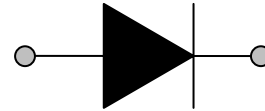
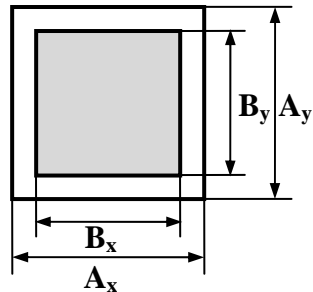


Rev.1. March 2010.

SM-12P1

Chip TVS diode.



Mechanical date: $A_x=400\mu\text{m}$, $A_y=600\mu\text{m}$
 $B_x=290\mu\text{m}$, $B_y=490\mu\text{m}$

Chip thickness: $230\pm 20\mu\text{m}$

Scribe Line width - $60\mu\text{m}$.

Top Metal: Al metallization for wire bond

Back side – Cathode: Ti-Ni-Ag for soldering.

Schematic and pinning diagram.

Limiting values

Parameter	Symbol	Conditions	Value	Unit
Reverse Stand-off voltage	V_{RWM}	-	12	V
Peak Pulse Power	P_{pp}	$t_p=8/20\mu\text{s}$	500*	W
Peak Pulse Current	I_{pp}	$t_p=8/20\mu\text{s}$	16,0*	A
Electrostatic Discharge	V_{ESD}	IEC 61000-4-2, level 4.	>8 (Contact); >15 (Air).	kV
Max.junction temperature	T_j	-	+150	°C

Characteristics ($T_j=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	MIN.	TYP.	MAX.	UNIT
V_{BR}	Breakdown voltage	$I_R=1\text{mA}$	13,4	-	17,0	V
I_R	Reverse leakage current	$V_R=12,0\text{V}$	-	-	0,9	μA
V_{CL}	Clamping Voltage	$I_{pp}=1.0\text{A}$, $t_p=8/20\mu\text{s}$ $I_{pp}=12\text{A}$, $t_p=8/20\mu\text{s}$	-	-	22,0* 27,0*	V
C_J	Diode capacitance	$V_R=0\text{V}$, $f=1\text{MHz}$	-		200	pF

*- For Device testing