

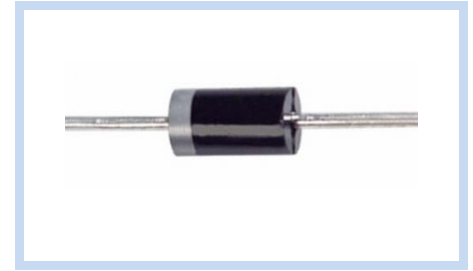
Transient Voltage Suppressors DO-204AC/DO-15 Package

SAC Series

MERITEK

FEATURE

- Peak Pulse Power Dissipation: 500W
- Glass passivated junction. Fast response time. Duty Cycle: 0.01%
- High Temperature soldering guaranteed: 265°C, 10 seconds
- Excellent clamping capability, Low incremental surge resistance
- Solderable per MIL-STD-750, Method 2026
- UL Flammability Classification Rating 94V-0
- UL safety approved: certification No: E223045



MAXIMUM RATINGS AND CHARACTERISTICS

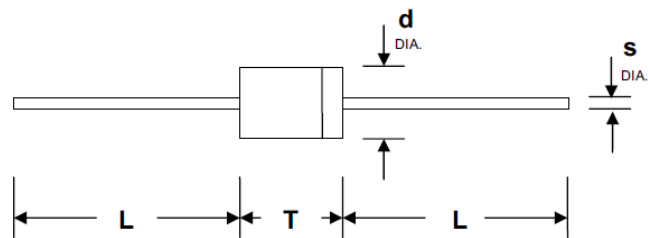
Parameter	Symbol	Value	Unit
Peak Pulse Power Dissipation on 10/1000 μ s waveform. (Note 1, Fig. 1)	P_{PPM}	Minimum 500	Watts
Peak Pulse Current on 10/1000 μ s waveform. (Note 1, Fig. 3)	I_{PPM}	See Table	Amps
Steady State Power Dissipation at $T_L = 75^\circ\text{C}$, Lead length .375" (9.5mm). (Fig. 5)	$P_{M(AV)}$	3.0	Watts
Operating junction and Storage Temperature Range.	T_J, T_{STG}	-55 to +175	$^\circ\text{C}$

Ratings at 25°C ambient temperature unless otherwise specified.

1. Non-repetitive current pulse, per Fig. 3 and derated above $T_A = 25^\circ\text{C}$ per Fig. 2.

DIMENSIONS

Item	DO-204AC/DO-15 (mm)	
	Min.	Max.
L	25.40	-
T	5.80	7.60
d	2.60	3.60
S	0.71	0.86

