

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



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

PARAMETER	SYMBOL	UNIT	VALUE
Peak pulse current rating per 8/20μs IEC 61000-4-5	I _{pp}	A	2500
Storage temperature	T _{stg}	°C	-55 ~+150
Junction temperature	T _j	°C	-55 ~+125

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

Breakdown Voltage V _{BR} @I _T			Maximum Reverse Leakage I _R @V _{RWM} (μA)	Working Peak Reverse Voltage V _{RWM} (V)	Typical. Capacitance 0V Bias 10kHz (nF)	Maximum Clamping Voltage V _c @ I _{pp} (V)
Min (V)	Max (V)	I _T (mA)				
90	110	1	5	80	1.5	130

■ Performance Graphs

FIG.1 V-I Characteristic

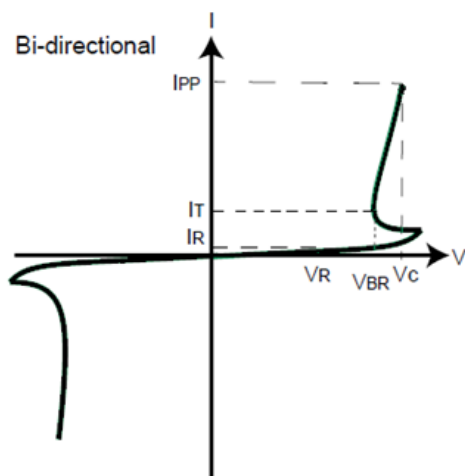


FIG.2 Pulse Derating Curve

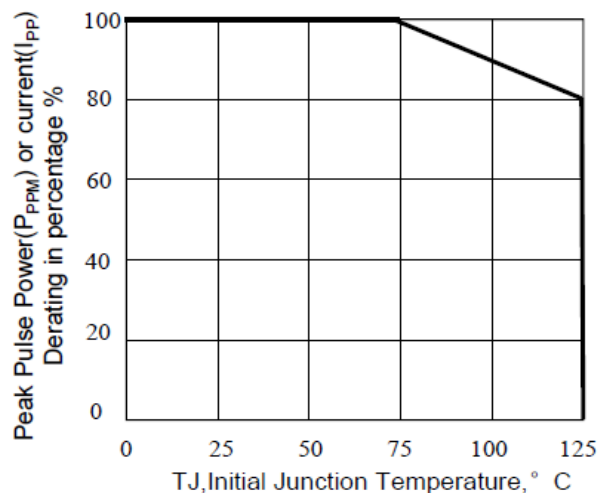


FIG.3 Current 8/20us Waveform per IEC 6100-4-5

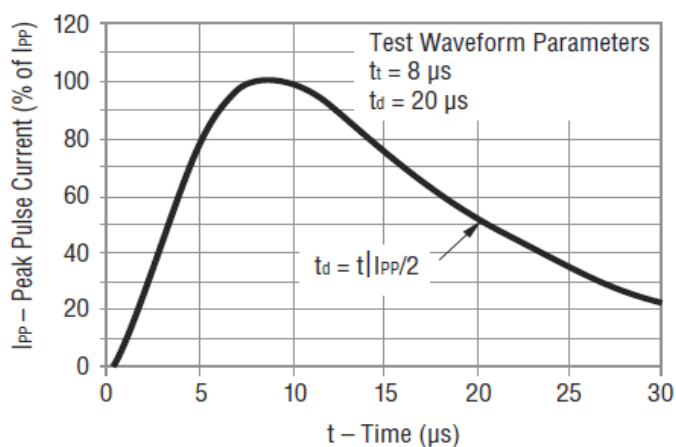
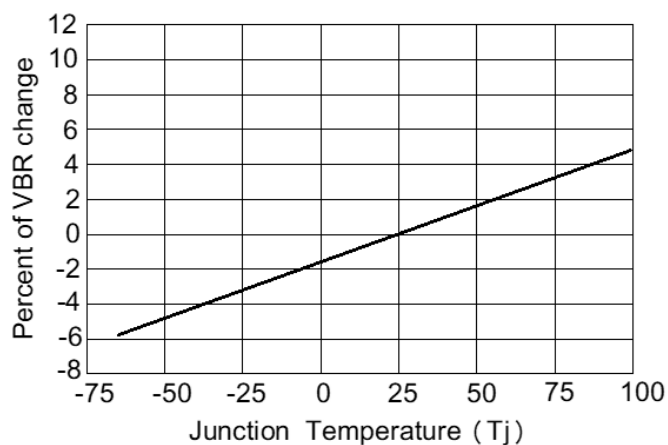


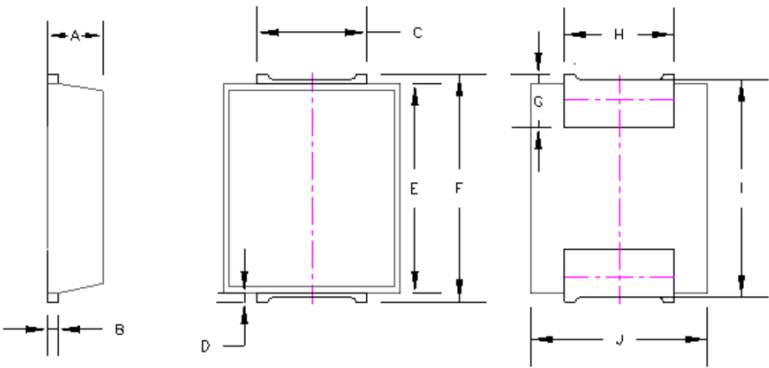
FIG.4: Typical VBR vs. junction temperature



■ Ordering Information(Example)

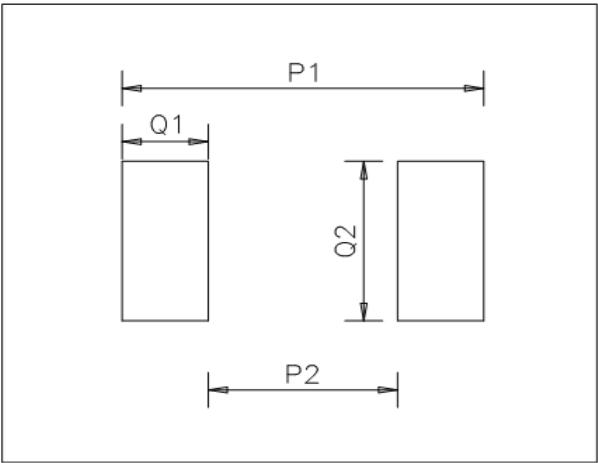
PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SMGJ SERIES	F1	Approximate 0.60	1500	3000	15000	15" reel

■ Outline Dimensions



SMG		
Dim	Min	Max
A	2.45	2.55
B	0.45	0.55
C	4.90	5.10
D	0.40	0.60
E	9.20	9.60
F	10.20	10.60
G	2.30	2.50
H	4.90	5.10
J	7.90	8.10
I	9.9	10.10

■ Suggested pad layout



Dim	Millimeters
P1	10.70
P2	5.60
Q1	2.60
Q2	5.10

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