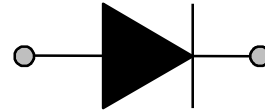
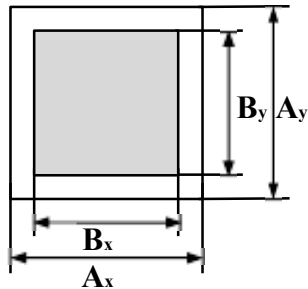


SM-12N

Chip TVS diode.



Mechanical date: $A_x=A_y=580\mu\text{m}$
 $B_x=B_y=420\mu\text{m}$

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}	$t_p=8/20\mu\text{s}$	300*	W
Peak Pulse Current	I_{pp}	$t_p=8/20\mu\text{s}$	12.5*	A
Max.junction temperature	T_j	-	+125	°C

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

SYMBOL	PARAMETER	CONDITIONS	MIN.	TYP.	MAX.	UNIT
V_{BR}	Breakdown voltage	$I_R=1\text{mA}$	13.3	-	16.3	V
I_R	Reverse leakage current	$V_R=12,0\text{V}$	-	-	0.9	μA
V_{CL}	Clamping Voltage	$I_{pp}=1.0\text{A}$, $t_p=8/20\mu\text{s}$ $I_{pp}=12\text{A}$, $t_p=8/20\mu\text{s}$	-	-	19.0* 25.0*	V
C_j	Diode capacitance	$V_R=0\text{V}$, $f=1\text{MHz}$	-		150	pF

*- For Device testing