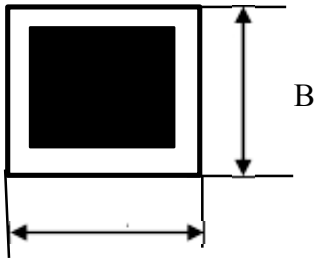
VSP-MIKRON

RoHS

Rev.1. October 2013.

SM-05L41; SM-05L42.

Chip TVS diode. **Die size: 11mil.**



Mechanical date: A= B=280um.
Chip thickness: a)138+/-12um for SM-05L41;
b) without the grinding (480um max.)– for SMB-05L42.
Scribe Line Width – 60um.
Top side – Cathode. Al metallization for wire bond.
Back side- Anode. a) SM-05L41 – Ti-Ni-Ag for Soldering.
b) SM-05L42 – without the metallization.

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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	60*	W
Max. Peak Pulse Current	I_{PP}	t_p= 8/20uS	4,0*	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_R=5,0V	-	-	0,9	uA
V_{BR}	Breakdown voltage.	I_R=1mA	6,25	6,8	7,5	V
C_j	Diode capacitance .	F=1MHz, V_R=0 V.	-	25	-	pF
V_{CL}	Clamping voltage	I_R=1A, t_p= 8/20uS I_R= 4,0A, t_p= 8/20uS	- -	- -	9,0* 15,0*	V
Vf	Forward Voltage	If=10mA	-	-	1,1	V

*- For Device testing