90	5	10	150	17	239.0	27.6
SM8S18CA	20.00	22.10	5	10	150	18	226.0	29.2
SM8S20CA	22.20	24.50	5	10	150	20	204.0	32.4
SM8S22CA	24.40	26.90	5	10	150	22	186.0	35.5
SM8S24CA	26.70	29.50	5	10	150	24	170.0	38.9
SM8S26CA	28.90	31.90	5	10	150	26	157.0	42.1
SM8S28CA	31.10	34.40	5	10	150	28	145.0	45.4
SM8S30CA	33.30	36.80	5	10	150	30	136.0	48.4
SM8S33CA	36.70	40.60	5	10	150	33	124.0	53.3
SM8S36CA	40.00	44.20	5	10	150	36	114.0	58.1
SM8S40CA	44.40	49.10	5	10	150	40	102.0	64.5
SM8S43CA	47.80	52.80	5	10	150	43	95.1	69.4

Note: 1. Surge current waveform is defined at 10/1000us waveform

Curve Characteristics

Fig. 1 - Peak Pulse Power Rating Curve

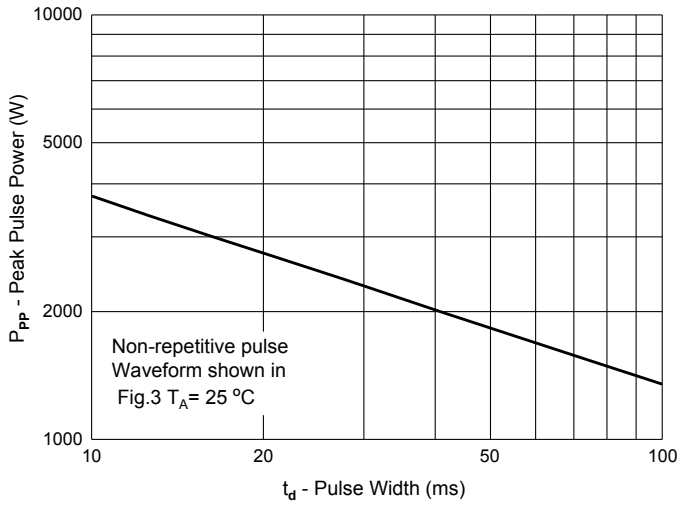


Fig. 2 - Typical Junction Capacitance

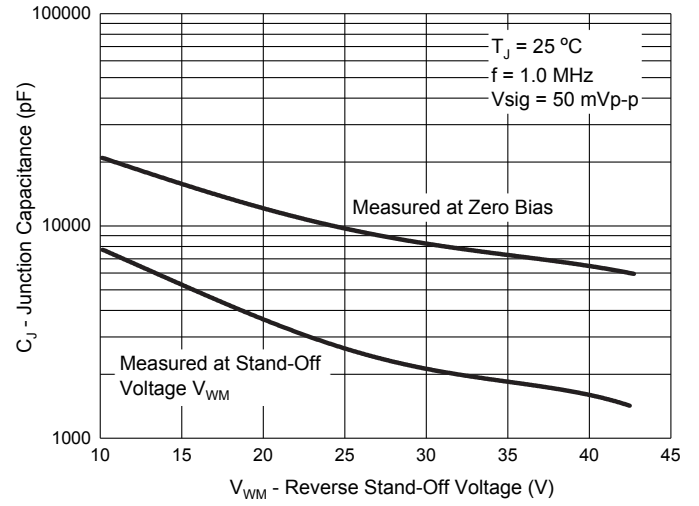


Fig. 3 - Pulse Waveform

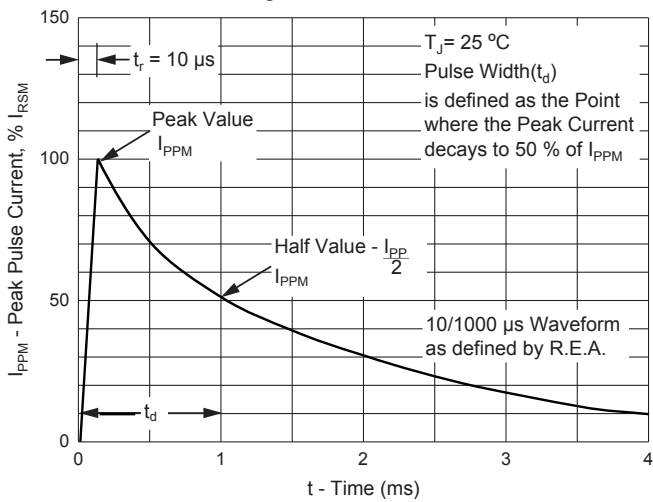
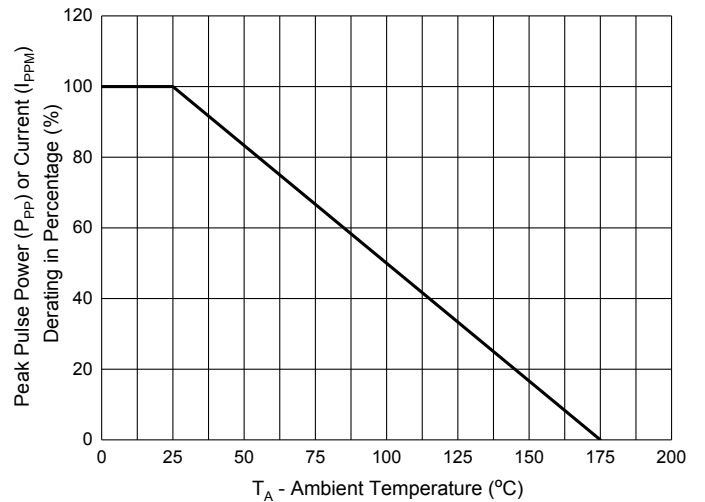


Fig. 4 - Pulse Derating Curve



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel:750pcs/Reel

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

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