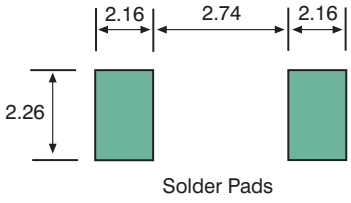
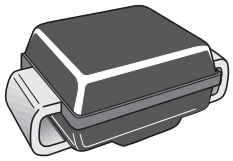
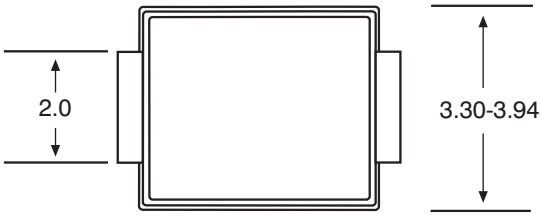
1000W SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR

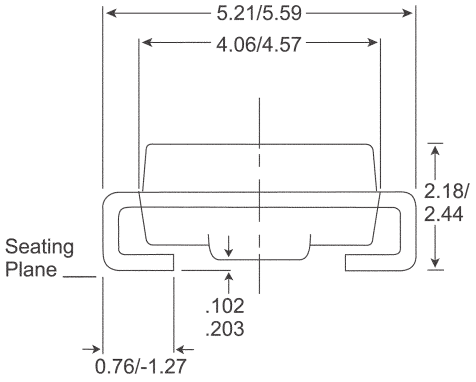
The 1KSMBJ range of surface mount protectors utilises the proven glass passivated technology used in many of Littelfuse products portfolio. Rated at 1000 watts (10 x 1000 µs double exponential waveform), the 1KSMBJ bridges the gap left by traditional types rated at 600 watts and 1500 watts, suiting many applications where both power handling and size are paramount. The extremely fast turn-on time, (less than one pico second), coupled with the low clamping factor and low on-state impedance make this range ideal for the protection of today's circuits. Our specially selected range of voltages has been chosen to fulfill optimum protection for use in automotive and telecom applications.



All dimensions in mm







FEATURES

- Available in breakdown voltages from 6.8v. to 43v; specially designed for automotive applications
- Response time: $1x10^{-12}$secs (theoretical)
- Glass passivated junction
- Offers high-surge rating in compact package: bridges the gap between 600W and 1.5KW
- Forward surge rating: 100A 8.3ms single half sine wave
- 100% tested
- Operating temperature: -55°C to +150°C

MECHANICAL CHARACTERISTICS

- Case: DO214AA Outline moulded plastic over glass passivated junction. UL 94 V-0 rated
- Terminals: Solderable to MIL-STD-750 Method 2026
- Solderable leads: 23°C for 10 seconds
- Marking: Cathode band, device code logo
- Weight: 0.093 grammes (approx)
- Supplied on reels of 3000 pieces. Tape width 12mm Follows requirements of EIA 481-1

ELECTRICAL SPECIFICATION @ Tamb 25°C

Part Number	Reverse Stand Off Voltage V_R (Volts)	Breakdown Voltage V_{BR} (Volts) @ I_T			Maximum Reverse Leakage I_R @ V_R (µA)	Maximum Clamping Voltage V_C @ I_{PP} (Volts)	Maximum Peak Pulse Current I_{PP} (A)
		MIN	MAX	(mA)			
1KSMB6.8	5.5	6.1	7.5	10.0	10000.0	10.8	92.5
1KSMB15	12.1	13.5	16.5	1.0	5.0	22.0	45.0
1KSMB18	15.3	16.2	19.8	1.0	5.0	26.5	38.0
1KSMB27	23.1	25.7	28.4	1.0	5.0	39.1	25.5
1KSMB30	25.6	27.0	33.0	1.0	5.0	43.5	22.9
1KSMB36	30.8	32.4	39.6	1.0	5.0	52.0	19.2

Note: Clamping voltage is measured using 10/1000 µS waveshape.