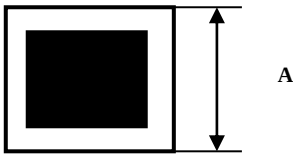
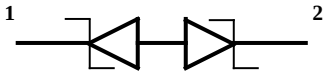
Wafer Spec Sheet July 2015

SMB-3,3L33; SMB-3,3L34.

Chip Bi- directional TVS diode





Mechanical data: A_x= 380um. A_y=380um..
Chip thickness: a) 138+/-12um – for SMB-3,3L33;
b) 470+/-20um – for SMB-3,3L34.
Top Metal: Al- for wire bonding.
Back side: a) SMB-3.3L33 - Ti-Ni-Ag for Soldering.;
b) SMB-3.3L34 – without metallization.
Probing: a) sampling testing: no bad dice inking;
. guaranteed good dice quantity≥95%.
b) 100% testing (if agreed with customer): wafer mapping data;
no bad dice inking.

Limiting values

Parameter	Symbol	Conditions	Value	Unit
Working Peak Reverse Voltage	V_{RWM}	-	3,3	V
Peak Pulse Power	P_{pp}	t_p= 8/20uS	250*	W
Peak Pulse Current	I_{pp}	t_p= 8/20uS	15,0*	A
Electrostatic Discharge	V_{ESD}	IEC 61000-4-2, level 4.	+/-10,0 (Contact); +/-25,0 (Air).	kV
Max.junction temperature	T_j		+150	ºC

Characteristics .Tj=25ºC.

SYMBOL	PARAMETER	CONDITIONS	MIN.	TYP.	MAX.	UNIT
I_R	Diode reverse leakage current.	V=±3,0 V	-	0,05	0,9	uA
V_{BR}	Breakdown voltage. Pin 1 to 2& Pin 2 to 1	I_R=1mA	3,5	-	-	V
V_{PT}	Punch-Through Voltage	I_{PT}=2uA	3,5	-	-	V
Vsb	Snap-Back Voltage	Isb=50mA	3,3	-	5,3	V
C_j	Diode capacitance .	f=1MHz, V_{dc}=0 V.	-	25		pF
V_{CL}	Clamping voltage	I_{pp}=1,0A; I_{pp}= 15,0A; t_p= 8/20uS .	- -	- -	5,5* 10,0*	V

*For Device testing.