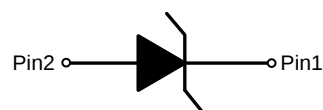
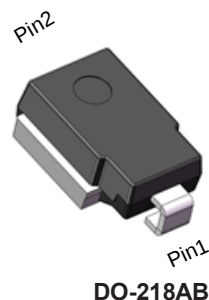


Transient Voltage Suppressors

FEATURES

- Available in uni-directional polarity only
- Peak pulse power:
 - 6600 W (10/1000 μ s)
- Stand off voltage range: 36V
- Unidirectional types
- Low leakage current:
 - 10 μ A at 25 °C
 - 150 μ A at 125°C
- Operating $T_{j\max}$: 150 °C
- JEDEC registered package outline
- Resin meets UL 94, V0
- AEC- Q101 qualified



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)
- ISO 7637-2^(a)
 - Pulse 1: $V_S = -100$ V
 - Pulse 2a: $V_S = +50$ V
 - Pulse 3a: $V_S = -150$ V
 - Pulse 3b: $V_S = +100$ V
 - Pulse 5a: $V_S = +87$ V

Order information

Device	Marking	Package	Shipping
SM8S66J36V	SM6S 36V	DO-218AB	500

ELECTRICAL CHARACTERISTICS (JEDEC REGISTERED DATA) (T _A = 25 °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 (μA)	MAXIMUM PEAK PULSE CURRENT I _{PPM} ⁽²⁾ (A)	MAXIMUM CLAMPING VOLTAGE AT I _{PPM} V _C (V)
	MIN.	MAX.					
SM8S66J36V	40.5	44.5	5.0	36.0	10	114	58.2

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
SM8S66J36V	-	✓	-	-	-	-	✓

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

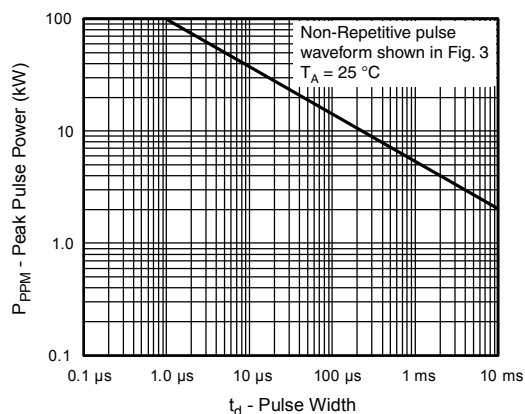


Fig. 1 - Peak Pulse Power Rating Curve

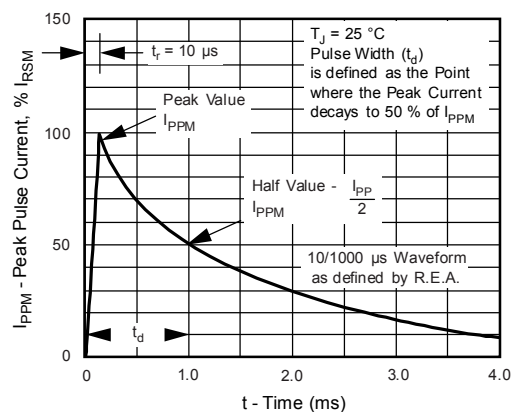


Fig. 3 - Pulse Waveform

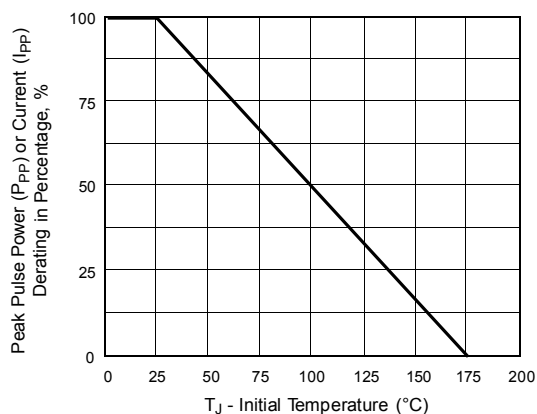


Fig. 2 - Pulse Power or Current vs. Initial Junction Temperature

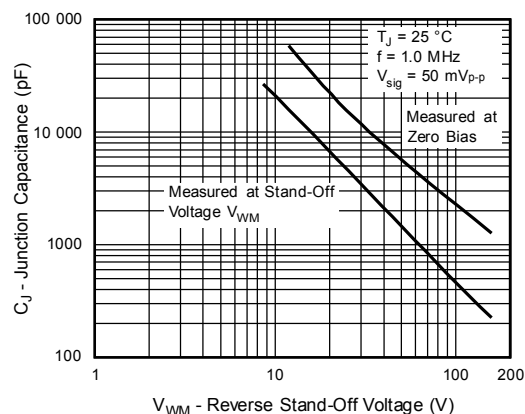
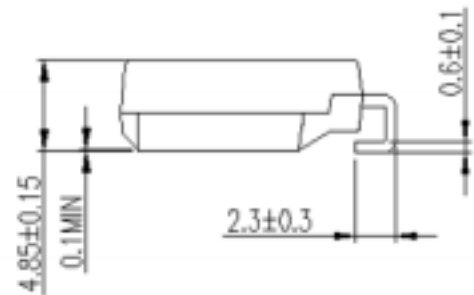
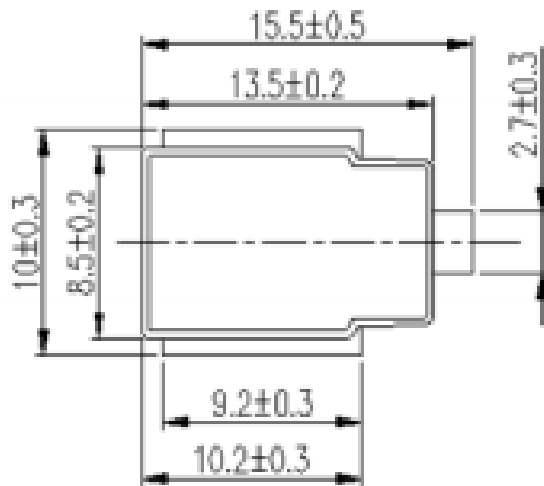


Fig. 4 - Typical Junction Capacitance

Transient Voltage Suppressors

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)



Recommended Mounting Pad Layout Unit:mm

