TVS DIODE CHIP

This TVS DIODE CHIP is a TVS and ESD Protection Diode. It has electrical characteristics like lower leakage current, high electrostatic discharge ability and other advantages, it also has extra small size .

Features

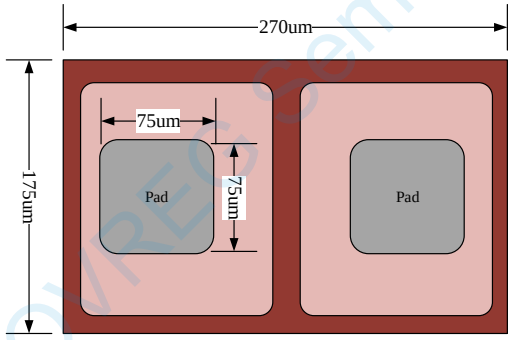
- Si-based low capacitance structure
- Ultra-small size 10.6mil * 6.9mil
- Non-conducting resin

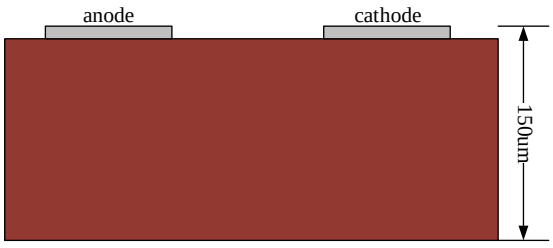
Structure

- Electrode topside (anode/cathode)：Aluminum
- Electrode backside：Silicon

Size

Parameter	Value（mil）	Value（mm）
Chip size	10.6mil x 6.9mil （±0.4mil）	0.270mm x 0.175mm（±0.01mm）
Chip Thickness	6mil ± 0.4mil	0.150mm ± 0.010mm
Top Metal Thickness	0.118mil	0.003mm
Pad Size	2.95mil±0.2mil	0.075mm±0.005mm





Electrical Characteristics(T= 25℃)

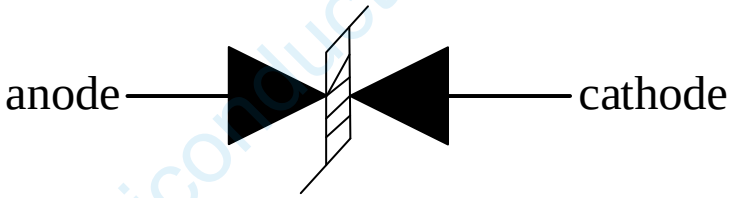
Parameter	Symbol	Test condition	Value	Unit
Junction temperature	Tj		125	℃
Storage temperature	Tstg		-55~150	℃

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Electrical Characteristics(T= 25℃)

Parameter	Symbol	Min	Type	Max	Unit	Test Conditions
Forward Voltage	V_F	7	-	9.5	V	I_F = 1mA
Forward Voltage	V_F	7	-	10	V	I_F = 10mA
Forward Leakage Current	I_F	-	-	200	nA	V_F = 6V
Reverse Voltage	V_R	7	-	9.5	V	I_R = 1mA
Reverse Voltage	V_R	7	-	10	V	I_R = 10mA
Reverse Leakage Current	I_R	-	-	200	nA	V_R = 6V
Peak Pulse Current	I_{PP}	-	3.5	-	A	8/20us waveform
Clamping Voltage	Vc	-	15	-	V	I_{PP}=3.5A,8/20us waveform
ESD	-	±20	-	-	kV	IEC 61000-4-2 (AIR)
ESD	-	±20	-	-	kV	IEC 61000-4-2 (CONTACT)
Junction Capacitance	C_J	-	0.8	-	pF	VR=0V, F=1 MHz,

Schematic and PIN configuration



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