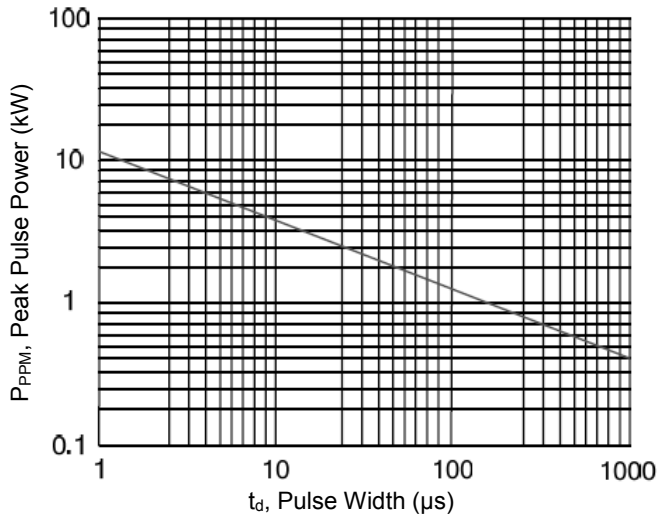


SPECIFICATIONS

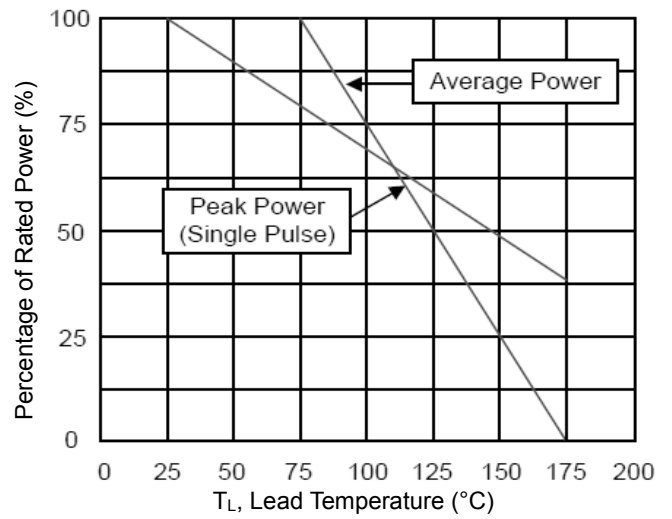
Part Number	Reverse Stand-Off Voltage	Breakdown Voltage Min. @ I_T	Maximum Reverse Leakage @ V_{RWM}	Maximum Clamping Voltage @ I_{PP}	Maximum Peak Pulse Current	Maximum Junction Capacitance @ 0V	Working Inverse Blocking Voltage	Working Blocking Leakage Current	Peak Inverse Blocking Voltage
	V_{RWM} (V)	$V_{BR MIN.}$ (V)	I_R (μA)	V_C (V)	I_{PP} (A)	pF	V_{WIB} (V)	I_{IB} (mA)	V_{PIB} (V)
SAC5.0	5.0	7.60	300	10.0	44.0	50	75	1.0	100
SAC6.0	6.0	7.90	300	11.2	41.0	50	75	1.0	100
SAC7.0	7.0	8.33	300	12.6	38.0	50	75	1.0	100
SAC8.0	8.0	8.89	100	13.4	36.0	50	75	1.0	100
SAC8.5	8.5	9.44	50	14.0	34.0	50	75	1.0	100
SAC10	10.0	11.10	5	16.3	29.0	50	75	1.0	100
SAC12	12.0	13.30	1	19.0	25.0	50	75	1.0	100
SAC15	15.0	16.70	1	23.6	20.0	50	75	1.0	100
SAC18	18.0	20.00	1	28.8	15.0	50	75	1.0	100
SAC22	22.0	24.40	1	35.4	14.0	50	75	1.0	100
SAC26	26.0	28.90	1	42.3	11.1	50	75	1.0	100
SAC30	30.0	33.30	1	48.6	10.0	50	75	1.0	100
SAC36	36.0	40.00	1	60.0	8.6	50	75	1.0	100
SAC45	45.0	50.00	1	77.0	6.8	50	150	1.0	200
SAC50	50.0	55.50	1	88.0	5.8	50	150	1.0	200

