

SMCJ200C - 440CA

SURFACE MOUNT BI-DIRECTIONAL TRANSIENT VOLTAGE SUPPRESSOR

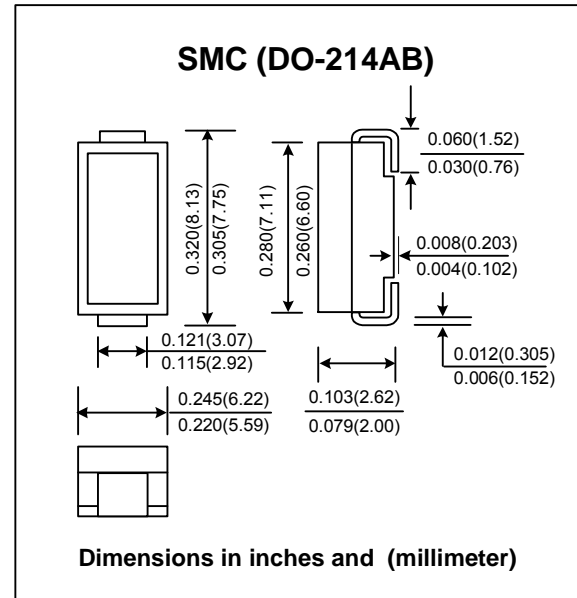
Stand-off Voltage : 200 - 440 V
Peak Pulse Power : 1500 W

FEATURES :

- * Bidirectional transient voltage suppressor
- * 1500W peak pulse power capability with a 10/1000 μ 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 10/1000 μ s waveform ^{(1) (2)}	P _{PPM}	Minimum 1500	W
Peak Pulse Current on 10/1000 μ s waveform ⁽¹⁾	I _{PPM}	See Next Table	A
Typical thermal resistance , Junction to ambient	R _{θJA}	75	°C/W
Operating Junction and Storage Temperature Range	T _J , T _{STG}	- 65 to + 150	°C

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

Type No.	Breakdown Voltage @ I _T ⁽³⁾			Working Peak Reverse Voltage V _{WM} (V)	Maximum Reverse Leakage @ V _{WM} I _R (μ A)	Maximum Peak Pulse Surge Current I _{PPM} (A)	Maximum Clamping Voltage @ I _{PPM} V _C (V)
	V _{BR} (V)		I _T (mA)				
	Min.	Max.					
SMCJ200CA	224	247	1.0	200	1.0	4.60	324
SMCJ220CA	246	272	1.0	220	1.0	4.2	356
SMCJ250CA	279	309	1.0	250	1.0	3.7	405
SMCJ300CA	335	371	1.0	300	1.0	3.1	486
SMCJ350CA	391	432	1.0	350	1.0	2.6	567
SMCJ400CA	447	494	1.0	400	1.0	2.3	648
SMCJ440CA	492	543	1.0	440	1.0	2.10	713

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) For part without A , the V_{BR} is \pm 10% and V_C is \pm 5% higher than with A parts.

RATING AND CHARACTERISTIC CURVES (SMCJ200C - 440CA)

FIG.1 - PULSE DERATING CURVE

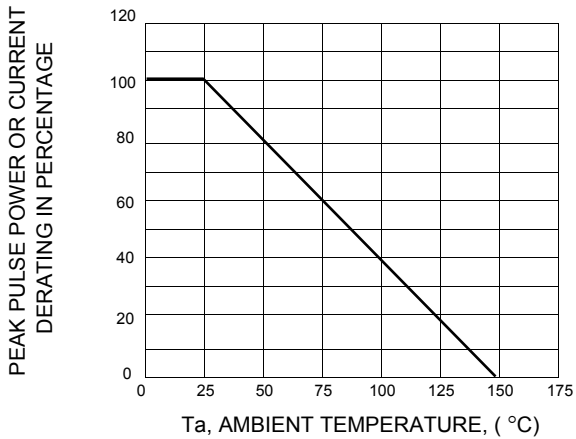


FIG.2 - TYPICAL JUNCTION CAPACITANCE

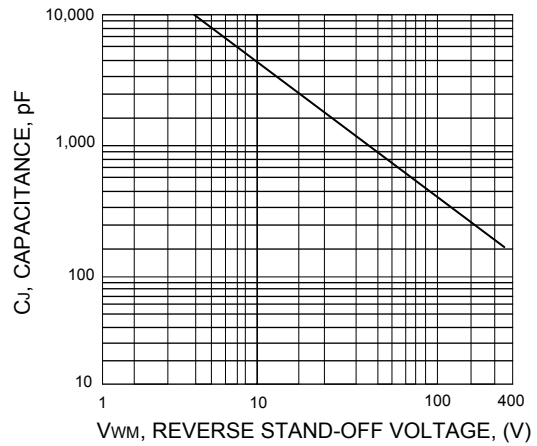


FIG.3 - PULSE WAVEFORM

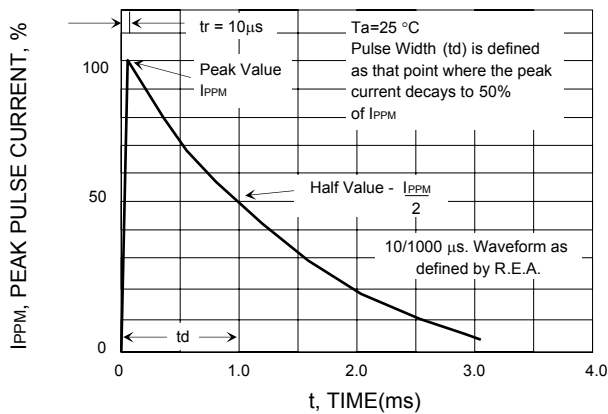


FIG.4 - PEAK PULSE POWER RATING CURVE

