SILICON DIODE CHIP

This SILICON DIODE CHIP is a Si-based 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 NPN type

Ultra-small size 7.8mil * 7.8mil

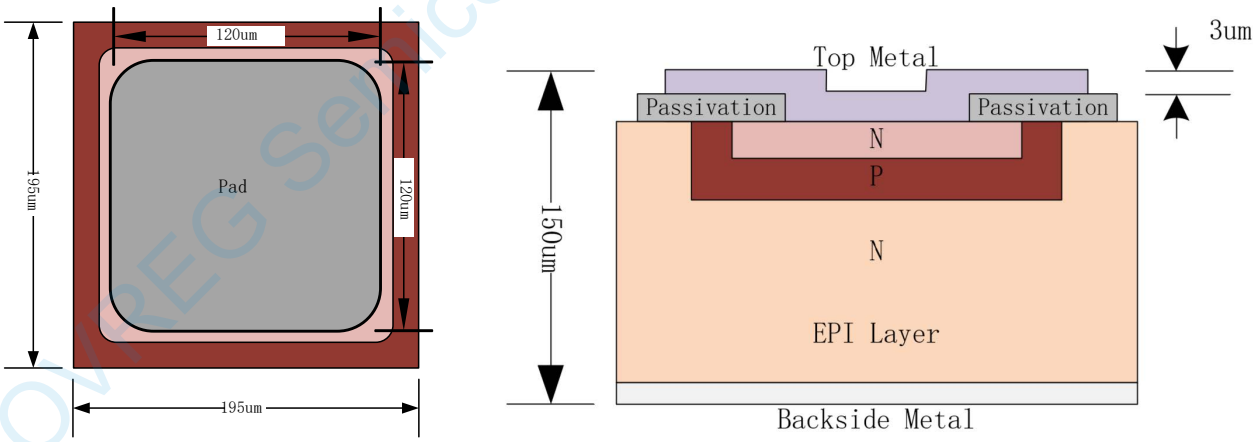
Structure

Electrode topside：Al

Electrode backside：Ag

Size

Parameter	Value（mil）	Value（mm）
Chip size	7.8mil x 7.8mil （±0.4mil）	0.195mm x 0.195mm（±0.01mm）
Chip Thickness	6mil ± 0.4mil	0.150mm ± 0.010mm
Top Metal Thickness	0.118mil	0.003mm
Pad Size	4.7mil x 4.7mil （±0.2mil）	0.120mm x 0.120mm（±0.005mm）



Electrical Characteristics(T= 25℃)

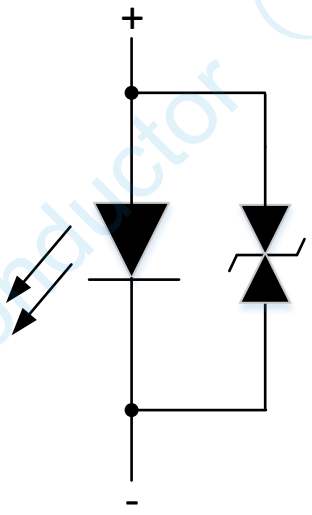
Parameter	Symbol	Test condition	Value	Unit
Junction temperature	Tj		150	℃
Storage temperature	Tstg		-55~150	℃

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Electrical Characteristics(T= 25℃)

Parameter	Symbol	Min	Type	Max	Unit	Test Conditions
Forward Voltage	V_F	5.5	-	7.5	V	I_F = 1mA
Forward Voltage	V_F	5.5	-	7.5	V	I_F = 10mA
Forward Leakage Current	I_F	-	-	100	nA	V_F = 5V
Reverse Voltage	V_R	5.5	-	7.5	V	I_R = 1mA
Reverse Voltage	V_R	5.5	-	7.5	V	I_R = 10mA
Reverse Leakage Current	I_R	-	-	100	nA	V_R = 5V
ESD	-	±30	-	-	kV	IEC 61000-4-2 (AIR)
ESD	-	±30	-	-	kV	IEC 61000-4-2 (CONTACT)
Junction Capacitance	C_J	-	10	-	pF	V_R=0V, F=1 MHz,

Schematic and PIN configuration



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