



## SMAJ440CA SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR



### Features

- For surface mounted applications in order to optimize board space
- Low profile package
- Built-in strain relief
- Glass passivated junction
- Low inductance
- Excellent clamping capability
- Repetition rate (duty cycle): 0.01%
- High temperature soldering: 250° C/10 seconds at terminals
- Plastic package has Underwriters Laboratory Flammability Classification 94 V-0

### Mechanical Data

- Case: SMA Low Profile Molded Plastic
- Terminals: Solder Plated , Solderable per MIL-STD-750, Method 2026
- Mounting Position: Any
- Polarity: Bipolar
- Weight: 0.064 grams (approx.)

### Maximum Ratings and Thermal Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Junction Temperature Range	T <sub>J</sub>	-65 to +150	°C
Storage Temperature Range	T <sub>STG</sub>	-65 to +150	°C
Peak Pulse Power (with 10/1000µs waveform) (Fig.1)(Note 1), (Note 2)	P <sub>PPM</sub>	400	W
Typical Thermal Resistance Junction to Lead	R <sub>θJL</sub>	30	°C/W
Typical Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	120	°C/W

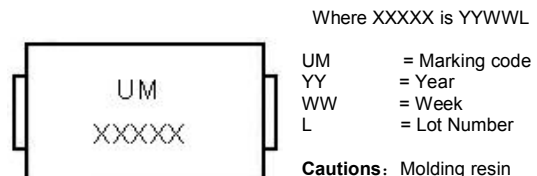
Note: 1. Non-repetitive current pulse, per Fig.3 and derated above T<sub>a</sub> = 25 °C per Fig.2.  
2. Mounted on Copper Pad area of 5.0x5.0 mm to each terminal.

### Ordering Information

Device	Package	Shipping
SMAJ440CA	SMA (Pb-Free)	5000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

### Marking Diagram

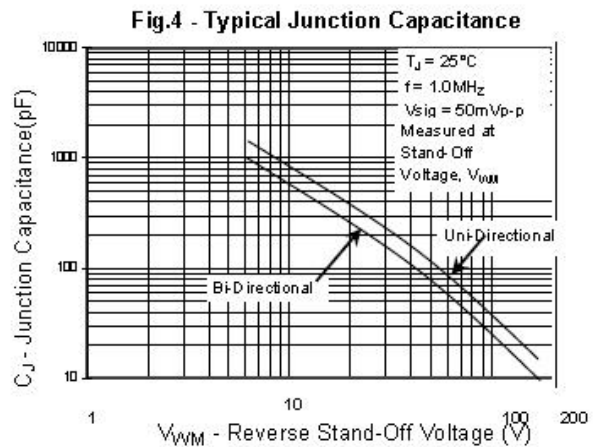
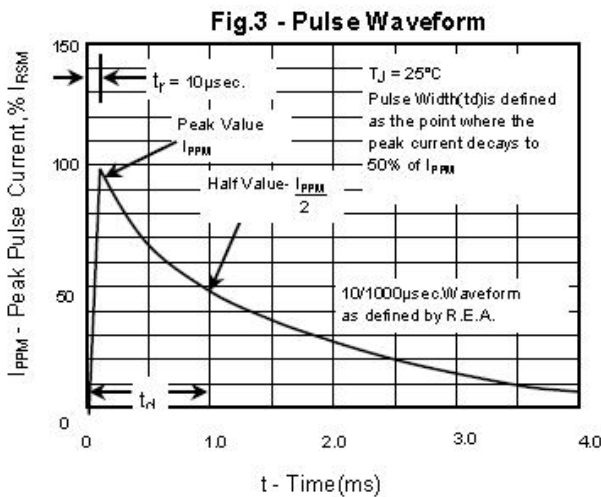
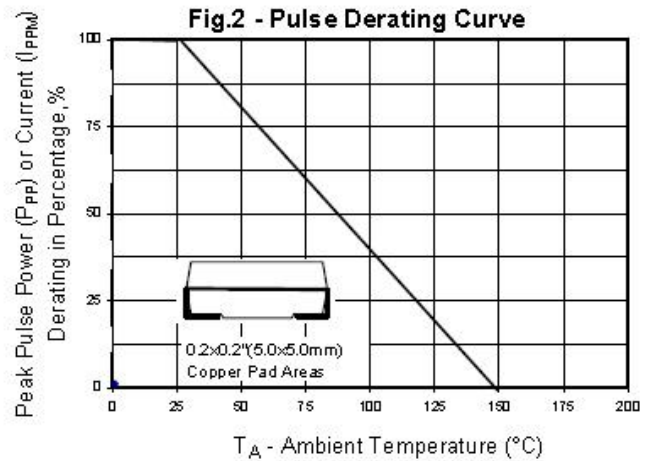
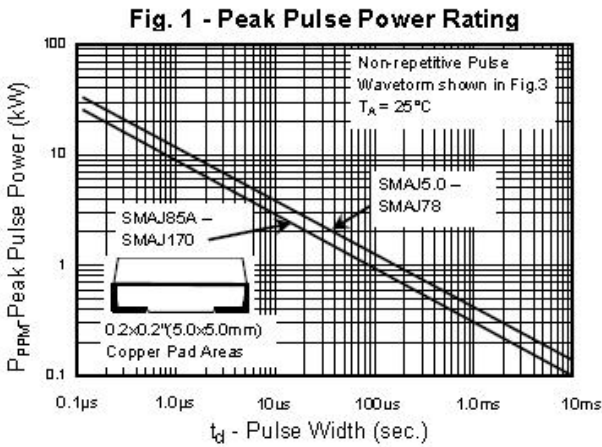


