

SMBJ-LC5.0CA

SURFACE MOUNT LOW CAPACITANCE TRANSIENT VOLTAGE SUPPRESSOR

Stand-off Voltage : 5.0 V

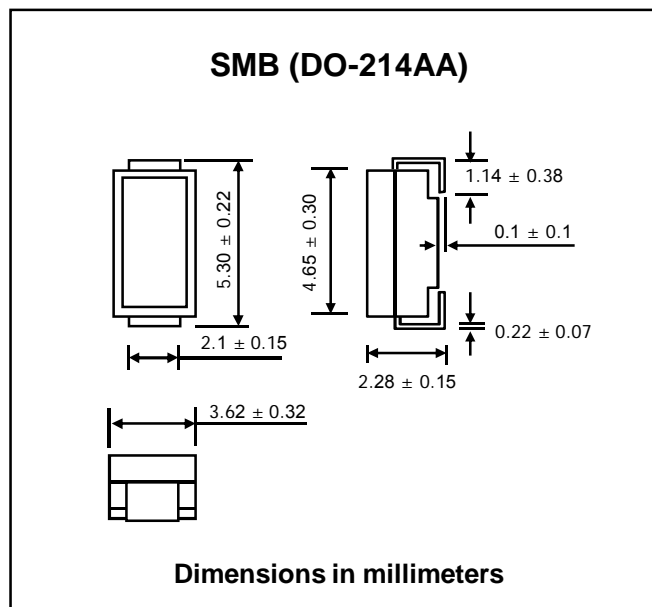
Peak Pulse Power : 600 W

FEATURES :

- * Bi-directional transient voltage suppressor
- * 600W peak pulse power capability with a 10/1000µs waveform
- * Low junction capacitance
- * Excellent clamping capability
- * Very fast response time
- * Pb / RoHS Free

MECHANICAL DATA

- * Case : SMB Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Lead Formed for Surface Mount
- * Mounting position : Any
- * Weight : 0.108 gram



MAXIMUM RATINGS

Rating at 25 °C ambient temperature unless otherwise specified.

Rating	Symbol	Value	Units
Peak Pulse Power Dissipation on 10/1000µs waveform ⁽¹⁾⁽²⁾	P _{PPM}	Minimum 600	W
Peak Pulse Current on 10/1000µs waveform ⁽¹⁾	I _{PPM}	See Table	A
Typical Thermal resistance, Junction to ambient	R _{θJA}	100	°C/W
Operating Junction and Storage Temperature Range	T _J , T _{STG}	- 55 to + 150	°C

ELECTRICAL CHARACTERISTICS (Rating at 25 °C ambient temperature unless otherwise specified)

Type No.	Breakdown Voltage ⁽³⁾ @ I _T		Reverse Stand-off Voltage V _{RWM}	Maximum Reverse Leakage @ V _{RWM} I _R	Maximum Peak Pulse Surge Current I _{PPM}	Maximum Clamping Voltage @ I _{PPM} V _C	Maximum Junction Capacitance @ 0 Volt pF	
	V _{BR} (V)	I _T (mA)						
	Min.	Max.	(V)	(µA)	(A)	(V)		
SMBJ-LC5.0CA	7.20	8.50	10	5.0	800	50	12	1000

Notes:

- (1) Non-repetitive Current pulse and derated above Ta = 25 °C
- (2) Mounted on 0.2 x 0.2" (5.0 x 5.0 mm) copper pads to each terminal.
- (3) Pulse test : tp ≤ 50ms.
- (4) "SMBJ-L" will be omitted in marking on the diode.

RATING AND CHARACTERISTIC CURVES (SMBJ-LC5.0CA)

FIG.1 - PULSE DERATING CURVE

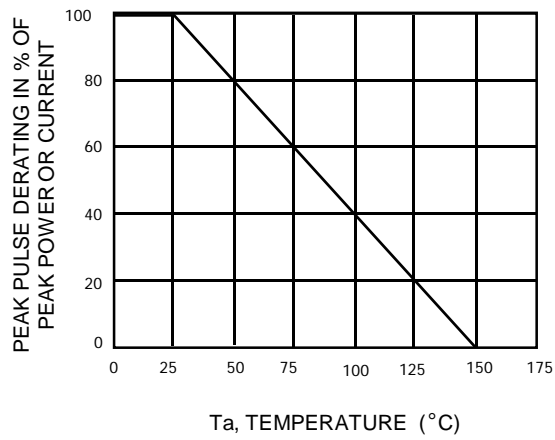


FIG.2 - PEAK PULSE POWER RATING CURVE

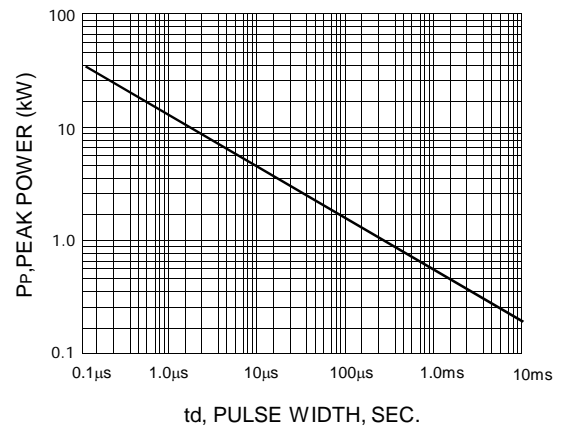


FIG.3 - PULSE WAVEFORM

