

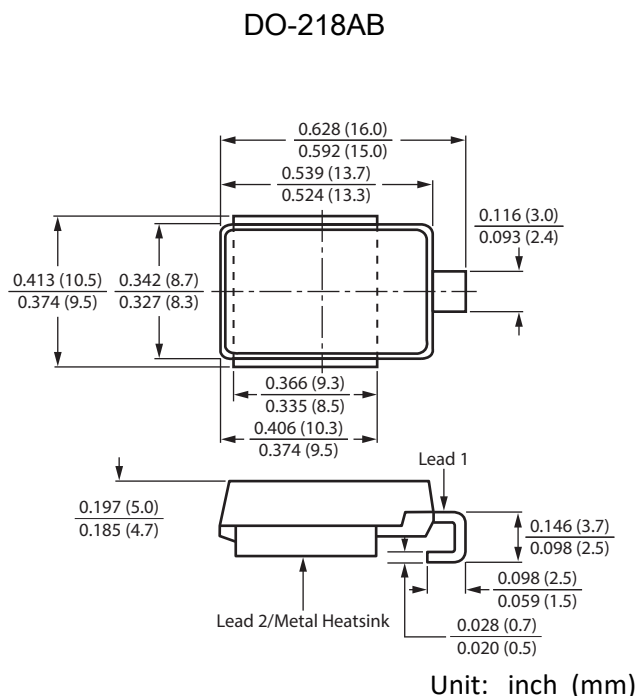
Surface Mount Transient Voltage Suppressor Rectifiers

Features

- Glass passivated chip
- 4600W 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)



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}	4600	W
Peak power dissipation with a 10/10000 us waveform ⁽¹⁾		3600	
Peak pulse current with a 10/1000 us waveform ⁽¹⁾	I_{PPM}	See Next Table	A
Power dissipation on infinite heat sink at $T_c = 25^\circ\text{C}$	P_D	6.0	W
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150	°C

Electrical Characteristics($T_A=25^{\circ}\text{C}$ unless otherwise noted)

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}
UNI-POLAR	$V_{RWM}(V)$	Min.(V)	Max.(V)	$I_T(mA)$	$V_C \text{ MAX.}(V)$	$I_{PP}(A)$	$I_R(\mu A)$
TSM6S10A	10.0	11.10	12.30	5	17.0	271	10
TSM6S11A	11.0	12.20	13.40	5	18.2	253	10
TSM6S12A	12.0	13.30	14.70	5	19.9	231	10
TSM6S13A	13.0	14.40	15.90	5	21.5	214	10
TSM6S14A	14.0	15.60	17.20	5	23.2	198	10
TSM6S15A	15.0	16.70	18.50	5	24.4	189	10
TSM6S16A	16.0	17.80	19.70	5	26.0	177	10
TSM6S17A	17.0	18.90	20.90	5	27.6	167	10
TSM6S18A	18.0	20.00	22.10	5	29.2	158	10
TSM6S20A	20.0	22.20	24.50	5	32.4	142	10
TSM6S22A	22.0	24.40	26.90	5	35.5	130	10
TSM6S24A	24.0	26.70	29.50	5	38.9	118	10
TSM6S26A	26.0	28.90	31.90	5	42.1	109	10
TSM6S28A	28.0	31.10	34.40	5	45.4	101	10
TSM6S30A	30.0	33.30	36.80	5	48.4	95	10
TSM6S33A	33.0	36.70	40.60	5	53.3	86	10
TSM6S36A	36.0	40.00	44.20	5	58.1	79	10

