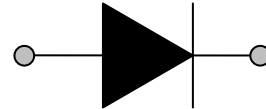
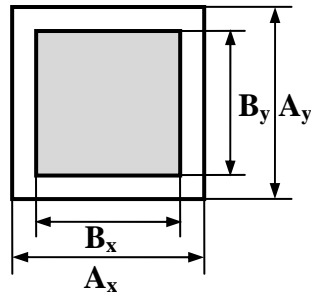


Rev.1. March 2010.

## SM-05

Chip TVS diode.



**Mechanical date:**  $A_x=A_y=450\mu\text{m}$   
 $B_x=B_y=310\mu\text{m}$

**Schematic and pinning diagram.**

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

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

**Top Metal-Cathode:** Al metallization for wire bond

**Back side - Anode:** Ti-Ni-Ag for soldering.

### 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	$I_{pp}$	$t_p=8/20\mu\text{s}$	15,0*	A
Max.junction temperature	$T_j$	-	+125	$^{\circ}\text{C}$

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

SYMBOL	PARAMETER	CONDITIONS	MIN.	TYP.	MAX.	UNIT
$V_{BR}$	Breakdown voltage	$I_R=1\text{mA}$	6,1	6,7	7,4	V
$I_R$	Reverse leakage current	$V_R=5\text{V}$	-	-	1,0	$\mu\text{A}$
$C_j$	Diode capacitance .	$F=1\text{MHz}, V_{dc}=0\text{V}$ .	-	140	200	pF
$V_{CL}$	Clamping voltage	$I_R=1\text{A}, t_p=8/20\mu\text{s}$	-	-	8,5	V
		$I_R=5,0\text{A}, t_p=8/20\mu\text{s}$	-	-	12,9	V
		$I_R=12,0\text{A}, t_p=8/20\mu\text{s}$	-	-	20,6	V
$V_f$	Forward voltage	$I_F=10\text{mA}$	-	0,75	-	V

\*- For Device testing