CHARACTERISTIC CURVES

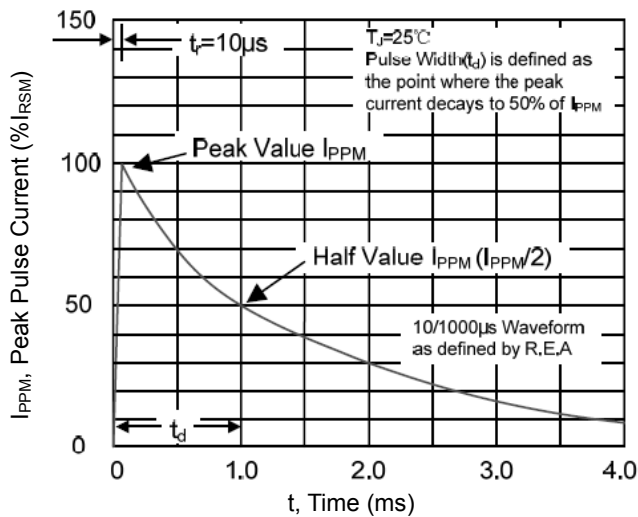
Peak Pulse Power Rating Curve



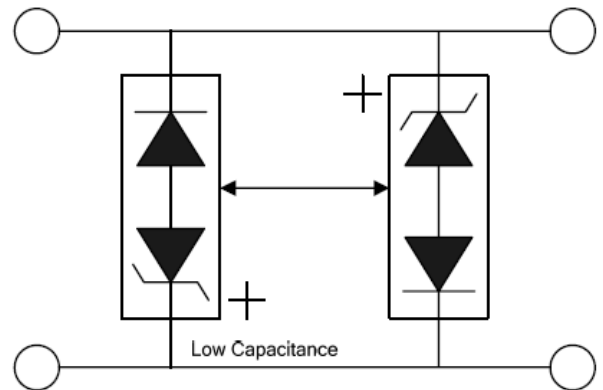
Pulse Derating Curve



Pulse Waveform

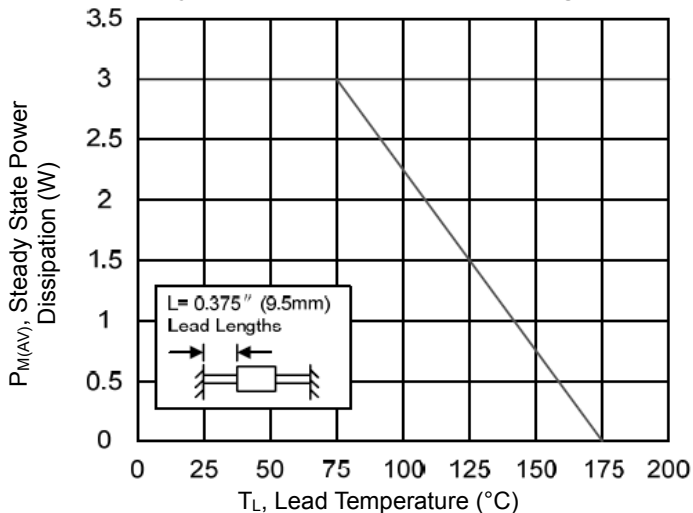


AC Line Protection Application



Note: Device must be used with two units in parallel, opposite in polarity as shown in circuit for AC signal line protection.

Steady State Power Dissipation Derating Curve



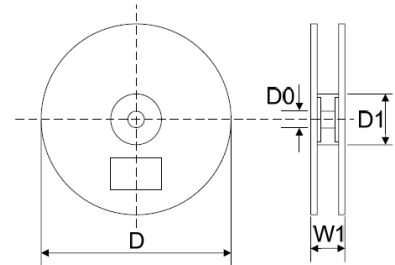
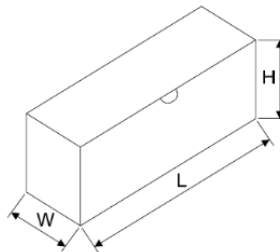
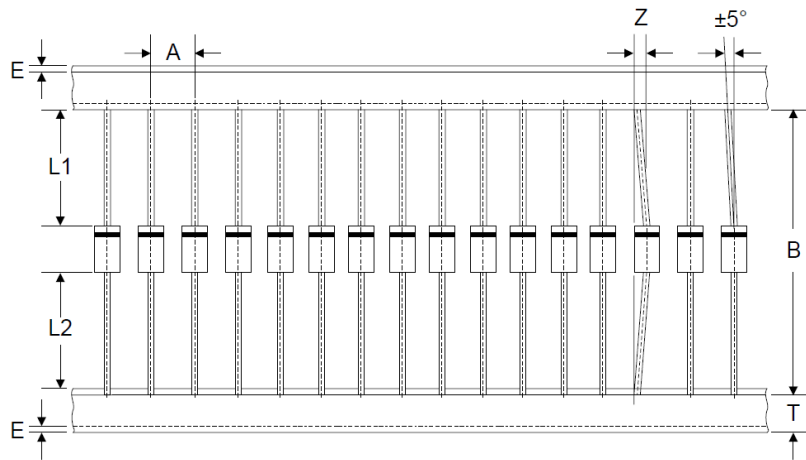
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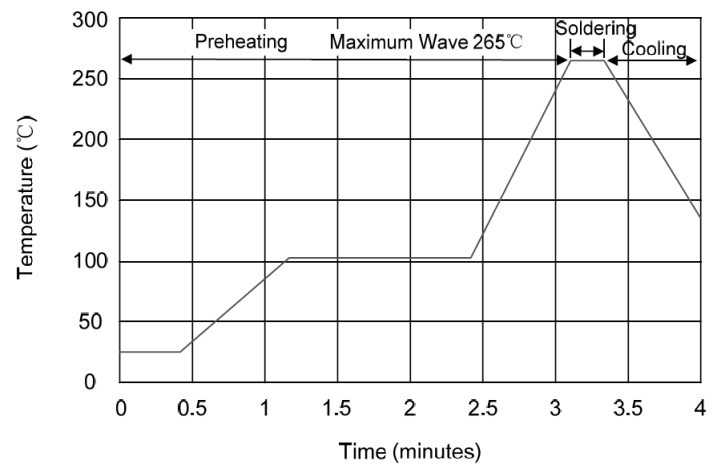
PACKAGING SPECIFICATION

Tape	
Symbol	Dimension(mm)
A	5.0±0.5
B	53.0±1.0
Z	1.2Max.
T	6.0±0.4
E	0.8Max.
L1-L2	1.0Max.
Box	
Symbol	Dimension(mm)
L	250.0±5.0
W	75.0±5.0
H	114.0±5.0
Quantity: 2000PCS	
Reel	
Symbol	Dimension(mm)
D	330.0±3.0
D0	16.4±2.0
D1	86.0±2.0
W1	76.0±3.0
Quantity: 4000PCS	



WAVE SOLDERING RECOMMENDATION

Item	Conditions
Peak Temperature	265°C
Dipping Time	10 Seconds
Soldering	1 time



*Specifications subject to change without notice.