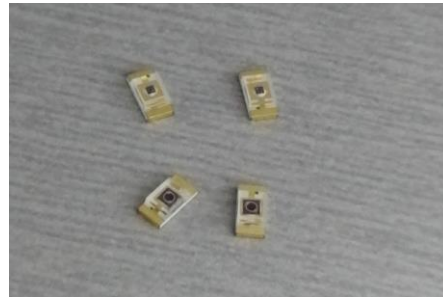


Si PIN Transistor

As a silicon PIN photodiode, the device can work in the reverse bias conditions, with spectral response ranges from visible light to near-infrared light, and with peak response wavelength of 930nm.



- ◆ Product features
- Plane orthographic structure
- Low dark current
- High response degree
- High reliability

- ◆ Applications
- Optical fiber communication, sensing and ranging
- Optical detection from visible light to near-infrared light, fast optical pulse detection
- Industrial Automatic Control

◆ Absolute Max rated value

Model	Package mode	Dimension (mm)	Working voltage (V)	Working temperature (°C)	Storage temperature (°C)	Soldering Temperature (°C)	Saturated optical power (W/cm ²)
SL9302	Plastic package	Φ0.2	40	-40~100	-55~125	260	0.3
SL9305		Φ0.5					

◆ Photoelectric performance (@TA=25°C)

Model	Spectral response ranges (nm)	Peak response wavelength (nm)	Response degree λ=900nm (A/W)	VR=1 5V (nA)	Rise time λ=900nm, VR=15V Rt=50Ω(ns)	Capacitor VR=15V f=1MHz (pF)	Emitter-base breakdown voltage (V)
SL9302	400~1100	930	0.63	0.1	5	1.2	>200
SL9305					5	2.0	

◆ Application circuit

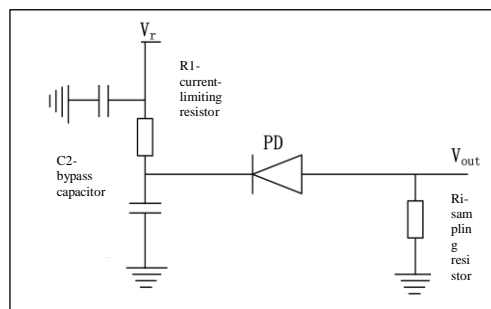


Figure 1 Application circuit

◆ Typical characteristic curve (@TA=25°C)

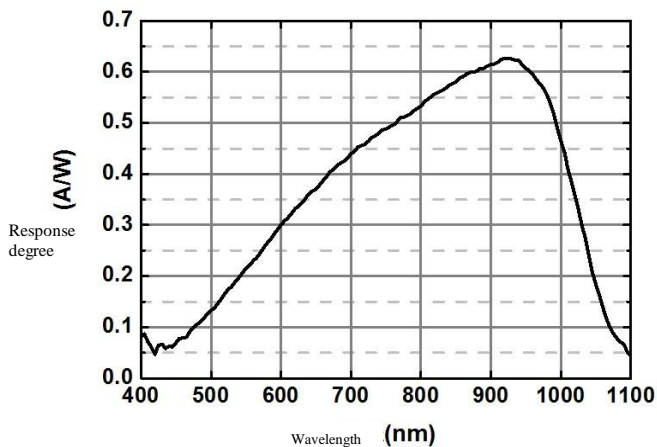


Figure 2 Spectral response curve

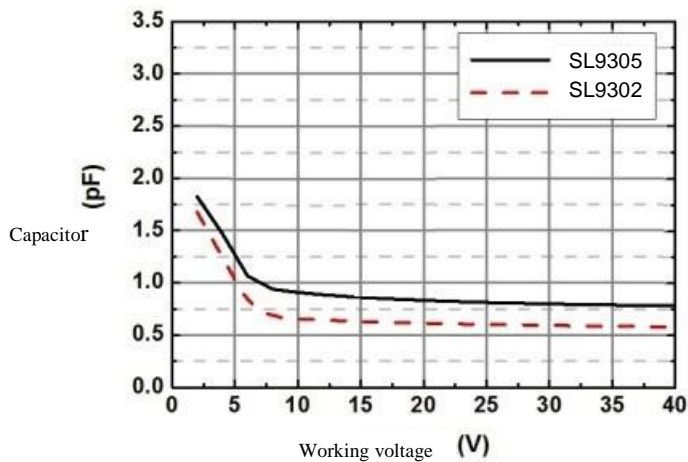
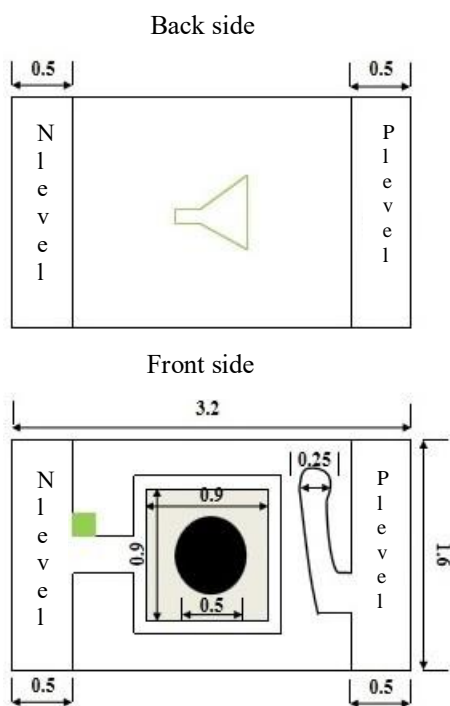


Figure 3 Relation curve between capacitor and working voltage

◆ Package dimension profile drawing



Notes:

1. The photo surface is in the center of the tube;
2. The unit in the figure is (mm)

◆ Matters needing attention:

- Since the device is an electrostatic sensitive device, please operate it in environments with electrostatic safety.