

Silicon Bidirectional Zener Diode

PSZ-1021B-7V(AL)

Description

- PSZ-1021B-7V(AL) is silicon planar zener diode.
- $V_{Z(F)}$ means Zener voltage on forward bias.

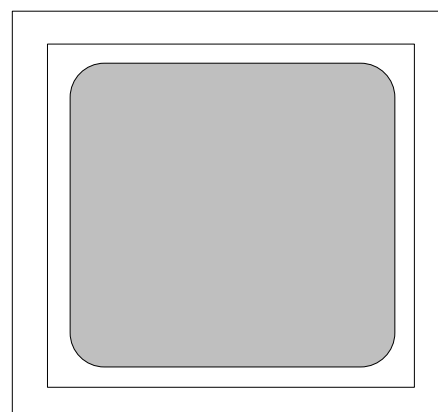
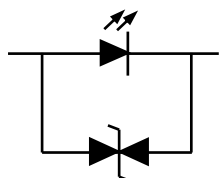
Application

- ESD & Surge Protector for LEDs

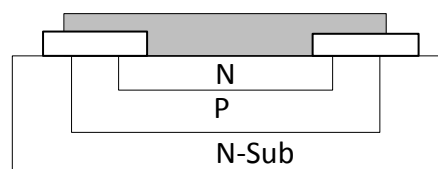
Feature

- **Chip Size** : $190(\pm 20)\mu\text{m} \times 190(\pm 20)\mu\text{m}$
- **Chip Thickness** : $100\mu\text{m} \pm 15\mu\text{m}$
- **Structure** : Vertical N/P/N
- **Metallization**
 - Top(Anode) : Al
 - Bottom(Cathode) : Au
- **Bonding Pad Size**
 - Top(Anode) : $\square 150\mu\text{m}$

Schematic Diagram



[Top View]



[Cross Section]

Electrical and Optical Characteristics (Ta=25°C)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward Zener Voltage	$V_{Z(F)}$	$I_F = 5\text{mA}$	4	5.5	7	V
Reverse Zener Voltage	$V_{Z(R)}$	$I_Z = 5\text{mA}$	5	6.5	8	V
Forward Current	I_F	$V_F = 4\text{V}$			0.1	μA
Reverse Current	I_R	$V_R = 4\text{V}$			0.1	μA

Absolute Maximum Rating (Ta=25°C)

Parameter	Symbol	Maximum Rating	Unit
Power dissipation	P_d	50	mW
Junction Temperature	T_j	150	°C