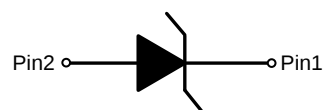
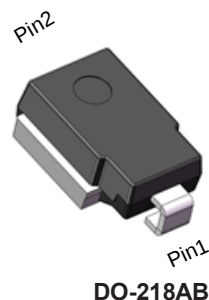


Transient Voltage Suppressors

FEATURES

- Available in uni-directional polarity only
- Peak pulse power:
 - 6600 W (10/1000 μ s)
- Stand off voltage range: 24 V
- Unidirectional types
- Low leakage current:
 - 10 μ A at 25 °C
 - 150 μ A at 175°C
- Operating $T_{j\ max}$: 175°C
- JEDEC registered package outline
- Resin meets UL 94, V0
- AEC-Q101



Circuit diagram

Complies with the following standards

- ISO 10605, C = 150 pF, R = 330 Ω :
 - 30 kV (air discharge)
 - 30 kV (contact discharge)
- ISO 10605, C = 330 pF, R = 330 Ω :
 - 30 kV (air discharge)
 - 30 kV (contact discharge)

Order information

Device	Marking	Package	Shipping
SM8S66J24V	SM6S 24A	DO-218AB	750

ELECTRICAL CHARACTERISTICS (JEDEC REGISTERED DATA) ($T_A = 25\ ^\circ\text{C}$ unless otherwise noted)						
DEVICE TYPE	BREAKDOWN VOLTAGE V_{BR} AT I_T ⁽¹⁾ (V)		TEST CURRENT I_T (mA)	STAND-OFF VOLTAGE V_{WM} (V)	MAXIMUM REVERSE LEAKAGE AT V_{WM} I_D (μ A)	MAXIMUM PEAK PULSE CURRENT I_{PPM} ⁽²⁾ (A)
	MIN.	MAX.				
SM8S66J24V	26.7	29.5	5.0	24.0	10.0	186.0
						35.5

Notes

- (1) Pulse test: $t_p \leq 50$ ms
- (2) Surge current waveform per fig. 3 and derate per fig. 2
- (3) All terms and symbols are consistent with ANSI/IEEE CA62.35

Transient Voltage Suppressors

IEC Compatibility

ISO7637 2 Test 5A Test Waveform							
Part Number	12V system	24V system	Resistance				
	100V@400ms	174V@350ms	0.5Ω	1Ω	2Ω	4Ω	8Ω
SM8S66J24V	✓	–	–	✓	✓	✓	✓

RATINGS AND CHARACTERISTICS CURVES ($T_A = 25^\circ\text{C}$ unless otherwise noted)

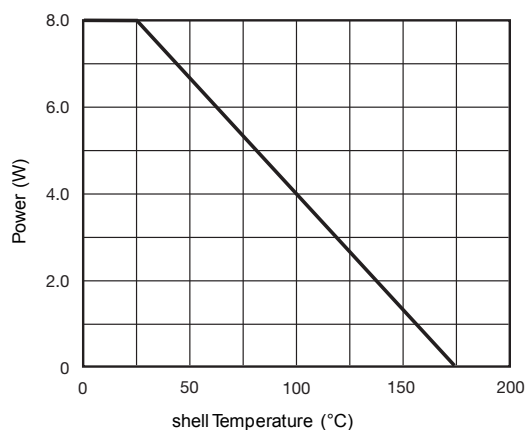


Fig. 1 - Power derating curve

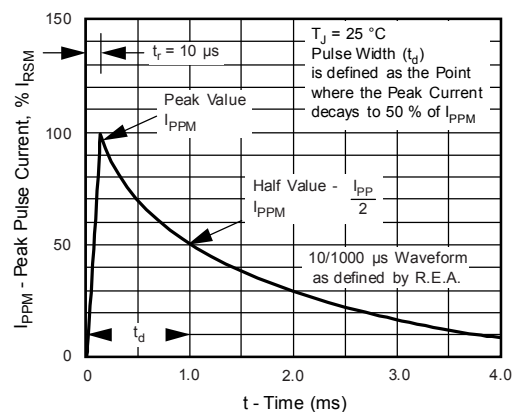


Fig. 2 - Pulse Waveform

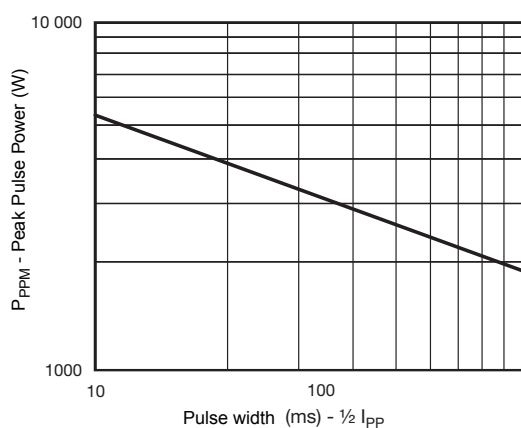


Fig. 3 - Peak Pulse Power Rating Curve

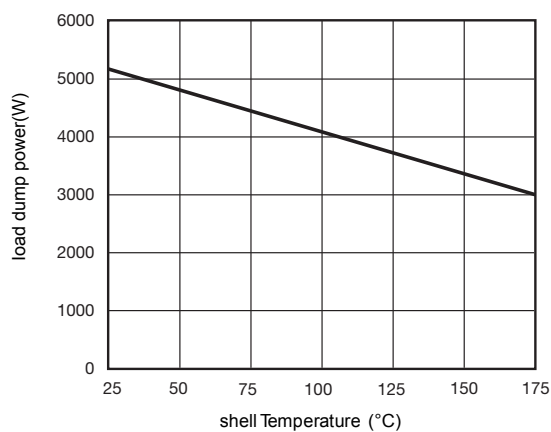
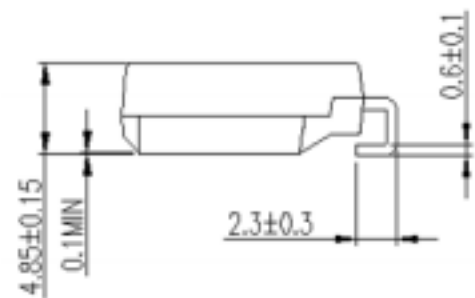
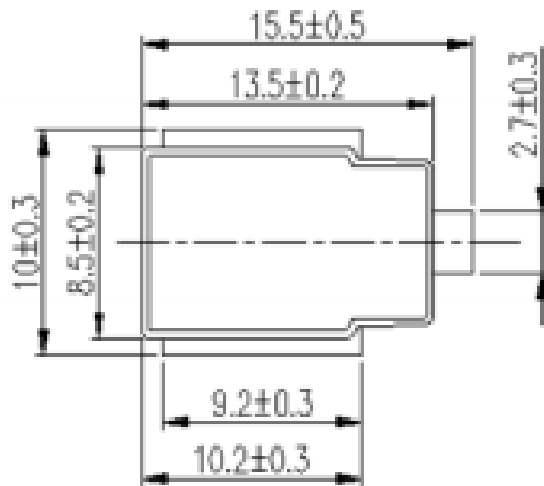


Fig. 4 - load dump power characteristics

Transient Voltage Suppressors

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)



Recommended Mounting Pad Layout Unit:mm

