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

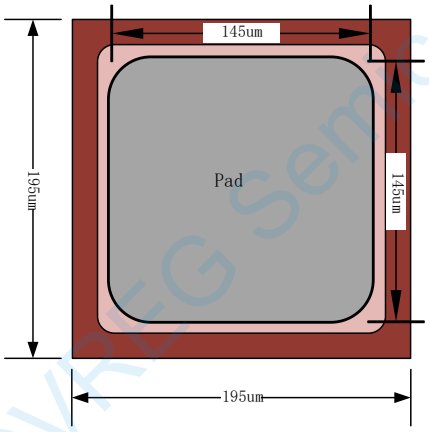
Structure

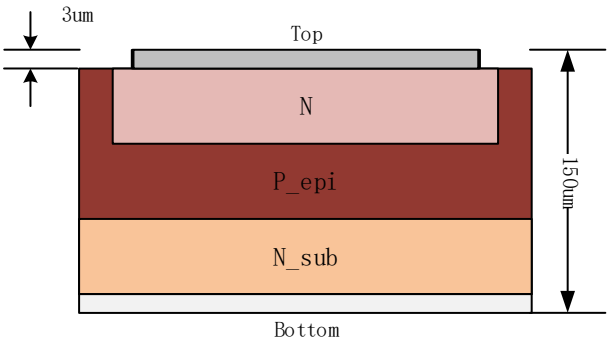
Electrode topside：Al

Electrode backside：Ag (Sn or Au is available)

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	5.8mil x 5.8mil （±0.2mil）	0.145mm x 0.145mm（±0.005mm）





Electrical Characteristics(T= 25℃)

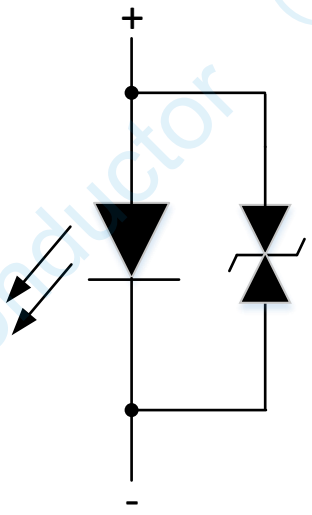
Parameter	Symbol	Test condition	Value	Unit
Junction temperature	Tj		150	℃
Storage temperature	Tstg		-55~150	℃

OVREG Semiconductor (xi'an) Co.,Ltd.

Electrical Characteristics(T= 25℃)

Parameter	Symbol	Min	Type	Max	Unit	Test Conditions
Forward Voltage	V_F	6	-	8	V	I_F = 1mA
Forward Voltage	V_F	6	-	8	V	I_F = 10mA
Forward Leakage Current	I_F	-	-	100	nA	V_F = 5V
Reverse Voltage	V_R	6	-	8	V	I_R = 1mA
Reverse Voltage	V_R	6	-	8	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



OVREG Semiconductor (xi'an) Co.,Ltd.