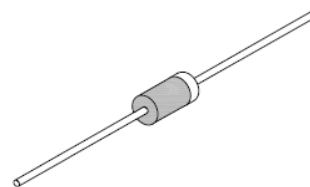


500W Low Capacitance Transient Voltage Suppressor

Features

- Stand-off voltage from 5.0 to 50 volts
- Glass passivated junction
- Excellent clamping capability
- Low incremental surge resistance
- 400W peak pulse capability with a 10/1000us waveform, Repetition rate (duty cycle): 0.01%
- Fast response time: typically less than 1.0ps from 0V to VBR
- Ideal for data line applications
- High temperature soldering guaranteed 265°C/10 seconds, 0.375" (9.5mm) lead length, 5lbs, (2.3kg) tension
- This series is UL recognized under component index. File number E315008
- RoHS Compliant



DO-15



Mechanical Data

Case:	JEDEC DO-15 molded plastic body over passivated junction
Epoxy:	Plastic package has UL flammability classification 94V-0
Terminals:	Solder plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity:	Color band denotes positive end (cathode)
Mounting position:	Any
Weight:	0.015 Ounce, 0. 4 gram

Maximum Ratings ($T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	Value	Unit	Conditions
PPPM	Peak Pulse Power Dissipation on 10/1000 us waveform	Minimum 500	W	Non-repetitive current pulse, per Fig.3 and derated above $T_A=25^{\circ}C$ per Fig.2
IPPM	Peak Pulse current with a 10/1000 us waveform	See Table	A	
PM(AV)	Steady State Power Dissipation	3	W	$T_L=75^{\circ}C$ with lead lengths or 0.375" (9.5mm)
T_J,T_{STG}	Operating Junction and Storage Temperature Range	-55 to 175	$^{\circ}C$	

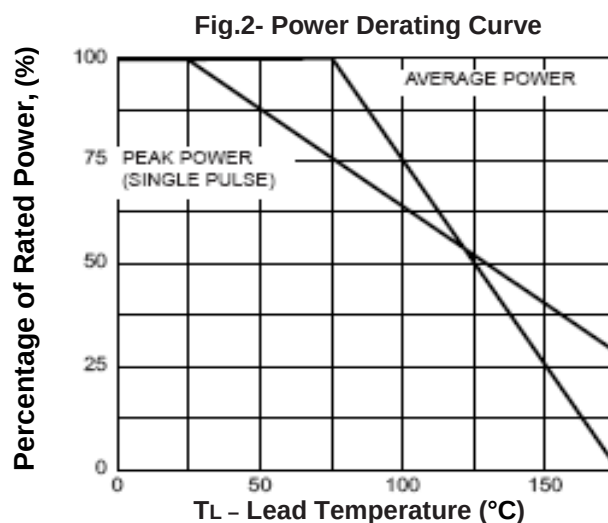
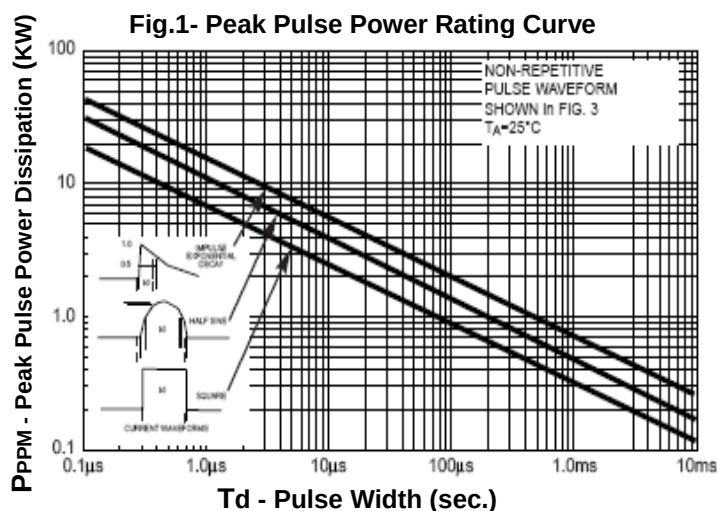
500W Low Capacitance Transient Voltage Suppressor

