

**1. Scope :**

This specification applies to P/N silicon TVS diode chips,  
Device NO. SD-141B6

**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 : 47.2 mils x 35.4 mils (1.200 mm x 0.900 mm ).
- 3-2. Chip thickness : 5.9 ± 1.0 mils (0.150 ± 0.0254 mm )
- 3-3. Bonding pad : 42.5 mils x 30.7 mils (1.080 mm x 0.780 mm).
- 3-4. Pattern drawing : Refer to the attached drawing.

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Reverse Working Voltage	$V_{RWM}$			29	V	-
Reverse Current	$I_R$			600	nA	$V_R=29V$ $E_e=0mW/cm^2$
Reverse Breakdown Voltage	$V_{(BR)}$	34		38	V	$I_R=5mA$ $E_e=0mW/cm^2$
Capacitance	$C_T$		292		pF	$F=1MHz,$ $V_R=0V$
Reverse Clamping Voltage <i>*IEC61000-4-5 Standard.</i>	$V_C$		36.8		V	$I_{PP}=1A$ $T_p=8/20us$
			38.6		V	$I_{PP}=4A$ $T_p=8/20us$
Forward Voltage	$V_f$			1.2	V	$I_f=10mA$ $E_e=0mW/cm^2$

Parameter	Symbol	Rating	Unit
ESD Voltage Air <i>*IEC61000-4-2 Standard.</i>	$V_{ESD}$	30	KV
ESD Voltage Contact <i>*IEC61000-4-2 Standard.</i>		30	

\*AEC-Q101 qualified.

