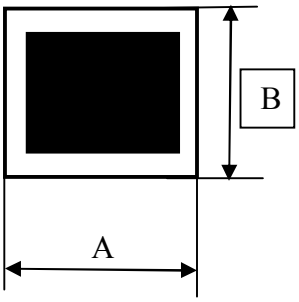
VSP-MIKRON

May 2012. Preliminary

SM-12N1

Chip TVS diode. **Die size: 22,8*14,6mil.**



Mechanical date: A= 580um; B=370um. Chip thickness –230+/-20um.
Scribe Line Width – 60um.
Top side – Anode. Al metallization for wire bond.

Back side- Cathode. Metallization Ti- Ni-Ag for soldering.

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Limiting values

Parameter	Symbol	Conditions	Value	Unit
Working Peak Reverse Voltage	V_{RWM}		12,0.	V
Peak Pulse Power	P_{pp}	t_p= 8/20uS	400*	W
Max. Peak Pulse Current	I_{PP}	t_p= 8/20uS	17,0*	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=12,0V	-	-	0,9	uA
V_{BR}	Breakdown voltage.	I_R=1mA	12,7	-	16,7	V
C_j	Diode capacitance .	F=1MHz, V_R=0 V.	-	110	130	pF
V_{CL}	Clamping voltage	I_R=5A, t_p= 8/20uS I_R= 17A, t_p= 8/20uS	- -	- -	18,2* 24,2*	V

*- For Device testing.