

## SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR

## P4SMAJ13A

## Features

For surface mounted applications in order to optimize board space.

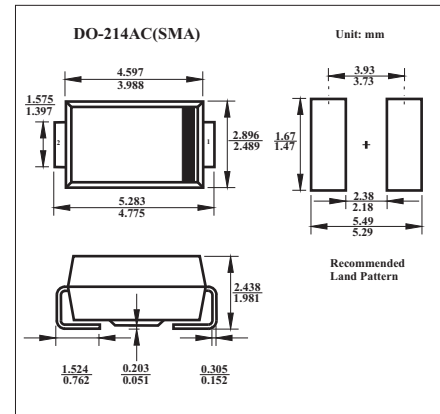
Low profile package

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.				
P4SMAJ13A	13	14.4	16.5	1.0	5	21.5	18.6

## 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	IG
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# P4SMAJ13A

## Typical Characteristics

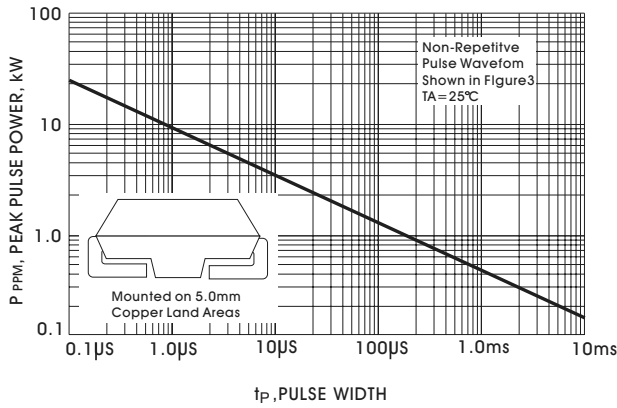


Figure 1, Peak Pulse Power Rating Curve

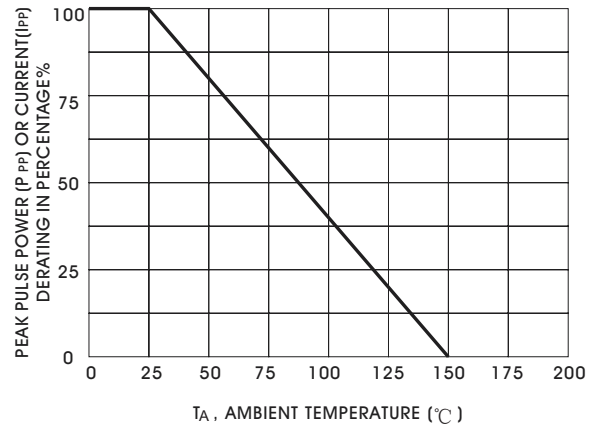


Figure 2, Derating Curve

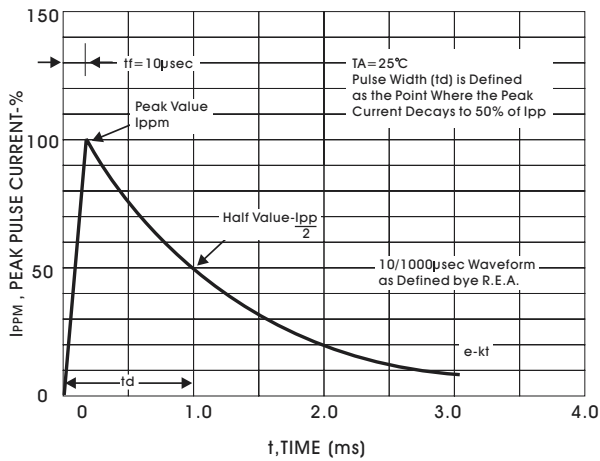


Figure 3, Pulse Waveform

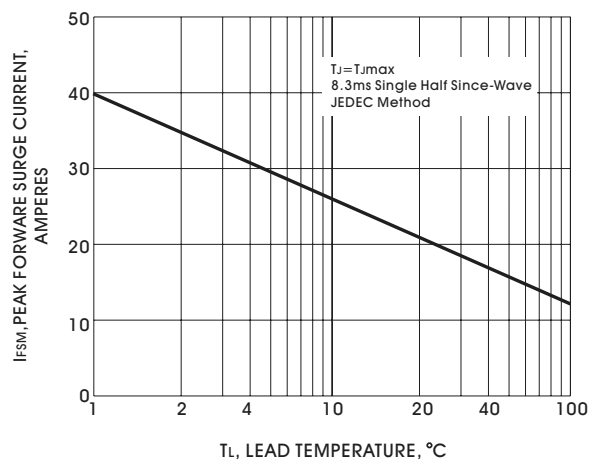


Figure 4, Maximum Non-Repetitive Peak Forward Surge Current



Figure 5, Typical Capacitance