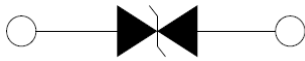
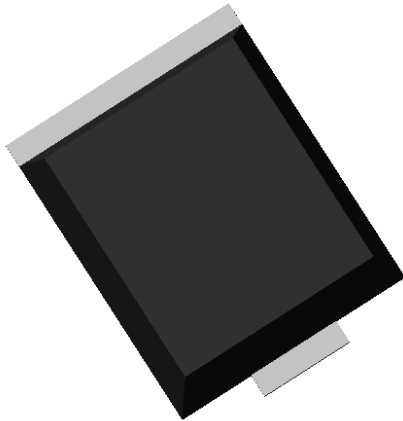


Surface Mount Transient Voltage Suppressor



Features

- Ideal for automated placement
- High surge current capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C
- Bi-directional TVS
- Glass passivated junction
- Low clamping voltage under surge

Typical Applications

- High power DC bus protection

Mechanical Data

- **Package:** SME
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102

■ Maximum Ratings (T_a=25°C Unless otherwise specified)

| PARAMETER | SYMBOL | UNIT | VALUE |
|--|------------------|------|-----------|
| Peak pulse current rating per 8/20μs IEC 61000-4-5 | I _{pp} | A | 10000 |
| Storage temperature | T _{stg} | °C | -55 ~+150 |
| Junction temperature | T _j | °C | -55 ~+125 |

■ Electrical Characteristics (T_A=25°C unless otherwise noted)

| Part Number (Bi) | Breakdown Voltage V _{BR@IT} | | | Maximum Reverse Leakage IR @VRWM (μA) | Working Peak Reverse Voltage VRWM (V) | Typical. Capacitance 0V Bias 10kHz (nF) | Maximum Clamping Voltage V _c @ IPP (V) |
|------------------|--------------------------------------|---------|---------|---------------------------------------|---------------------------------------|---|---|
| | Min (V) | Max (V) | IT (mA) | | | | |
| SMEJ58CA | 64 | 70 | 10 | 5 | 58 | 6.5 | 110 |
| SMEJ66CA | 72 | 80 | 10 | 5 | 66 | 6.5 | 120 |
| SMEJ76CA | 85 | 95 | 10 | 5 | 76 | 6.5 | 135 |
| SMEJ86CA | 96 | 107 | 10 | 5 | 86 | 6.0 | 157 |



SMEJ SERIES

Ordering Information (Example)

| PREFERRED P/N | PACKING CODE | UNIT WEIGHT(g) | MINIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|---------------|--------------|------------------|----------------------|-------------------------|----------------------------|---------------|
| SMEJ | F1 | Approximate 5.10 | 400 | 800 | 4000 | 13" reel |

Performance Graphs

FIG.1 Pulse Derating Curve

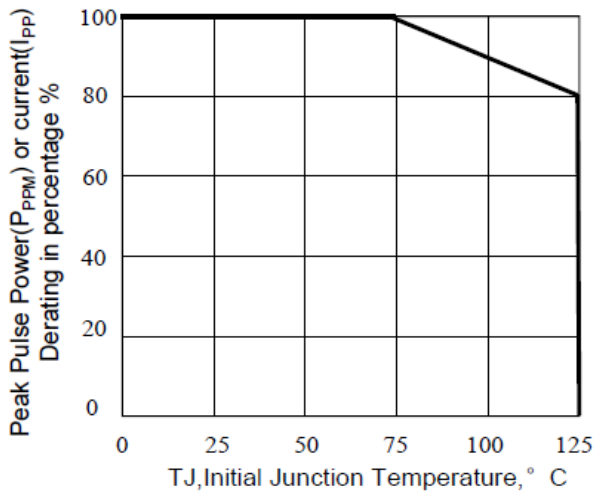


Fig.2 Current 8/20us Waveform per IEC 6100-4-5

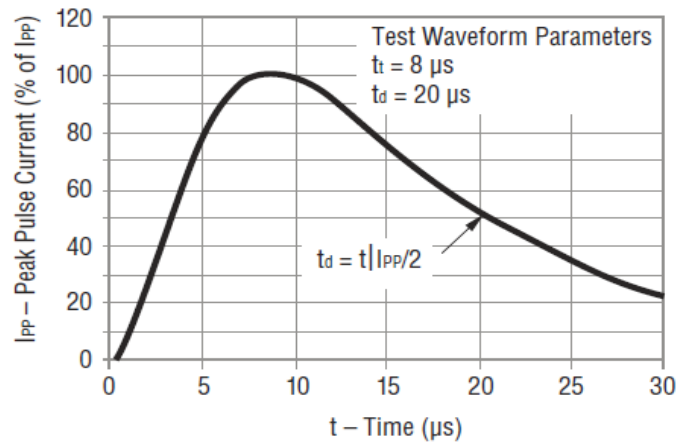
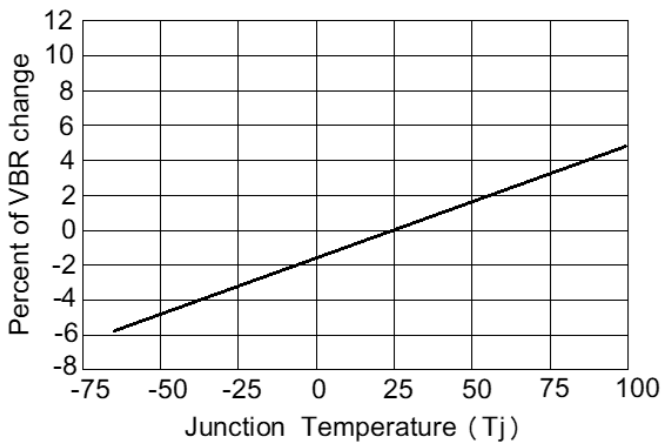