SAC5.0 - SAC50

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

500W	Min. Breakdown Voltage @ Test Current		Stand-off Voltage	Max. Reverse Leakage @ V_{WM}	Max. Clamping Voltage @ $I_{PPM}=5.0A$	Max. Peak Pulse Current @ 10/1000us	Max. Junction Capacitance @ 0V	Peak Inverse Blocking Voltage
Part NO.	$V_{(BR)}(V)$	$I_T(mA)$	$V_{WM}(V)$	$I_D(\mu A)$	$V_C(V)$	$I_{PPM}(A)$	$C(pF)$	$V_{PIB}(V)$
SAC5.0	7.60	1.0	5.0	300.0	10.0	44.0	50	100
SAC6.0	7.90	1.0	6.0	300.0	11.2	41.0	50	100
SAC7.0	8.33	1.0	7.0	300.0	12.6	38.0	50	100
SAC8.0	8.89	1.0	8.0	100.0	13.4	36.0	50	100
SAC8.5	9.44	1.0	8.5	50.0	14.0	34.0	50	100
SAC10	11.10	1.0	10.0	5.0	16.3	29.0	50	100
SAC12	13.30	1.0	12.0	5.0	19.0	25.0	50	100
SAC15	16.70	1.0	15.0	5.0	23.6	20.0	50	100
SAC18	20.00	1.0	18.0	5.0	28.8	15.0	50	100
SAC22	24.40	1.0	22.0	5.0	35.4	14.0	50	100
SAC26	28.90	1.0	26.0	5.0	42.3	11.1	50	100
SAC30	33.30	1.0	30.0	5.0	48.6	10.0	50	100
SAC36	40.00	1.0	36.0	5.0	60.0	8.6	50	100
SAC45	50.00	1.0	45.0	5.0	77.0	6.8	50	200
SAC50	55.50	1.0	50.0	5.0	88.0	5.8	50	200

Typical Characteristics Curves



500W Low Capacitance Transient Voltage Suppressor

SAC5.0 - SAC50

Fig.3- Pulse Waveform

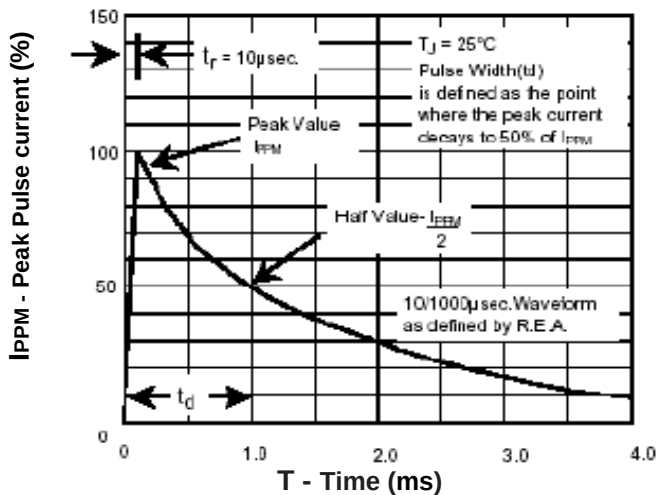
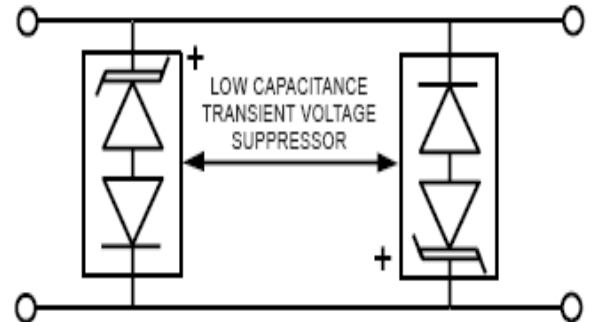
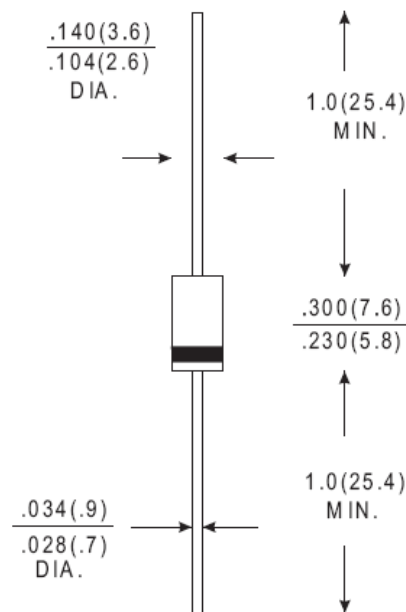


Fig.4- AC Line Protection Application



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

Dimensions in inches (mm)



DO-15

500W Low Capacitance Transient Voltage Suppressor

SAC5.0 - SAC50

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