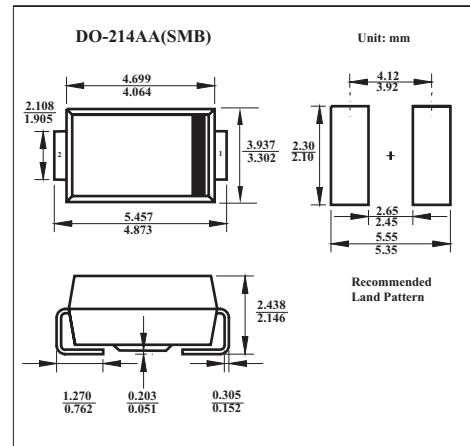


SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR

1SMB15A

■ Features

- For surface mounted applications in order to optimize board space.
- Working Peak Reverse Voltage Range : 5.0 V to 170 V
- Standard Zener Breakdown Voltage Range : 6.7 V to 199 V
- Low Leakage
- Excellent clamping capability

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

Parameter	Symbol	Ratings	Units
Peak Power Dissipation @ $T_L=25^\circ\text{C}$ Pulse Width = 1 ms	P _{PPM}	600	W
DC Power Dissipation @ $T_L = 75^\circ\text{C}$ (Note 1) Derate Above 75°C	P _D	3.0	W
		40	mW/ $^\circ\text{C}$
DC Power Dissipation @ $T_A = 25^\circ\text{C}$ (Note 2) Derate Above 25°C	P _D	0.55	W
		4.4	mW/ $^\circ\text{C}$
Thermal Resistance from Junction to Ambient	R _{θJA}	226	$^\circ\text{C}/\text{W}$
Peak Forward Surge Current (Note 3)	I _{FSM}	100	A
Instantaneous Forward Voltage @ I _{PP} =30A	V _F	3.5	V
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +150	$^\circ\text{C}$

NOTES: 1. in square copper pad, FR-4 board.

2.FR-4 board

3.Measured on 8.3ms , single half sine-wave or equivalent square wave , duty cycle= 4 pulses per minutes maximum.

■ 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.				
	V	V	V	mA	μA	V	A
1SMB15A	15	16.7	18.5	1.0	5.0	24.4	24.0