

8KPMC58(C)A ~ 8KPMC64(C)A Series

Transient Voltage Suppressor

Voltage

58 - 64 V

Power

8000 W

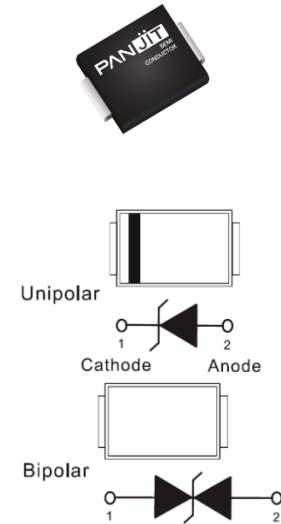
Features

- For surface mounted applications in order to optimize board space.
- Package suitable for automated handling
- Low inductance
- High temperature soldering : 260°C/10 seconds at terminals
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

- Case : SMC Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.266 grams

SMC



Maximum Ratings and Thermal Characteristics (T_A = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNIT
Peak Pulse Power Dissipation(tp = 10 / 1000 us) ^(Note 1,2)	P _{PP}	8000	W
Peak Pulse Current on tp = 10 / 1000 us waveform ^(Fig.2) (Note 1)	I _{PPM}	See table 1	A
Power Dissipation on Infinite Heat Sink at T _L = 50 °C	P _D	6.5	W
Peak Forward Surge Current (8.3ms single half sine-wave) for Uni-directional only	I _{FSM}	300	A
ESD IEC61000-4-2(Air)	V _{ESD}	±30	kV
ESD IEC61000-4-2(Contact)		±30	
Typical Thermal Resistance Junction to Ambient ^(Note 3)	R _{θJA}	125	°C/W
Operating Junction Temperature Range	T _J	-55~175	°C
Storage Temperature Range	T _{STG}	-55~175	°C

Notes :

1. Non-repetitive current pulse, per Fig.3 and derated above T_A=25°C per Fig.2.
2. Mounted on 100cm² copper pads to each terminal.
3. Mounted on a FR4 PCB, single-sided copper, standard footprint.
4. A transient suppressor is selected according to the working peak reverse voltage(V_{RWM}), which should be equal to or greater than the DC or continuous peak operation voltage level.
5. TVS is a transient protection device, it is strongly recommended not to use as a Zener.

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

Part Number		V _{RWM}	V _{BR}			I _R @V _{RWM}		V _C @I _{PP}		V _C @I _{PP}		Marking Code	
			Min.	Max.	I _T	uA		(10/1000us)		(8/20us)			
UNI	BI	V	V	V	mA	UNI	BI	V	A	V	A	UNI	BI
8000W Transient Voltage Suppressor													
8KHMC58A	8KHMC58CA	58	64.4	71.2	1	5	5	93.6	85.5	106.8	555.6	8KH58A	8KH58CA
8KHMC60A	8KHMC60CA	60	66.7	73.7	1	5	5	96.8	82.7	110.6	537.2	8KH60A	8KH60CA
8KHMC64A	8KHMC64CA	64	71.1	78.6	1	5	5	103.0	77.7	117.9	504.9	8KH64A	8KH64CA

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TYPICAL CHARACTERISTIC CURVES

