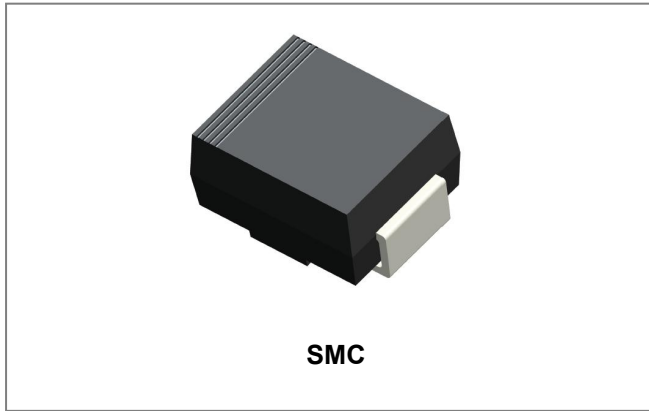


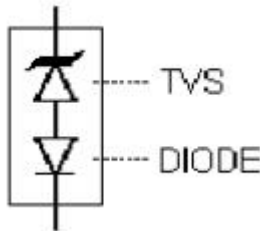
SMCJLCE28A 1500 WATT LOW CAPACITANCE SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR



Features

- Glass Passivated Die Construction
- 1500W Peak Pulse Power Dissipation
- Uni-Directional Versions Available
- Excellent Clamping Capability
- Low capacitance of 100 pF or less
- IEC61000-4-2 ESD 15 kV (air), 8 kV (contact)
- Plastic Case Material has UL Flammability Classification Rating 94V-O
- This is a Pb - Free Device
- Terminals finish: 100% Pure Tin
- All SMC Parts are Traceable to the Wafer Lot
- Additional testing can be offered upon request

Circuit Diagram



Mechanical Data

- Case: SMC Low Profile Molded Plastic
- Terminals: Solder Plated , Solderable per MIL-STD 750, Method 2026
- Polarity: Color band denoted positive end
- Weight: 0.21 grams (approx.)

Maximum Ratings and Thermal Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

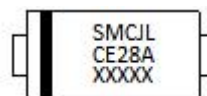
| Parameter | Symbol | Value | Units |
|---|-----------------|------------|--------------------|
| Peak Pulse Power Dissipation on 10/1000 us waveform | P_{PPM} | 1500 | W |
| Steady State power dissipation @ $T_L = 50^\circ\text{C}$ | P_D | 5 | W |
| Typical Thermal Resistance Junction to Lead | $R_{\theta JL}$ | 20 | $^\circ\text{C/W}$ |
| Operating Junction and Storage Temperature Range | T_J, T_{STG} | -65 to 150 | $^\circ\text{C}$ |

Ordering Information

| Device | Package | Shipping |
|--------------|---------|----------------|
| SMCJLCE28A | SMC | 3000pcs / reel |
| SMCJLCE28ATR | SMC | 3000pcs / 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



Where XXXXX is YYWWL

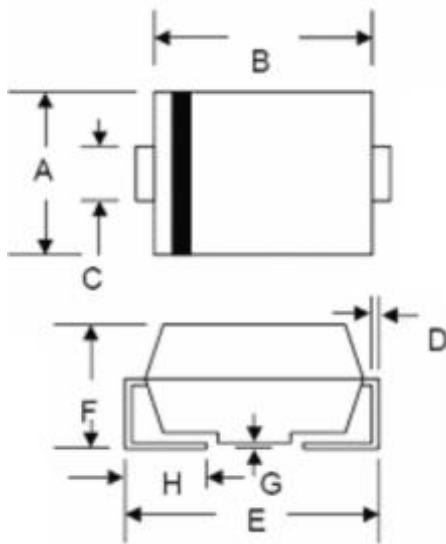
SMCJLCE28A = Marking code
YY = Year
WW = Week
L = Lot Number

Electrical Characteristics @T_A=25°C unless otherwise specified

| UNI-DIRECTIONAL PART NO. | REVERSE STAND-OFF VOLTAGE VRWM (V) | BREAKDOWN VOLTAGE VBR (V) MIN. @I _T | BREAKDOWN VOLTAGE VBR (V) MAX. @I _T | TEST CURRENT I _T (MA) | MAXIMUM CLAMPING VOLTAGE @I _{PP} V _C (V) | PEAK PULSE CURRENT I _{PP} (A) | REVERSE LEAKAGE @V _{RWM} I _R (uA) | MAXIMUM CAPACITANCE @ 0 Volts |
|--------------------------|------------------------------------|--|--|----------------------------------|--|--|---|-------------------------------|
| SMCJLCE28A | 28 | 31.10 | 34.4 | 1 | 45.5 | 33 | 5 | 100 |

