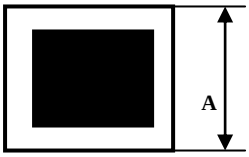
VSP-MIKRON

Rev.2. March. 2014

SMB-05L51, SMB-05L52

Chip Bi- directional TVS diode in wafer form, 4 inch. Die size: 8*8mil.



Mechanical data: A_x= 210um. A_y=210um..
Chip thickness: a) 138+/-12um – for SMB-05L51;
b) without grinding 470+/-20um – for SMB-05L52.
Top Metal: Al- for wire bonding.
Back side: a) Ti-Ni-Ag for Soldering – for SMB-05L51
b) without metallization – for SMB-05L52
Scribe Line Width – 40um.
Sampling testing: no bad dice inking;
guaranteed good dice quantity≥95%.

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	35*	W
Peak Pulse Current	I_{pp}	t_p= 8/20uS	2,0*	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. Pin 1 to 2 or Pin2 to 1.	I_R=1mA	5,6	-	9,4	V
C_j	Diode capacitance .	F=1MHz, V_{dc}=0 V.	-	3,0	3,5	pF
V_{CL}	lamping voltage	I_{pp}=1,0A; I_{pp}= 2,0A; t_p= 8/20uS .	- -	- -	10,0* 13,0*	V

*For Device testing.