ZENER DIODE CHIP

This ZENER DIODE CHIP is a device made by the planar ZENER diode process. It has electrical characteristics like lower leakage current, high electrostatic discharge ability and other advantages, it also has extra small size.

Features

Si-based P/N type

Ultra-small size 15mil * 15mil

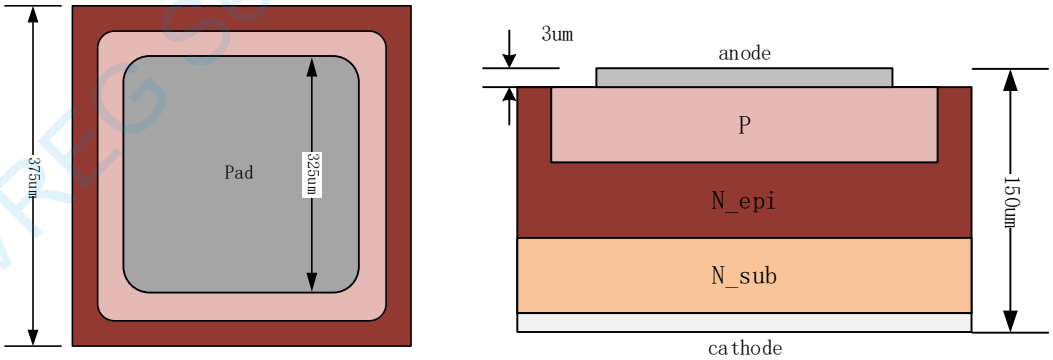
Unidirectional configuration

Structure

- Electrode topside (anode)：Aluminum
- Electrode backside (cathode)：AgSn

Size

Parameter	Value（mil）	Value（mm）
Wafer size	6000mil	150mm
Chip size （including scribe）	15mil x 15mil (±0.4mil)	0.375mm x 0.375mm (±0.01mm)
Chip Thickness	6mil ± 0.4mil	0.150mm ± 0.010mm
Top Metal Thickness	0.118mil	0.003mm
Pad Size	13mil±0.2mil	0.325mm±0.005mm



Electrical Characteristics(T= 25℃)

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

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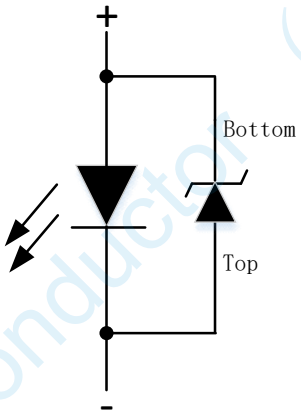
Electrical Characteristics(T= 25℃)

Parameter	Symbol	Min	Type	Max	Unit	Test Conditions
Forward Voltage	V_F	0.5	—	1.2	V	I_F = 1mA
Forward Voltage	V_F	0.5	—	1.5	V	I_F = 10mA
Reverse Voltage	V_R	40	—	48	V	I_R = 1mA
Reverse Voltage	V_R	40	—	48	V	I_R = 10mA
Reverse Leakage Current	I_R	—	—	100	nA	V_R = 36V
ESD	—	±20	—	—	kV	IEC 61000-4-2 (AIR)
ESD	—	±20	—	—	kV	IEC 61000-4-2 (CONTACT)
ESD	—	±8	—	—	kV	HBM

Schematic and PIN configuration



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