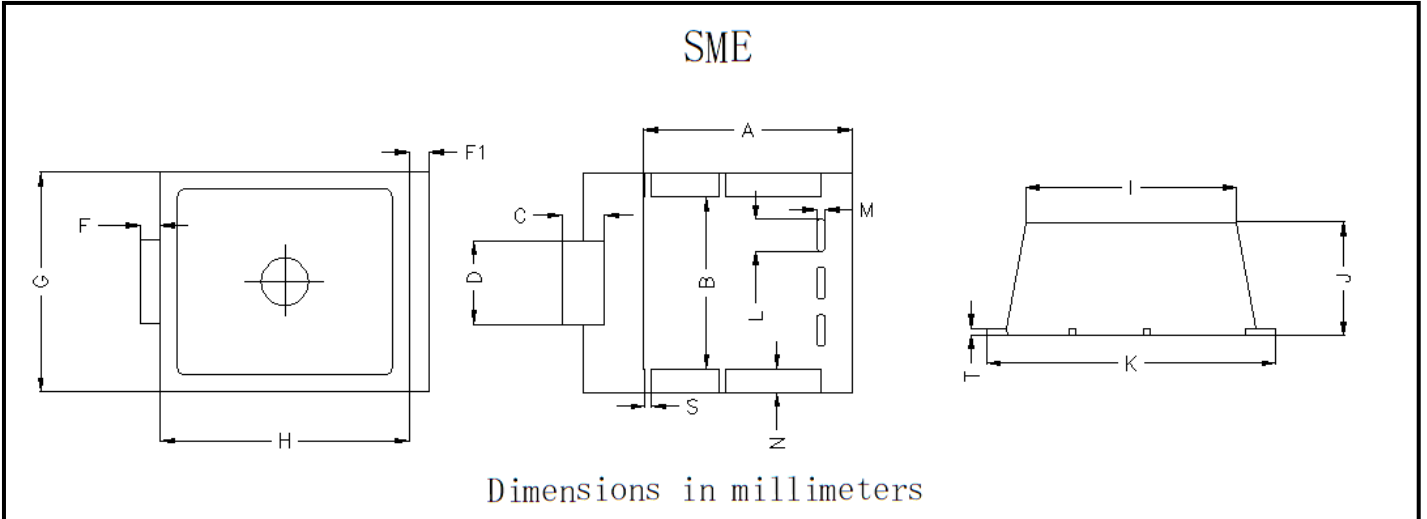
FIG.3: Typical VBR vs. junction temperature





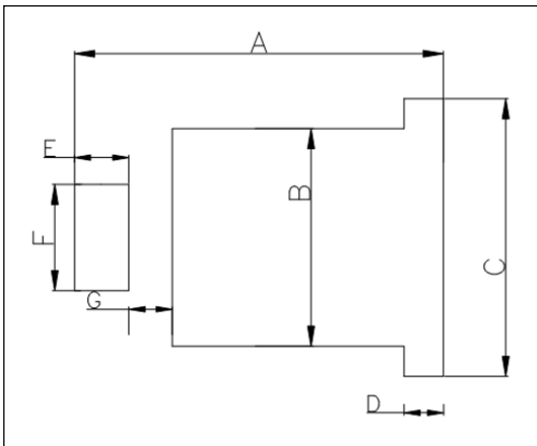
SMEJ SERIES

■ Outline Dimensions



| SME | | |
|-----|-------|-------|
| Dim | Min | Max |
| A | 13.16 | 13.76 |
| B | 10.55 | 11.05 |
| C | 2.50 | 2.90 |
| D | 5.15 | 5.65 |
| F1 | 1.20 | 1.40 |
| F | 1.20 | 1.40 |
| G | 13.45 | 14.60 |
| H | 15.50 | 16.05 |
| J | 6.94 | 7.24 |
| K | 18.1 | 18.5 |
| L | 1.9 | 2.1 |
| M | 0.4 | 0.6 |
| N | 1.4 | 1.6 |
| T | 0.33 | 0.43 |
| S | 0.35 | 0.45 |

■ Suggested pad layout



| Dim | Millimeters |
|-----|-------------|
| A | 18.31 |
| B | 10.80 |
| C | 13.72 |
| D | 2.54 |
| E | 2.70 |
| F | 5.33 |
| G | 2.15 |



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