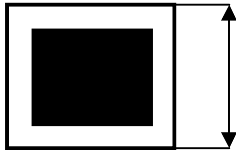
VSP-MIKRON

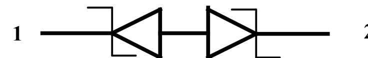
RoHS

Rev.3. March 2014

SMB-05L31; SMB-05L32

Chip Bi- directional TVS diode in wafer form, 4 inch. Die size: 15*15mil.





Mechanical data: A_x= 380um. A_y=380um..
Chip thickness: a) 460/-20um – for SMB-05L31;
b) 230+/-20um – for SMB-05L32;
Top Metal: Al- for wire bonding.
Back side: a) SMB-05L31 - without metallization;
b) SMB-05L32 – Ti-Ni-Ag for Soldering.
Probing: **a)sampling testing**: no bad dice inking;
guaranteed good dice quantity≥95%.
b)100% testing(if agreed with custumer): wafer mapping data;
no bad dice inking.

Limiting values

Parameter	Symbol	Conditions	Value	Unit
Working Peak Reverse Voltage	V_{RWM}		5,0.	V
Peak Pulse Power	P_{pp}	t_p= 8/20uS	140*	W
Peak Pulse Current	I_{pp}	t_p= 8/20uS	10,0*	A
Electrostatic Discharge	V_{ESD}	IEC 61000-4-2, level 4.	+/-8,0 (Contact); +/-15,0 (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=±5,0 V	-	-	90	nA
V_{BR}	Breakdown voltage.	I_R=1mA	5,6	-	9,4	V
C_j	Diode capacitance.	F=1MHz, V_{dc}=0 V.	-	15	20	pF
V_{CL}	Clamping voltage	I_{pp}=1,0A; I_{pp}= 10,0A; t_p= 8/20uS .	- -	- -	12,0* 14,0*	V

*For Device testing