Micro Commercial Components
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RoHS COMPLIANT

SMBSAC5.0 THRU SMBSAC50

Low Capacitance Transient Voltage Suppressors 5 to 50 Volts 500Watt

Features

- For surface mount applications in order to optimize board space
- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)
- Excellent clamping capability
- Fast response time: typical less than 1.0ps from 0 volts to V_{BR} minimum
- Halogen free available upon request by adding suffix "-HF"
- Ideal for data line applications
- UL Recognized File# E480232

Mechanical Data

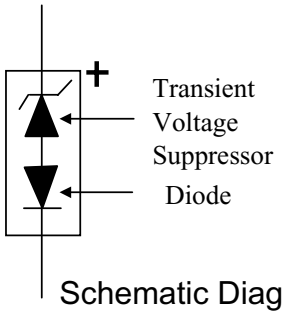
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Terminals: solderable per MIL-STD-750, Method 2026
- The band denotes TVS cathode
- Maximum soldering temperature: 260°C for 10 seconds

Maximum Ratings @ 25°C Unless Otherwise Specified

Peak Pulse Current on 10/1000us waveform	I_{PP}	See Table 1	Note: 2
Peak Pulse Power Dissipation	P_{PP}	500W	Note: 2, 3
Steady State Power Dissipation T_L= 75°C With at lead lengths 0.375"(9.5mm)	P_D	3	Watt
Operation and Storage Temperature Range	T_J, T_{STG}	-55°C to +175°C	

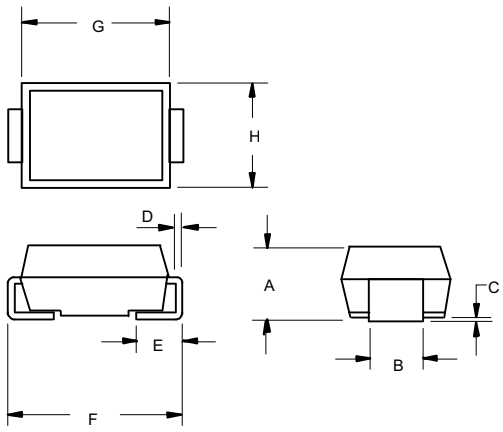
NOTES:

1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.
2. Non-repetitive current pulse, per Fig.3 and derated above T_A=25°C per Fig.2.
3. Mounted on 5.0mm^2 copper pads to each terminal.



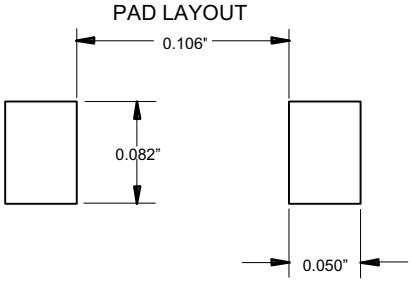
Schematic Diagram

DO-214AA
(SMB) (LEAD FRAME)



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.083	.096	2.13	2.44	
B	.075	.086	1.91	2.20	
C	.002	.008	0.051	0.203	
D	.006	.012	0.152	0.305	
E	.030	.060	0.76	1.52	
F	.200	.220	5.08	5.59	
G	.160	.185	4.06	4.70	
H	.130	.155	3.30	3.94	

