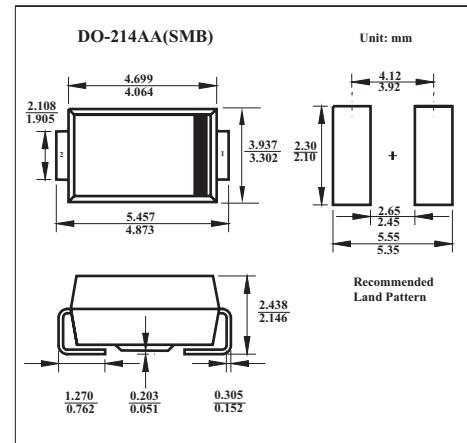


1SMB15A
■ Features

- 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 Ta = 25°C

Parameter	Symbol	Ratings	Units
Peak Power Dissipation @ TL=25°C Pulse Width = 1 ms	PPPM	600	W
DC Power Dissipation @ TL = 75°C (Note 1)	PD	3.0	W
Derate Above 75°C		40	mW/°C
DC Power Dissipation @ TA = 25°C (Note 2)	PD	0.55	W
Derate Above 25°C		4.4	mW/°C
Thermal Resistance from Junction to Ambient	R _θ JA	226	°C/W
Peak Forward Surge Current (Note 3)	I _{FSM}	100	A
Instantaneous Forward Voltage @ IPP=30A	V _F	3.5	V
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +150	°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 Ta = 25°C

Part Number	Reverse Stand-off Voltage	Breakdown Voltage		Test Current	Reverse Leakage	Max. Clamp Voltage	Peak Pulse Current
	VRWM	VBR @ I _T					
		Min.	Max.	I _T	I _R @ VRWM	V _C @ IPP	I _{PP}
		V	V	mA	μ A	V	A
1SMB15A	15	16.7	18.5	1.0	5.0	24.4	24.0