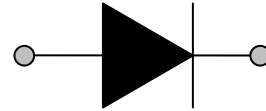
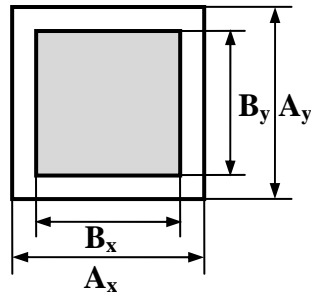


Rev.1. March 2010.

## SM-05L2

Chip TVS diode.



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

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

**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	$P_{pp}$	$t_p=8/20\mu\text{s}$	250*	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	$I_R=1\text{mA}$	6,15	-	7,1	V
$I_R$	Reverse leakage current	$V_R=5,25\text{V}$	-	-	10	$\mu\text{A}$
$C_j$	Diode capacitance .	$F=1\text{MHz}, V_{dc}=0\text{V}$ .	-	100	140	pF
$V_F$	Forward voltage	$I_F=200\text{mA}$	-	-	1,25	V
$V_{CL}$	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

\*- For Device testing