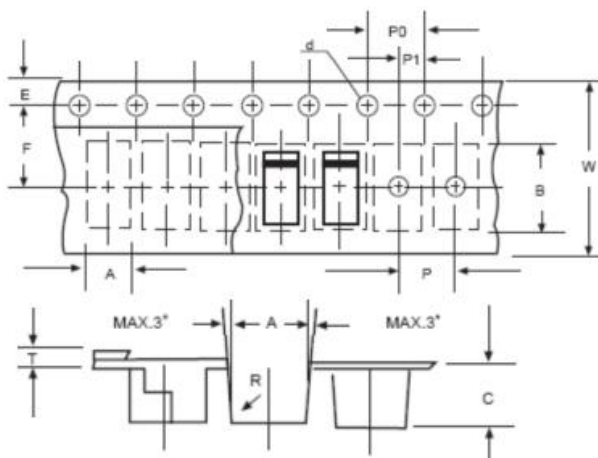
"A" Suffix Designates 5% Tolerance Devices

Mechanical Dimensions SMC



| SMC/DO-214AB | | | | |
|----------------|-------|-------|-----------|-------|
| Dim. | Min. | Max. | Min. | Max. |
| A | 5.59 | 6.22 | 0.220 | 0.245 |
| B | 6.60 | 7.11 | 0.260 | 0.280 |
| C | 2.90 | 3.20 | 0.114 | 0.126 |
| D | 0.152 | 0.305 | 0.006 | 0.012 |
| E | 7.75 | 8.13 | 0.305 | 0.320 |
| F | 2.00 | 2.95 | 0.079 | 0.116 |
| G | - | 0.203 | - | 0.008 |
| H | 0.76 | 1.52 | 0.030 | 0.060 |
| In Millimeters | | | In inches | |

Carrier Tape Specification SMC



| SYMBOL | Millimeters | |
|--------|-------------|-------|
| | Min. | Max. |
| A | 5.90 | 6.10 |
| B | 8.20 | 8.40 |
| C | 2.40 | 2.60 |
| d | 1.40 | 1.60 |
| E | 1.40 | 1.60 |
| F | 7.60 | 7.70 |
| P | 7.90 | 8.10 |
| P0 | 3.90 | 4.10 |
| P1 | 3.90 | 4.10 |
| T | - | 0.600 |
| W | 15.80 | 16.20 |

Ratings and Characteristics Curves

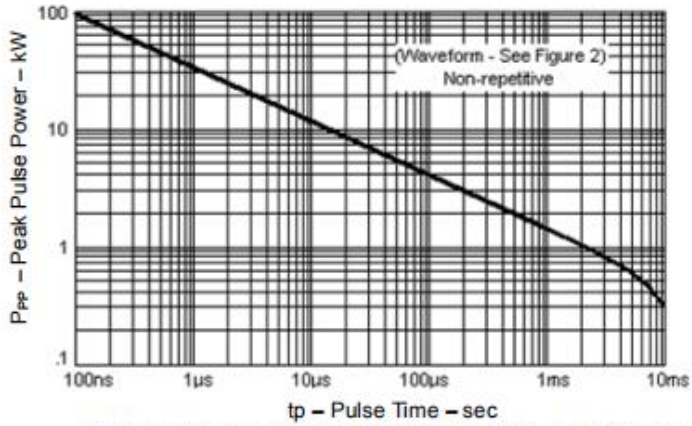


FIGURE 1 PEAK PULSE POWER vs. PULSE TIME

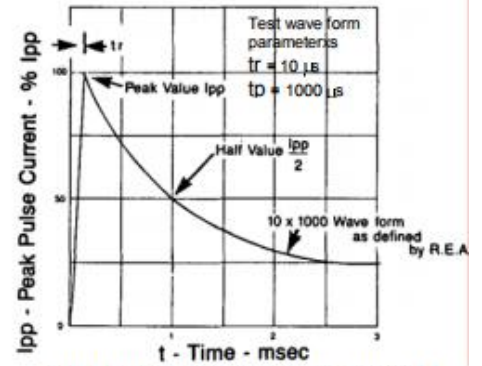


FIGURE 2 PULSE WAVEFORM

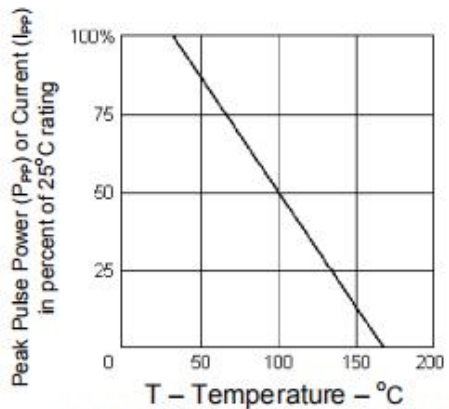


FIGURE 3 DERATING CURVE

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