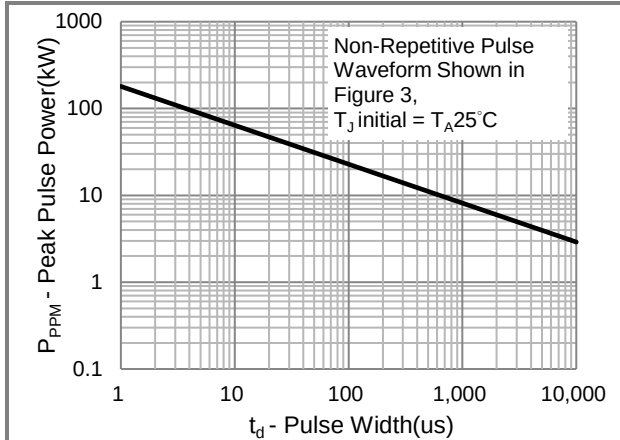


Fig.1 Pulse Power Rating Curve

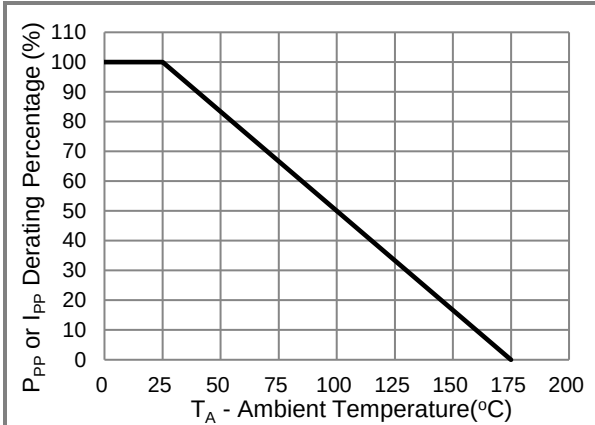


Fig.2 Derating Curve

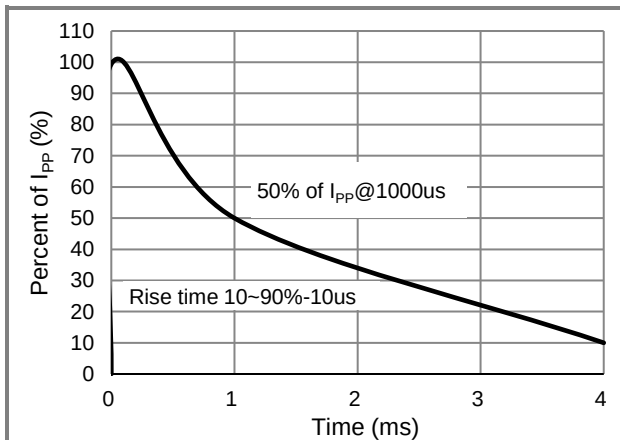


Fig.3 10/1000us Pulse Waveform

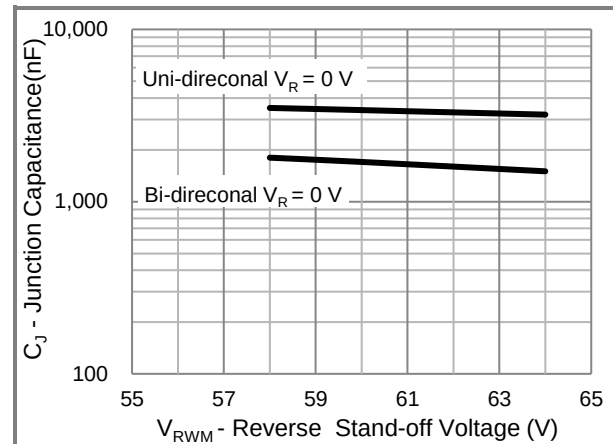


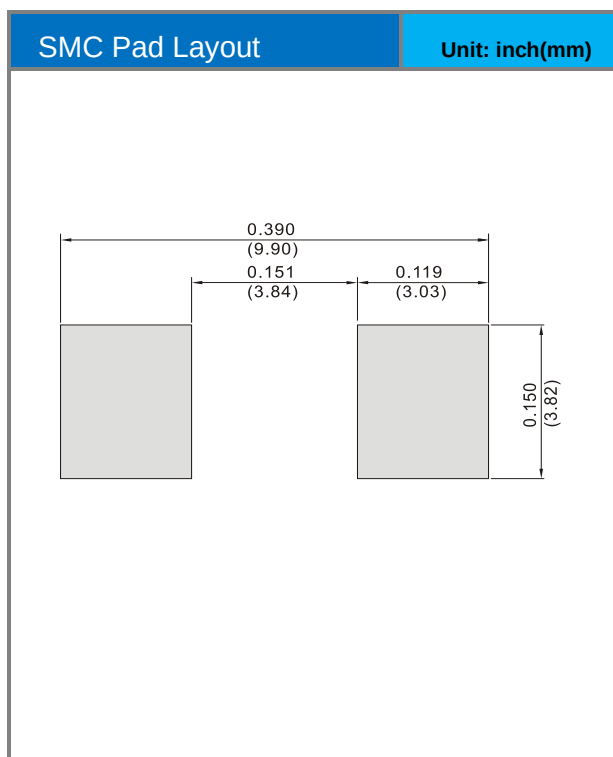
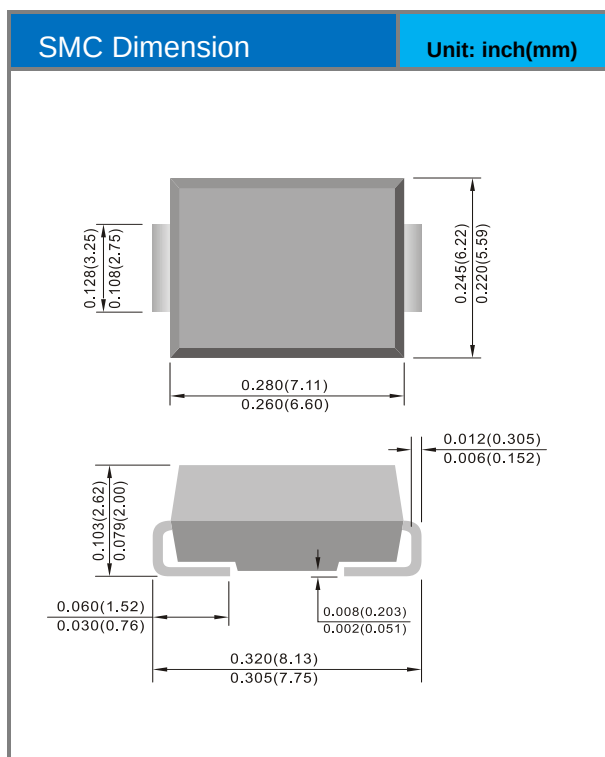
Fig.4 Typical Capacitance

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Product and Packing Information

Part No.	Package Type	Packing Type	Marking
8KPMCxxxA	SMC	3K pcs / 13" reel	See Table

Packaging Information & Mounting Pad Layout



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