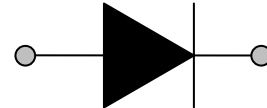
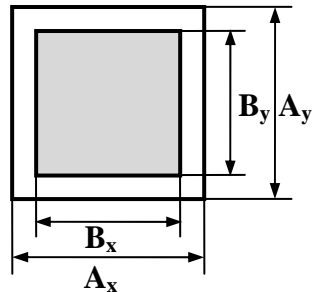


Rev.1. March 2010.

SM-05L1

Chip TVS diode.



Mechanical date: $A_x=A_y=380\mu\text{m}$
 $B_x=B_y=280\mu\text{m}$

Chip thickness: $138\pm 12\mu\text{m}$

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

Top Metal-Cathode: a) Al metallization for wire bond
 b) Ti-Ni-Ag for soldering

Back side - Anode: Without the metallization.

Schematic and pinning diagram.

Limiting values

Parameter	Symbol	Conditions	Value	Unit
Reverse Stand-off voltage	V_{RWM}	-	5,0	V
Peak Pulse Power	P_{pp}	$t_p=8/20\mu\text{s}$	260*	W
Peak Pulse Current	I_{pp}	$t_p=8/20\mu\text{s}$	12,0*	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	$I_R=1\text{mA}$	6,45	6,7	7,1	V
I_R	Reverse leakage current	$V_R=5\text{V}$	-	-	0,9	μA
C_j	Diode capacitance .	$F=1\text{MHz}$, $V_{dc}=0\text{V}$.	-	100	150	pF
V_{CL}	Clamping voltage	$I_R=1\text{A}$, $t_p=8/20\mu\text{S}$	-	-	9,0	V
		$I_R=12\text{A}$, $t_p=8/20\mu\text{S}$	-	-	21,0	V
R_{diff}	Differential resistance	$I_F=1,0\text{mA}$	-		80	ohm

*- For Device testing