

**1. Scope :**

This specification applies to P/N silicon TVS diode chips,  
Device NO. SD-116B6

**2. Structure :**

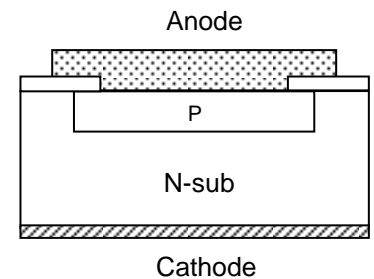
- 2-1. Planar type : P/N Diode.
- 2-2. Electrodes :  
Top side : Aluminum alloy.  
Back side : Gold layer.

**3. Size :**

- 3-1. Chip size : 26.3 mils x 9.8 mils (0.670 mm x 0.250 mm ).
- 3-2. Chip thickness : 5.9 ± 1.0 mils (0.150 ± 0.0254 mm )
- 3-3. Bonding pad : 21.7 mils x 5.1 mils (0.550 mm x 0.130 mm).
- 3-4. Pattern drawing : Refer to the attached drawing.

**4. Electrical characteristics (Ta = 25 °C)**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Reverse Working Voltage	V <sub>RWM</sub>			29	V	-
Reverse Current	I <sub>R</sub>			600	nA	V <sub>R</sub> =29V E <sub>e</sub> =0mW/cm <sup>2</sup>
Reverse Breakdown Voltage	V <sub>(BR)</sub>	34	36	38	V	I <sub>R</sub> =5mA E <sub>e</sub> =0mW/cm <sup>2</sup>
Capacitance	C <sub>T</sub>		34		pF	F=1MHZ, V <sub>R</sub> =0V
Reverse Clamping Voltage <i>*IEC61000-4-5 Standard.</i>	V <sub>C</sub>		40.7		V	IPP=1A Tp=8/20us
			64.6		V	IPP=4A Tp=8/20us
Forward Voltage	V <sub>f</sub>			1.2	V	I <sub>F</sub> =10mA E <sub>e</sub> =0mW/cm <sup>2</sup>



Parameter	Symbol	Rating	Unit
ESD Voltage Air <i>*IEC61000-4-2 Standard.</i>	V <sub>ESD</sub>	30	KV
ESD Voltage Contact <i>*IEC61000-4-2 Standard.</i>		30	

\*AEC-Q101 qualified.