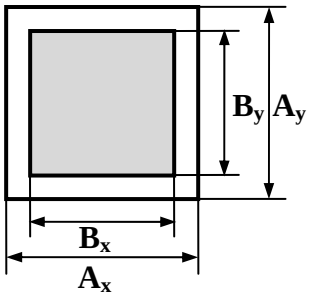
VSP-MIKRON

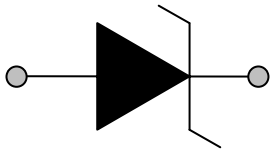
RoHS

Rev.1. March 2010.

SM-05L12, SM-05L13

Chip TVS diode.





Schematic and pinning diagram.

Mechanical date: A_x=A_y=410um
B_x=B_y=315um
Chip thickness: 138+/-12um for SM-05L12
230+/-20um for SM-05L13
Scribe Line width - 60um.
Top Metal-Cathode: a)Al metallization for wire bond
b) Ti-Ni-Ag for soldering
Back side - Anode: Without the metallization.

Limiting values

Parameter	Symbol	Conditions	Value	Unit
Reverse Stand-off voltage	V_{RWM}	-	5,0	V
Peak Pulse Power	P_{pp}	t_p=8/20us	300*	W
Peak Pulse Current	I_{pp}	t_p=8/20us	17,0*	A
Electrostatic Discharge	V_{ESD}	IEC 61000-4-2, level 4.	>8 (Contact); >15 (Air).	kV
Max.junction temperature	T_j	-	+150	ºC

Characteristics (Tj=25ºC)

SYMBOL	PARAMETER	CONDITIONS	MIN.	TYP.	MAX.	UNIT
V_{BR}	Breakdown voltage	I_R=1mA	6,3	6,7	7,1	V
I_R	Reverse leakage current	V_R=5,0V	-	-	0,9	uA
C_j	Diode capacitance .	F=1MHz, V_{dc}=0 V.	-	130	140	pF
V_{CL}	Clamping voltage	I_R=1A, t_p= 8/20uS I_R=17A, t_p=8/20uS	- -	- -	9,0* 18,0*	V V
R_{diff}	Differential resistance	I_R=1,0mA	-	-	80	ohm

*- For Device testing