

SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR

P6SMBJ7.0A

Features

For surface mounted applications in order to optimize board space.

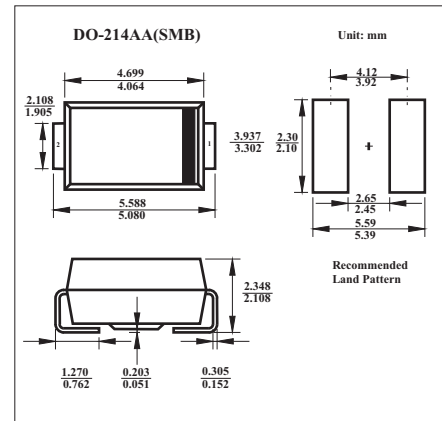
Low profile package

Built-in strain relief

Glass passivated junction

Excellent clamping capability

Low inductance

Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Ratings | Units |
|--|----------------|-------------|------------------|
| Peak Power Dissipation at $T_a=25^\circ\text{C}$, $T_P=1\text{ms}$ (Note 1,2) | PPPM | Minimum 600 | W |
| Peak Forward Surge Current (Note 2,3) | IFSM | 100 | A |
| Peak Pulse Current Current on 10/1000 μs waveform (Note 1) | IPPM | See Table | A |
| Operating and Storage Temperature Range | T_j, T_{STG} | -55 to +150 | $^\circ\text{C}$ |

Electrical Characteristics $T_a = 25^\circ\text{C}$

| Part Number | Reverse Stand-off Voltage | Breakdown Voltage | | Test Current | Reverse Leakage | Max. Clamp Voltage | Peak Pulse Current |
|-------------|---------------------------|-------------------|------|--------------|-----------------|--------------------|--------------------|
| | VRWM | VBR @ IT | | IT | IR @ VRWM | VC @ IPP | IPP |
| | | Min. | Max. | | | | |
| | V | V | V | mA | μA | V | A |
| P6SMBJ7.0A | 7.0 | 7.78 | 8.95 | 10 | 200 | 12.0 | 50.0 |

NOTES:

- 1.Non-repetitive current pulse, per Fig. 3 and derated above $T_a=25^\circ\text{C}$ per
- 2.Mounted on 5.0mm² (.013mm thick) land areas.
- 3.Measured on 8.3ms , single half sine-wave or equivalent square wave , duty cycle= 4 pulses per minutes maximum.

Marking

| | |
|---------|----|
| Marking | KM |
|---------|----|

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Typical Characteristics

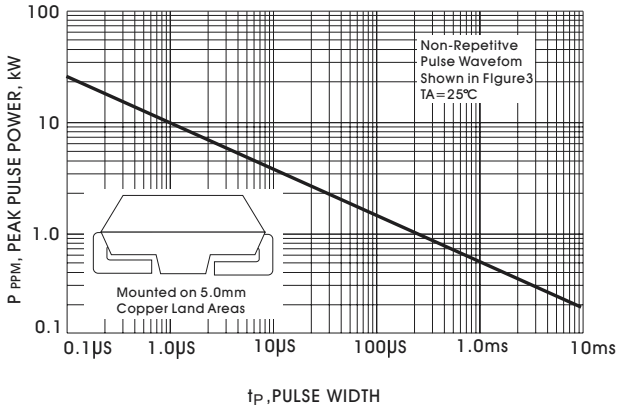


Figure 1, Peak Pulse Power Rating Curve

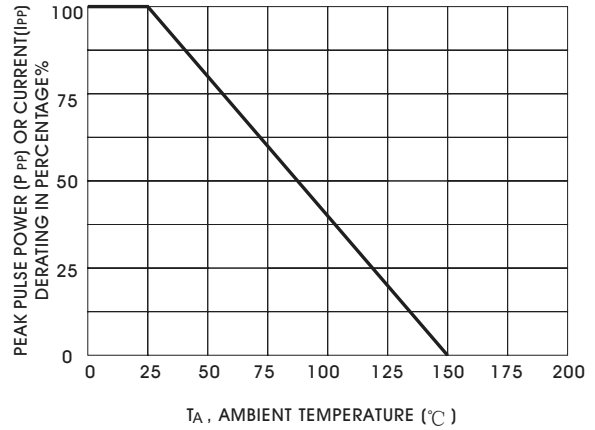


Figure 2, Derating Curve

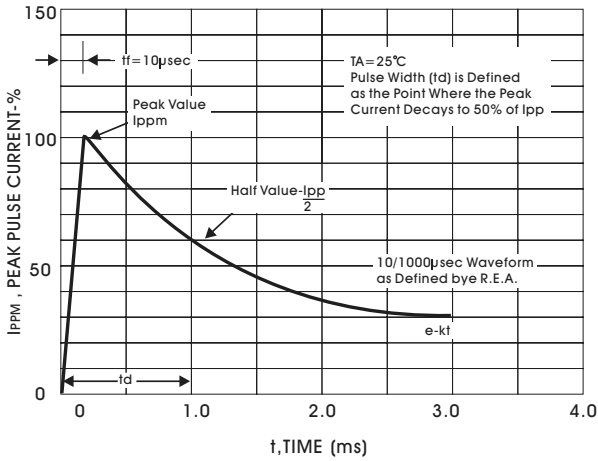


Figure 3, Pulse Waveform

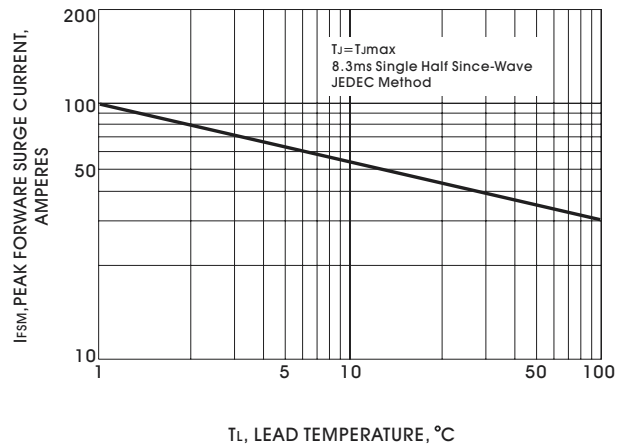


Figure 4, Maximum Non-Repetitive Peak Forward Surge Current

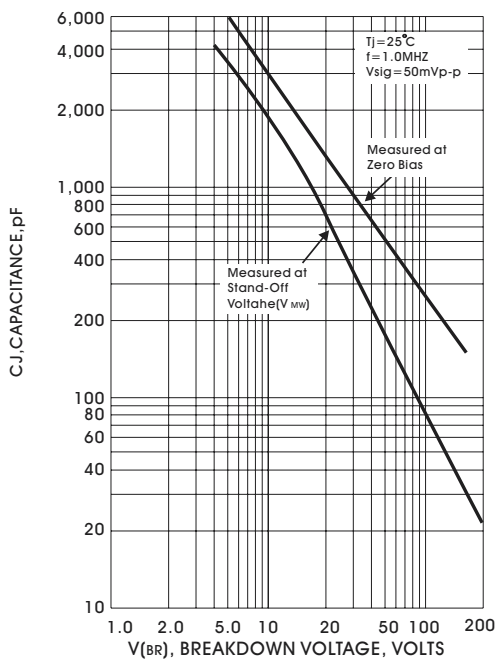


Figure 5, Typical Capacitance