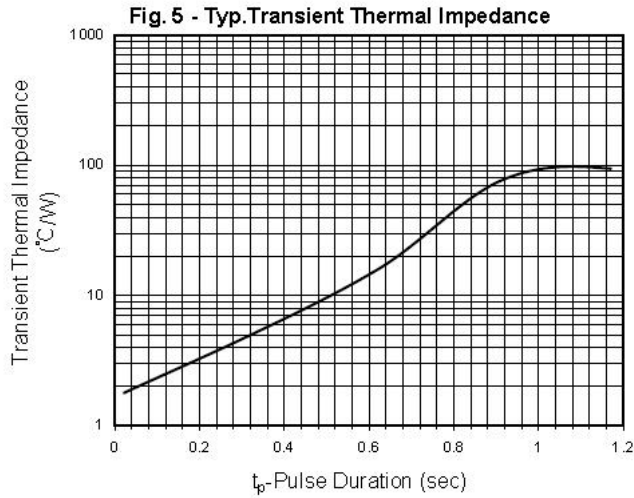
**Cautions:** Molding resin  
Epoxy resin UL:94V-0

**Electrical Characteristics @  $T_A=25^\circ\text{C}$  unless otherwise specified**

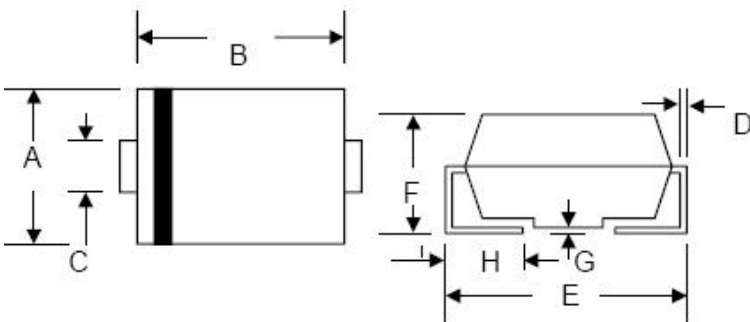
Part Number	Marking code	Reverse Stand off Voltage $V_R$	Breakdown Voltage $V_{BR}$ (Volts) @ $I_T$		Test Current $I_T$ (mA)	Maximum Clamping Voltage $V_C$ @ $I_{pp}$ (Volts)	Maximum Peak Pulse Current $I_{pp}$ (A)	Maximum Reverse Leakage $I_R$ @ $V_R$ ( $\mu\text{A}$ )
		(Volts)	MIN.	MAX.				
SMAJ440CA	UM	440	492	543	1	713	0.6	5

**Ratings and Characteristics Curves**



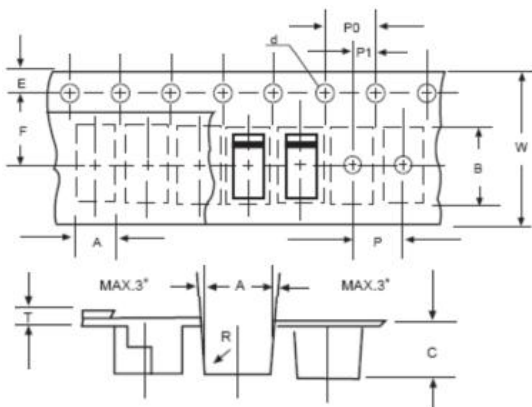


**Mechanical Dimensions SMA(Inches/Millimeters)**



Dim.	SMA/DO-214AC			
	Min.	Max.	Min.	Max.
A	2.40	2.90	0.094	0.114
B	3.99	4.75	0.157	0.187
C	1.05	1.70	0.041	0.067
D	0.15	0.51	0.006	0.020
E	4.80	5.66	0.189	0.223
F	1.90	2.95	0.075	0.116
G	0.05	0.203	0.002	0.008
H	0.76	1.52	0.030	0.600
	In mm		In inch	

**Carrier Tape Specification SMA**



SYMBOL	Millimeters	
	Min.	Max.
A	2.97	3.17
B	5.70	5.90
C	2.32	2.52
d	1.40	1.60
E	1.40	1.60
F	5.60	5.70
P	3.90	4.10
P0	3.90	4.10
P1	1.90	2.10
T	0.25	0.35
W	11.80	12.20



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