

Surface Mount Transient Voltage Suppressor Rectifiers

Reverse Voltage 12.0 ~ 36.0 V

6600 Watt Peak Pulse Power

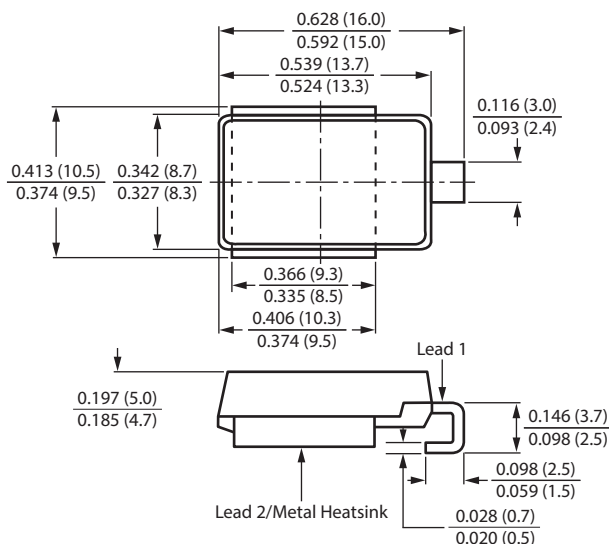
Features

- Glass passivated chip
- 6600W peak pulse power capability with a 10/1000 us waveform, repetitive rate (duty cycle):0.01 %
- Excellent clamping capability
- Low reverse leakage
- Very fast response time
- Lead and body according with RoHS standard

Mechanical Data

- Case:DO-218AB Molded plastic
- Lead: Solderable per MIL-STD-750, method 2026
- Epoxy: UL 94V-0 rate flame retardant
- Compliant to RoHS directive 2002/95/EC and in accordance to WEEE 2002/96/EC
- Mounting position: Any
- System: Accreditation through IATF16949 System
- High reliability grade (AEC Q101 qualified)

DO-218AB



Unit: inch (mm)

Maximum Ratings & Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbols	Value	Unit
Peak power dissipation with a 10/1000 us waveform ⁽¹⁾	P _{PPM}	6600	W
Peak power dissipation with a 10/10000 us waveform ⁽¹⁾		5200	
Peak pulse current with a 10/1000 us waveform ⁽¹⁾	I _{PPM}	See Next Table	A
Power dissipation on infinite heat sink at TL = 75 °C	P _D	8.0	W
Operating junction and storage temperature range	T _J , T _{STG}	-55 to +150	°C

Note:

1)Non-repetitive current pulse per Fig.5 and derated above TA= 25 °C per Fig.1 ;

Part Number	Reverse Stand-off Voltage	Breakdown Voltage $V_{BR} @ I_T$		Test Current	Max. Clamping Voltage @ I_{PP}	Max. Peak Pulse Current	Max. Reverse Leakage @ V_{RWM}
		Min.(V)	Max.(V)				
BI-POLAR	$V_{RWM}(V)$			$I_T(mA)$	$V_{C MAX.}(V)$	$I_{PP}(A)$	$I_R(\mu A)$
SM8S12CA	12.0	13.30	14.70	5	19.9	332	150
SM8S13CA	13.0	14.40	15.90	5	21.5	307	150
SM8S14CA	14.0	15.60	17.20	5	23.2	284	150
SM8S15CA	15.0	16.70	18.50	5	24.4	270	150
SM8S16CA	16.0	17.80	19.70	5	26.0	253	150
SM8S17CA	17.0	18.90	20.90	5	27.6	239	150
SM8S18CA	18.0	20.00	22.10	5	29.2	226	150
SM8S20CA	20.0	22.20	24.50	5	32.4	204	150
SM8S22CA	22.0	24.40	26.90	5	35.5	186	150
SM8S24CA	24.0	26.70	29.50	5	38.9	170	150
SM8S26CA	26.0	28.90	31.90	5	42.1	157	150
SM8S28CA	28.0	31.10	34.40	5	45.4	145	150
SM8S30CA	30.0	33.30	36.80	5	48.4	136	150
SM8S33CA	33.0	36.70	40.60	5	53.3	124	150
SM8S36CA	36.0	40.00	44.20	5	58.1	114	150

Ratings and Characteristics Curves (TA=25°C unless otherwise noted)

