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DESCRIPTION

SMBJ surface mount package is utilized where power and space is a requirement. Designed for effective protection of power bus 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

- 2000 watts Peak Pulse Power 8/20 μs
- For surface Mount Applications (flat handling surface for accurate placement).
- Voltage and reverse leakage lowest available
- High surge capacity provides transient protection for low voltage circuits
- 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 plate
- POLARITY: Cathode end is banded
- WEIGHT: 0.2 grams MOUNTING POSITION: Any

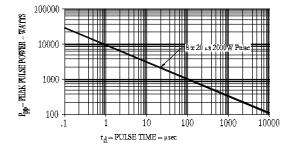
MAXIMUM RATINGS

- Operating Temperature: -55°C to +150°C Storage Temperature: -55°C to +150°C
- Steady state Power Dissipation: 3.0 watt @ T_L ≤ 75°C
- Repetition rate (duty cycle): .01%
- Surge Power: 300 watts @ 10/1000 μs or 2000 watts @ 8/20 μs
- I_{PP} and V_C below are @ 8/20 μ s

Electrical Characteristics @ 25°C unless otherwise specified

TYPE SMBJ	V _(BR) MIN VOLTS	I _(BR) mA	V _{WM} VOLTS	l _P µA	I _{PP}	V _C VOLTS	α _{V(BR)} %°C
2K3.0	4.3	50	3.0	1500	10	5.4	+0/05
2K3.3	4.6	50	3.3	700	10	5.8	±.025
2K4.0	5.0	50	4.0	400	10	6.3	±.030
2K4.5	5.4	50	4.5	50	10	6.6	±.040
2K5.0	5.9	50	5.0	5	10	7.6	±.050

	DIMENSIONS IN INCHES											
	Α	В	C	D	Е	F	G					
MIN	.077	.160	.130	.205	.075	.030	.004					
MAX	.083	.180	.155	.220	.095	.060	.008					
DIMENSIONS IN MILLIMETERS												
MIN	1.96	4.06	3.30	5.21	1.90	0.760	.101					
MAX	2.10	4.57	3.94	5.59	2.41	1.520	.202					

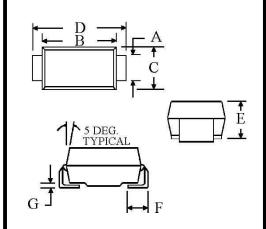


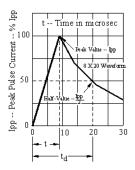
Peak Pulse Power vs. Pulse Time

SMBJ2K3.0 thru SMBJ2K5₋0

TRANSIENT VOLTAGE SUPPRESSOR







8X20 Pulse Wave Form