

NSL-7910

Light Dependent Resistor (LDR) CdS Photocell

The NSL-7910 is a Light Dependent Resistor with sensitivity in the visible light region. The CdS photoresistor cell is mounted in a TO-8 hermetically sealed package.

Advanced Photonix's CdS Photocells are photoresistor cells for visible light measurement designed to sense light from 400 to 700 nm. Their resistance decreases as the light level increases with efficiency characteristics similar to the human eye. These Light Dependent Resistors (LDR) are available in a wide range of resistance values. They are available in a two-leaded plastic-coated ceramic header or hermetically sealed TO metal cans.

Applications

Industrial
Audio Compressors
Night Lights
Photography Light Meters
Solar Street Lights
Flame Detection

Features

Passive Resistance output
Hermetically Sealed Package
Available in a two-leaded ceramic package
Available in a wide range of resistance values

Absolute Maximum Ratings at $T_A=23\text{ }^\circ\text{C}$

Parameter	Symbol	Min	Max	Unit
Voltage	V_R	-	250	V
Power Dissipation*	-	-	500	mW
Operating Temperature	T_{OP}	-40	+75	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55	+75	$^\circ\text{C}$
Package	TO-8			

*Derate linearly to zero at 75 $^\circ\text{C}$

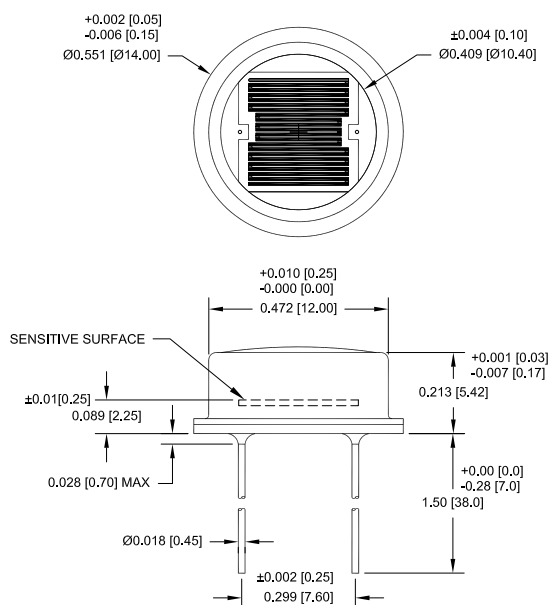
Typical Electro-Optical Specifications at $T_A=23\text{ }^\circ\text{C}$

Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Light Resistance	2ftc., 2854 $^\circ\text{K}$	R_L	5.5	7.5	10	K Ω
	100 ftc., 2854 $^\circ\text{K}$	R_L	-	800	-	Ω
Dark Resistance	5sec after removal of test light	R_D	1.5	-	-	M Ω
Spectral Peak	-	λ	-	615	-	nm

Cells light adapted at 30 to 50 ftc for 16 hrs minimum prior to electrical tests

Mechanical Specifications

Units are in inches [mm]



Resistance vs Illuminance