Ratings and Characteristics Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

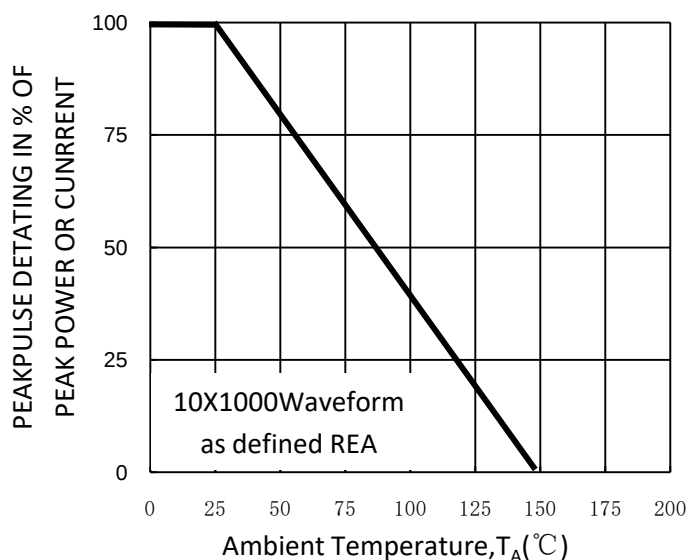


Fig. 1-Pulse Derating Curve

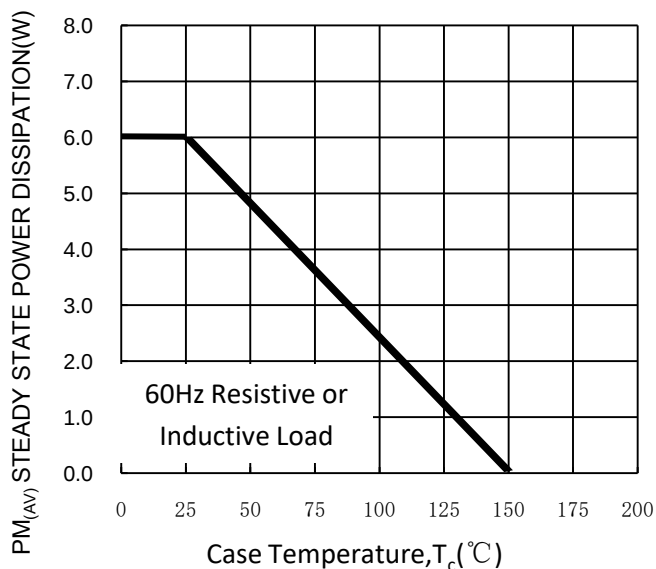


Fig. 2-Steady State Power Derating Curve

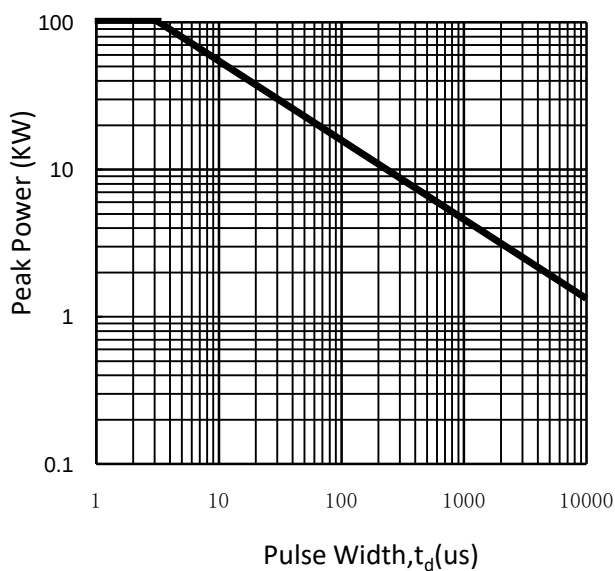


Fig. 3-Peak Pulse Power Rating Curve

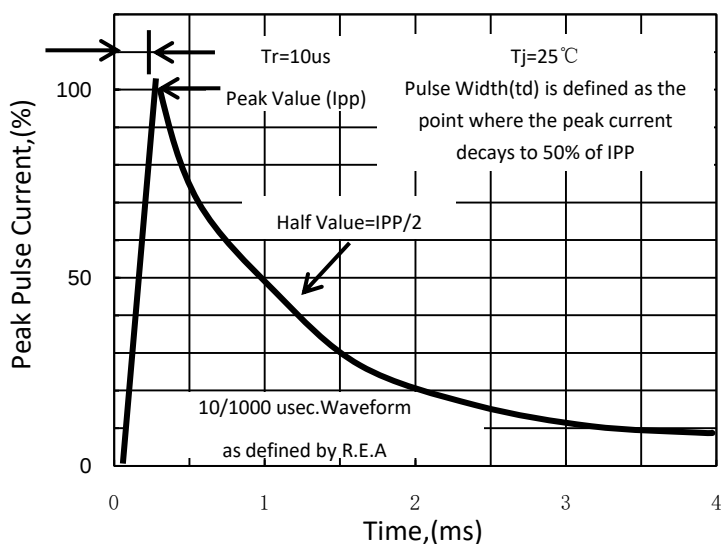


Fig. 4-Pulse Waveform