SUGGESTED SOLDER PAD LAYOUT



SMBSAC 5.0THRU SMBSAC50

MCC PART NUMBERS	Marking Code	STAND-OFF VOLTAGE V_{WM} (VOLTS)	MINIMUM BREAKDOWN VOLTAGE AT I_T=1.0mA V(BR) (VOLTS)	MAXIMUM REVERSE LEAKAGE AT V_{WM} I_R(μA)	MAXIMUM CLAMPING VOLTAGE AT Ipp=5.0A V_C (V)	MAXIMUM PEAK PULSE CURRENT PER FIG.3 Ipp (AMPS)	MAXIMUM JUNCTION CAPACITANCE AT 0 VOLTS (pF)	WORKING INVERSE BLOCKING VOLTAGE V_{WIB} (VOLTS)	INVERSE BLOCKING LEAKAGE CURRENT V_{WIB} IIB(mA)	PEAK INVERSE BLOCKING VOLTAGE V_{PIB} (VOLTS)
SMBSAC5.0	SKE	5.0	7.6	300	10.0	44.0	45	75	1.0	100
SMBSAC6.0	SKG	6.0	7.9	300	11.2	41.0	45	75	1.0	100
SMBSAC7.0	SKM	7.0	8.3	300	12.6	38.0	45	75	1.0	100
SMBSAC8.0	SKR	8.0	8.9	100	13.4	36.0	45	75	1.0	100
SMBSAC8.5	SKT	8.5	9.44	50	14.0	34.0	45	75	1.0	100
SMBSAC10	SKX	10.0	11.10	5	16.3	29.0	45	75	1.0	100
SMBSAC12	SLE	12.0	13.30	5	19.0	25.0	45	75	1.0	100
SMBSAC15	SLM	15.0	16.70	5	23.6	20.0	45	75	1.0	100
SMBSAC18	SLT	18.0	20.00	5	28.8	15.0	45	75	1.0	100
SMBSAC22	SLX	22.0	24.40	5	35.4	14.0	45	75	1.0	100
SMBSAC26	SME	26.0	28.90	5	42.3	11.1	45	75	1.0	100
SMBSAC30	SMK	30.0	33.30	5	48.6	10.0	45	75	1.0	100
SMBSAC36	SMP	36.0	40.00	5	60.0	8.6	45	75	1.0	100
SMBSAC45	SMV	45.0	50.00	5	77.0	6.8	45	150	1.0	200
SMBSAC50	SMZ	50.0	55.50	5	88.0	5.8	45	150	1.0	200

Electrical Ratings and Characteristic Curves (T_a=25 °C unless otherwise specified)

Pig.1 - Peak Pulse Power Rating Curve

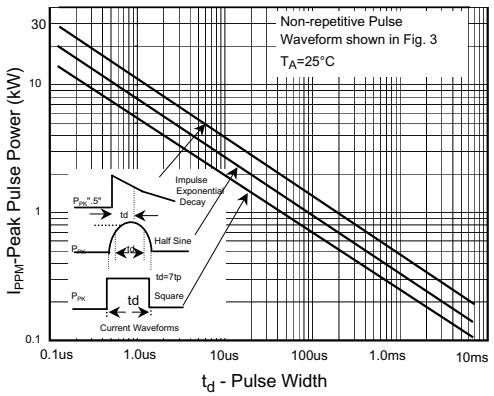


Fig.2-Power Derating Curve

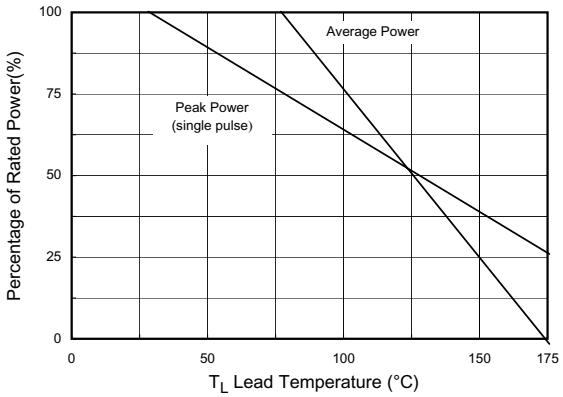


Fig.3 - Pulse Waveform

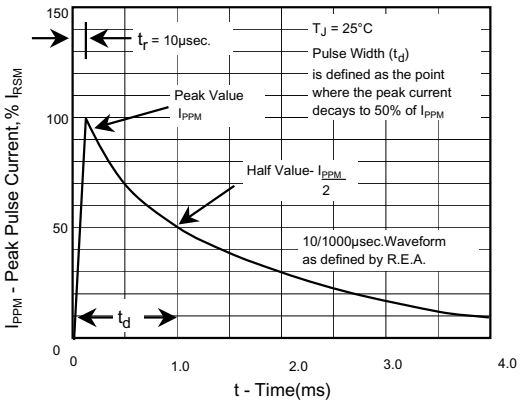
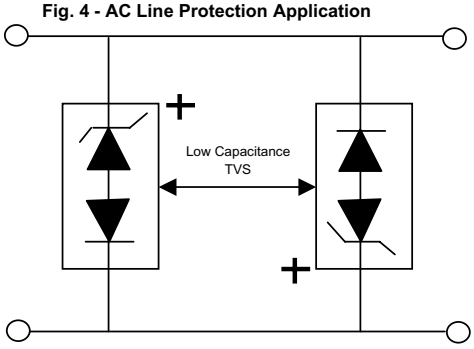


Fig. 4 - AC Line Protection Application



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

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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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