



8700 E. Thomas Road
Scottsdale, AZ 85251
Tel: (480) 941-6300
Fax: (480) 947-1503

SMBJSAC5.0

500 WATT LOW CAPACITANCE
TRANSIENT VOLTAGE SUPPRESSOR

Description

SMBJ surface mount package is utilized where power and space is a requirement. Designed for effective protection of low voltage power bus lines and data lines from voltage spikes originating from ESD, line noise (EFT), and induced lighting defined by IEC 1000-4-2, 1000-4-4, and 1000-4-5 respectively. Advanced technology provides lowest clamping voltage with surface mount packaging minimizing parasitic inductance.

Features

- 500 watts Peak Pulse Power 10/1000 μ s
- For surface Mount Applications (flat handling surface for accurate placement).
- Voltage and reverse leakage lowest available
- Low capacitance
- UL 94V-0 Flammability Classification

Mechanical Characteristics

- CASE: DO-214AA (SMBJ) outline
- Terminals solderable per MIL-STD-750, Method 2026
- Maximum temperature for soldering: 260°C for 10 seconds maximum
- LEAD MATERIAL: Copper
- LEAD FINISH: Tin lead plate (Sn95/P65)
- POLARITY: Band indicates TVS cathode
- WEIGHT: 0.2 grams
- MOUNTING POSITION: Any

Maximum Ratings

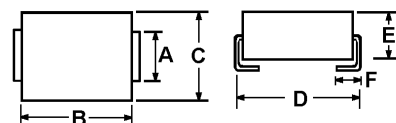
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Steady state Power Dissipation: 3.0 watt @ $T_L \leq 75^\circ\text{C}$
- Repetition rate (duty cycle): .01%
- Surge Power: 300 watts @ 10/1000 μ s or 2000 watts @ 8/20

Electrical Characteristics @ 25°C unless otherwise specified

PART NUMBER	REVERSE STAND-OFF VOLTAGE (NOTE 1) V_{WM} VOLTS	BREAKDOWN VOLTAGE @ IT-1.0 Ma $V_{(BR)}$ VOLTS min.	MAXIMUM REVERSE LEAKAGE @ V_{WM} I_{ρ} μ A	MAXIMUM CLAMPING VOLTAGE $I_p=5.0A$ V_C VOLTS	MAXIMUM PEAK PULSE CURRENT RATING I_{pp} Amps	CAPACITANCE @ 0 VOLTS pF	WORKING INVERSE BLOCKING VOLTAGE V_{WIB} VOLTS	INVERSE BLOCKING LEAKAGE CURRENT @ V_{WIB} I_{ib} Ma	PEAK INVERSE BLOCKING VOLTAGE V_{PIB} VOLTS
SMBJSAC5.0	5.0	7.6	300	10.0	44	50	75	1	100



DO-214AA



	INCHES		MILLIMETERS	
DIM	MIN	MAX	MIN	MAX
A	.077	.083	1.96	2.10
B	.160	.180	4.06	4.57
C	.130	.155	3.30	3.94
D	.205	.220	5.21	5.59
E	.075	.095	1.90	2.41
F	.030	.060	0.76	1.52

