





NSL-5152

Light Dependent Resistor (LDR) CdS Photocell

The NSL-5152 is a light dependent resistor with sensitivity in the visible light region. The CdS photoresistor photocell is mounted on a 2-pin ceramic and the photocell surface is plastic encapsulated for moisture resistance.

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

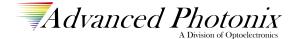
Features

Passive Resistance output

Ceramic Package

Available in a Hermetically Sealed Package

Available in a wide range of resistance values





Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit			
Voltage	$V_{_{\mathrm{R}}}$	-	100	V			
Power Dissipation*	-	-	50	mW			
Operating Temperature	T _{OP}	-40	+75	°C			
Storage Temperature	T _{STG}	-55	+75	°C			
Package	Ceramic						

^{*}Derate linearly to zero at 75°C

Typical Electro-Optical Specifications at T_A =23 °C

Parameter	Test Conditions	Symbol	Min	Тур	Max	Unit
Light Resistance	1ftc., 2854 °K	$R_{\scriptscriptstyle L}$	10	15	20	ΚΩ
	100 ftc.,2854 °K	R_{\scriptscriptstyleL}	-	400	-	Ω
Dark Resistance	5 Sec. after removal of test light	$R_{\scriptscriptstyle D}$	10	-	-	ΜΩ
Spectral Peak	<u>-</u>	λ_{p}	_	550	-	nm

 $^{^{\}rm 1}\text{Cells}$ light adapted at 30 to 50 ftc for 16 hrs minimum prior to electrical tests.

Mechanical Specifications

Units are in inches [mm]

