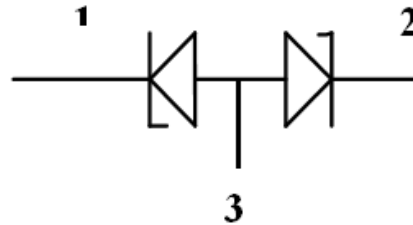
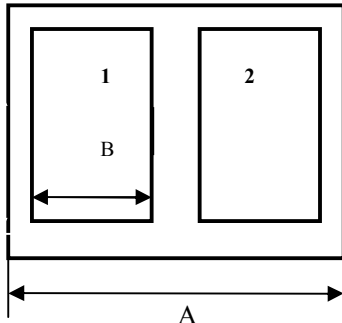


Rev.2. March. 2014

SMB-3A; SMB-3B

Chip Bi- directional TVS diode in wafer form, 4 inch.

Die size: 15mil.


Mechanical data: $A_x=A_y=380\mu\text{m}$. $B_x=110\mu\text{m}$. $B_y=260\mu\text{m}$.

Chip thickness: 138+/-12 μm .

Pin 1, 2 –Kathode: Al metallization for wire bonding.

Pin 3- Back side –Anode: metallization-Ti-Ni-Ag.

Probing: a) sampling testing: no bad dice inking;
 guaranteed good dice quantity $\geq 95\%$.

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}	$I_R=1\text{mA}$	3,3	V
Peak Pulse Power	P_{pp}	$t_p= 8/20\mu\text{S}$	73*	W
Peak Pulse Current	I_{pp}	$t_p= 8/20\mu\text{S}$	6,7*	A
Electrostatic Discharge	V_{ESD}	IEC 61000-4-2, level 4.	+/-8,0 (Contact); +/-15,0 (Air).	kV
Max.junction temperature	T_j		+150	$^{\circ}\text{C}$

Characteristics $T_j=25^{\circ}\text{C}$. UNIDIRECTIONAL (Circuit tied to Pins 1 and 3 or Pins 2 and 3)

SYMBOL	PARAMETER	CONDITIONS	MIN.	TYP.	MAX.	UNIT
I_r	Diode reverse leakage current. SMB-3A, SMB-3B	$V_R=3,0\text{ V}$;	-	-	5,0 0,5	μA
V_{BR}	Breakdown voltage. SMB-3A, SMB-3B	$I_R=1\text{mA}$	5,35 5,80	-	5,80 6,45	V
C_j	Diode capacitance : SMB-3A, SMB-3B	$F=1\text{MHz}$, $V_{dc}=0\text{ V}$.	-	65 40	- -	pF
V_{CL}	Clamping voltage	$I_{pp}=1,0\text{A}$; $t_p= 8/20\mu\text{S}$ $I_{pp}= 6,7\text{A}$; $t_p= 8/20\mu\text{S}$.	-	-	6,9* 10,9*	V

* For Device testing