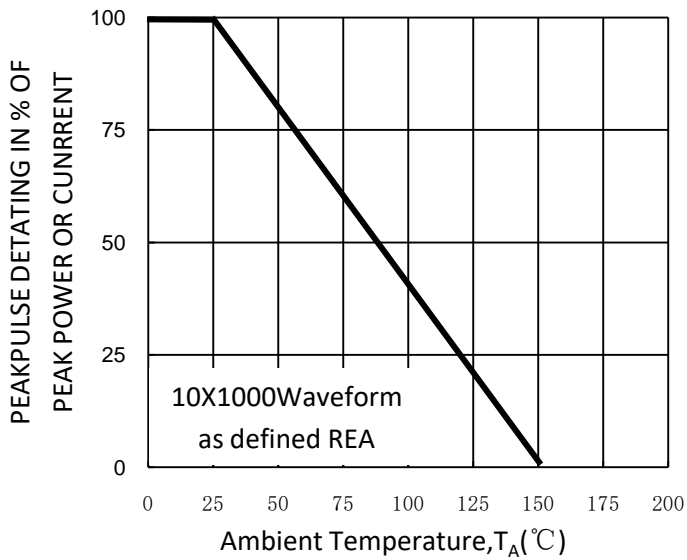


Fig. 1-Pulse Derating Curve

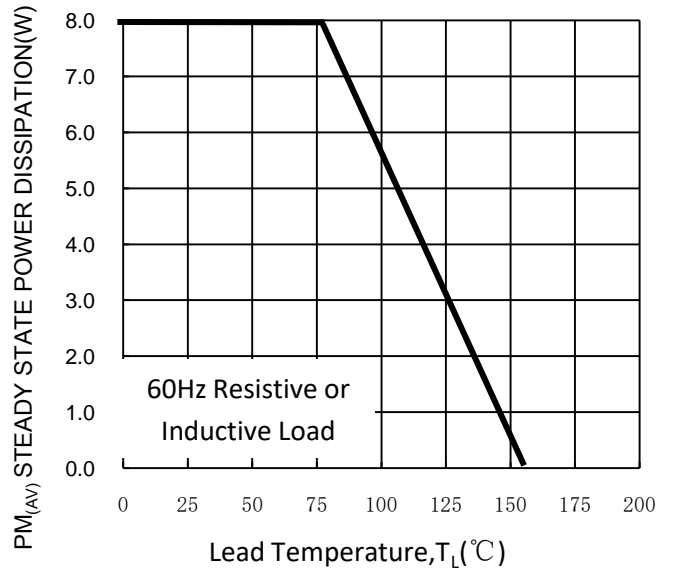


Fig. 2-Steady State Power Derating Curve

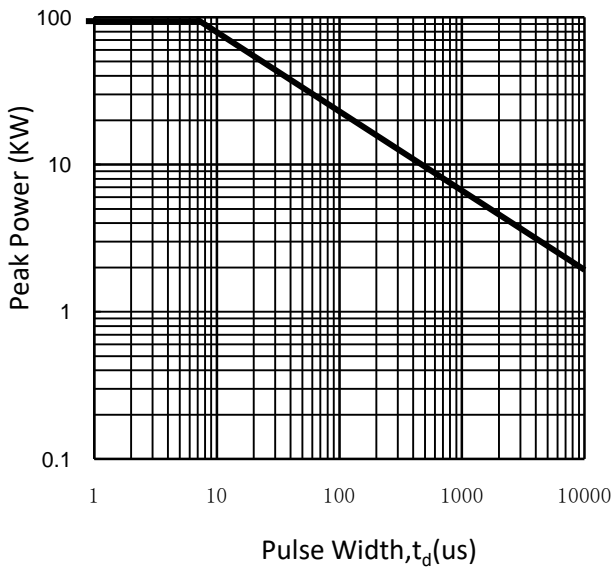


Fig. 3-Peak Pulse Power Rating Curve

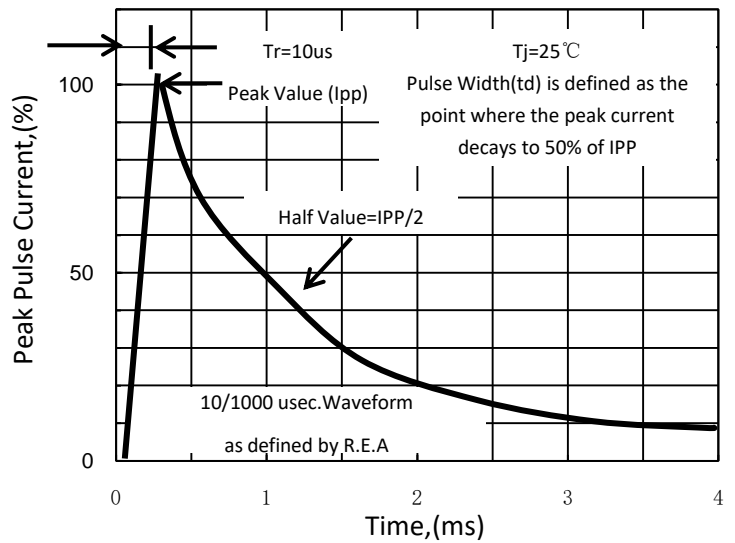


Fig. 4-Pulse Waveform

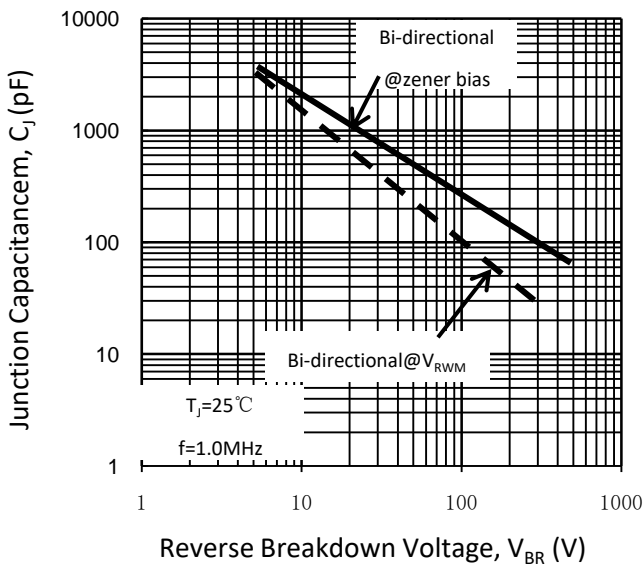


Fig. 5-Typical Junction Capacitance