

# SMCJ200CA

## SURFACE MOUNT BI-DIRECTIONAL TRANSIENT VOLTAGE SUPPRESSOR

**Stand-off Voltage : 200 V**

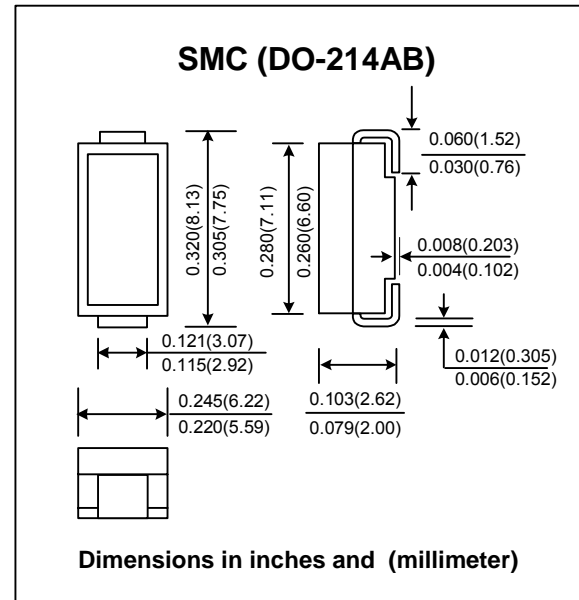
**Peak Pulse Power : 1500 W**

### FEATURES :

- \* Bidirectional transient voltage suppressor
- \* 1500W peak pulse power capability with a 10/1000 $\mu$ s waveform
- \* Excellent clamping capability
- \* Very fast response time
- \* **Pb / RoHS Free**

### MECHANICAL DATA

- \* Case : SMC Molded plastic
- \* Epoxy : UL94V-0 rate flame retardant
- \* Lead : Lead Formed for Surface Mount
- \* Mounting position : Any
- \* Weight : 0.21 gram



### MAXIMUM RATINGS

Rating at 25 °C ambient temperature unless otherwise specified.

Rating	Symbol	Value	Unit
Peak Pulse Power Dissipation on 10/1000ms waveform <sup>(1) (2)</sup>	P <sub>PPM</sub>	Minimum 1500	W
Peak Pulse Current on 10/1000 $\mu$ s waveform <sup>(1)</sup>	I <sub>PPM</sub>	See Next Table	A
Typical thermal resistance , Junction to ambient	R <sub>ΘJA</sub>	75	°C/W
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	- 55 to + 150	°C

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

Type No.	Breakdown Voltage @ I <sub>T</sub> <sup>(3)</sup>			Working Peak Reverse Voltage V <sub>WM</sub> (V)	Maximum Reverse Leakage @ V <sub>WM</sub> I <sub>R</sub> ( $\mu$ A)	Maximum Peak Pulse Surge Current I <sub>PPM</sub> (A)	Maximum Clamping Voltage @ I <sub>PPM</sub> V <sub>C</sub> (V)
	V <sub>BR</sub> (V)		I <sub>T</sub> (mA)				
	Min.	Max.					
SMCJ200CA	224	247	1.0	200	5.0	4.60	324

#### Notes :

- (1) Non-repetitive Current pulse, per Fig. 3 and derated above Ta = 25 °C per Fig. 1
- (2) Mounted on 0.31x 0.31" (8.0 x 8.0mm) copper pads to each terminal.
- (3) Pulse test : tp ≤ 50ms.

## RATING AND CHARACTERISTIC CURVES ( SMCJ200CA )

FIG.1 - PULSE DERATING CURVE

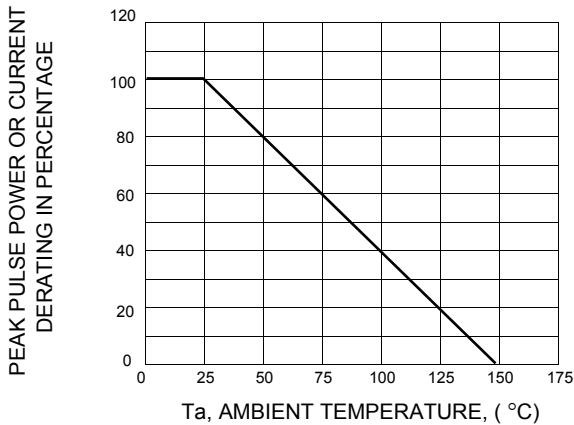


FIG.2 - TYPICAL JUNCTION CAPACITANCE

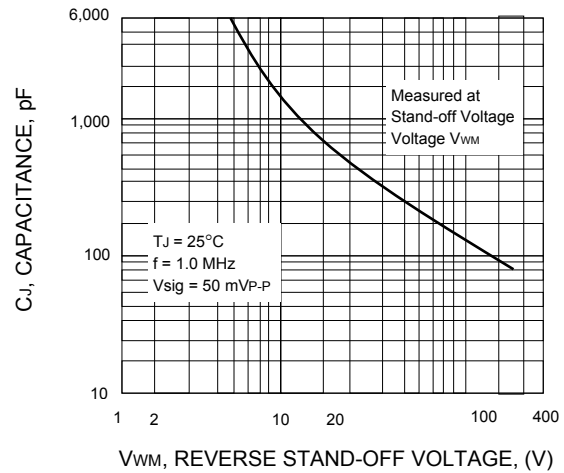


FIG.3 - PULSE WAVEFORM

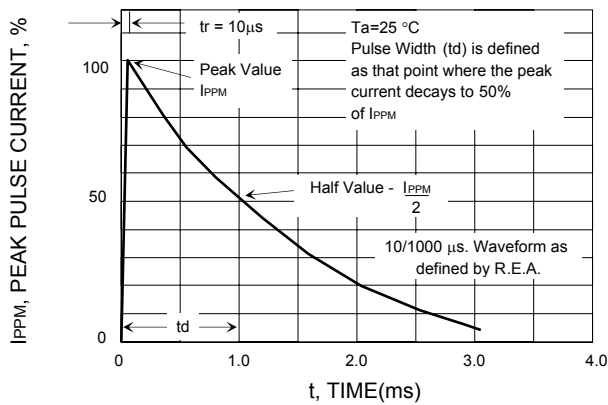


FIG.4 - PEAK PULSE POWER RATING CURVE

