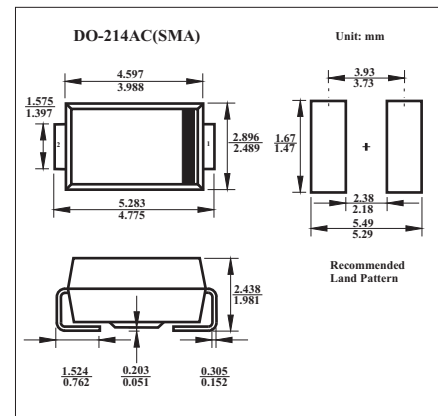


## SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR

## P4SMAJ45A

## ■ 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 1,2,5) | PPPM             | Minimum 400 | W                |
| Steady State Power Dissipation (Note 3)  | PM(AV)           | 1           | W                |
| Peak Forward Surge Current (Note 4)  | IFSM             | 40          | A                |
| Peak Pulse Current Current on 10/1000 $\mu\text{s}$ waveform (Note 1,2,5)        | I <sub>PPM</sub> | 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 |
|-------------|---------------------------|-------------------|------|--------------|-----------------|--------------------|--------------------|
|             | $V_{RWM}$                 | $V_{BR} @ I_T$    |      | $I_T$        | $I_R @ V_{RWM}$ | $V_C @ I_{PP}$     | $I_{PP}$           |
|             |                           | Min.              | Max. |              |                 |                    |                    |
| P4SMAJ45A   | 45                        | 50.0              | 57.5 | 1.0          | 5               | 72.7               | 5.5                |

## NOTES:

1. Non-repetitive current pulse and derated above  $T_a = 25^\circ\text{C}$
2. Mounted on 5.0mm<sup>2</sup> copper pad to each terminal.
3. lead temperature at 75 $^\circ\text{C}$ .
4. 8.3ms single half sine-wave, duty cycle= 4 pulses per minutes maximum.
5. Peak pluse power waveformis 10/1000 $\mu\text{s}$ .

## ■ Marking

|         |    |
|---------|----|
| Marking | JV |
|---------|----|

# P4SMAJ45A

## Typical Characteristics

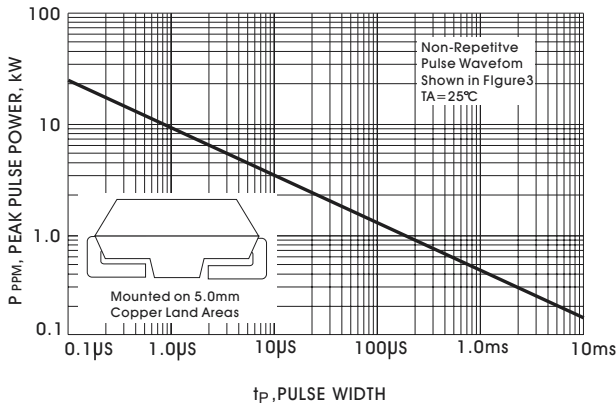


Figure 1, Peak Pulse Power Rating Curve

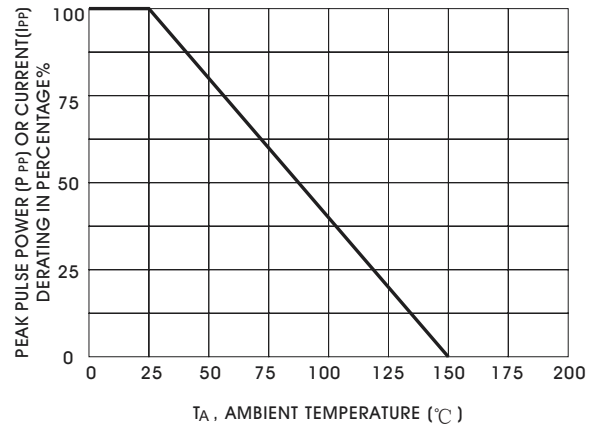


Figure 2, Derating Curve

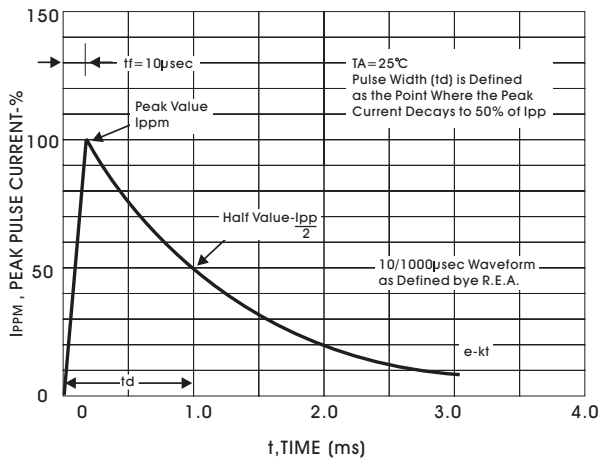


Figure 3, Pulse Waveform

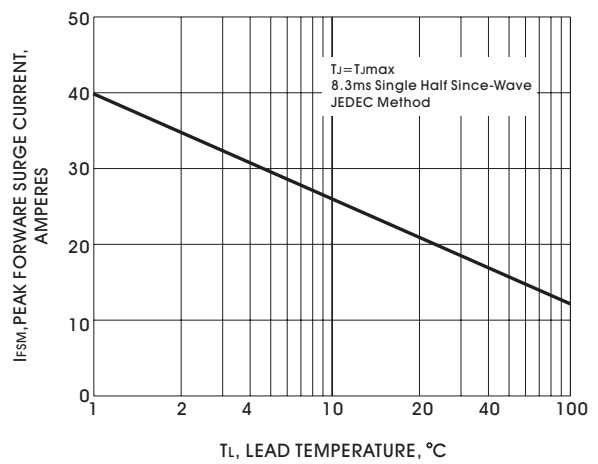


Figure 4, Maximum Non-Repetitive Peak Forward Surge Current

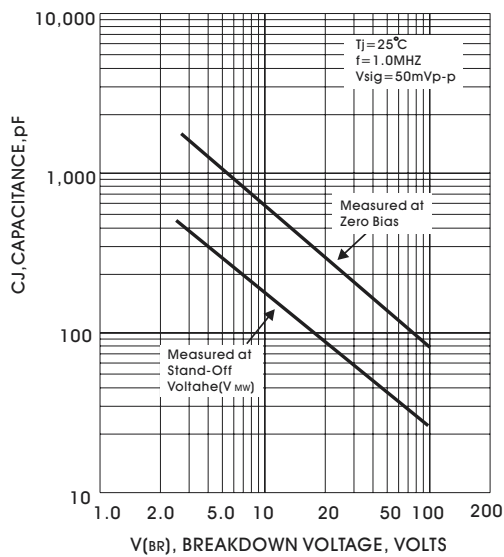


Figure 5, Typical Capacitance