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

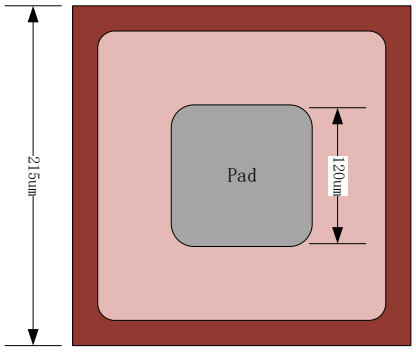
- Si-based NPN type
- Ultra-small size 8.5mil * 8.5mil

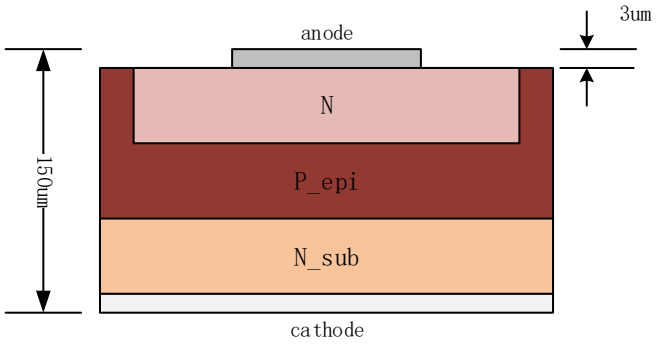
Structure

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

Size

Parameter	Value（mil）	Value（mm）
Chip size (including scribe)	8.5mil x 8.5mil (±0.2mil)	0.215mm x 0.215mm (±0.005mm)
Scribe line	2mil	0.05mm
Chip Thickness	6mil ± 0.4mil	0.150mm ± 0.010mm
Top Metal Thickness	0.118mil	0.003mm
Pad Size	4.8mil ± 0.2mil	0.120mm ± 0.005mm





Electrical Characteristics(T= 25℃)

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

Electrical Characteristics(T= 25℃)

Parameter	Symbol	Min	Type	Max	Unit	Test Conditions
Forward Voltage	V_F	3.6	—	4.5	V	I_F = 1mA
Forward Voltage	V_F	3.6	—	4.5	V	I_F = 10mA
Forward Leakage Current	I_F	—	—	200	nA	V_F = 3.3V
Reverse Voltage	V_R	3.6	—	4.5	V	I_R = 1mA
Reverse Voltage	V_R	3.6	—	4.5	V	I_R = 10mA
Reverse Leakage Current	I_R	—	—	200	nA	V_R =3.3V
ESD	—	±30	—	—	kV	IEC 61000-4-2 (AIR)
ESD	—	±30	—	—	kV	IEC 61000-4-2 (CONTACT)
ESD	—	±8	—	—	KV	HBM
Junction Capacitance	C_J	—	20	—	pF	VR=0V, F=1 MHz

Schematic and PIN configuration

