

PHOTORESISTORS

5mm, 12mm, & 20mm LDR Radial Lead Types

Description

Photoconductive cells are sensors that allow you to detect light. They are small, inexpensive, low-power, easy to use, and don't wear out. NTEs light-dependent resistors (LDR) are photoresistors whose resistance decreases with increasing incident light intensity. In other words, when it is dark, they have a high electrical resistance and when it is light, their electrical resistance is low.

Features

- Epoxy Encapsulated
- Small Size
- Reliable Performance
- Quick Response
- High Sensitivity
- Good Characteristic of Spectrum

Typical Applications

Digital Applications

- Automatic Headlight Dimmer
- Night/Streetlight Control
- Photoelectric Control
- Industrial Control
- Security System

Analog Applications

- Camera Exposure Control
- Automatic Gain Control

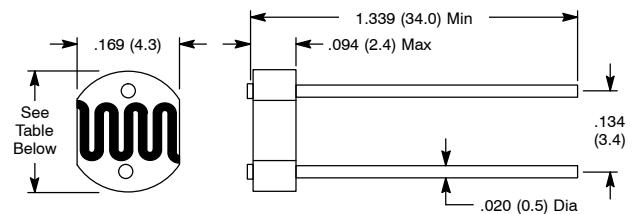
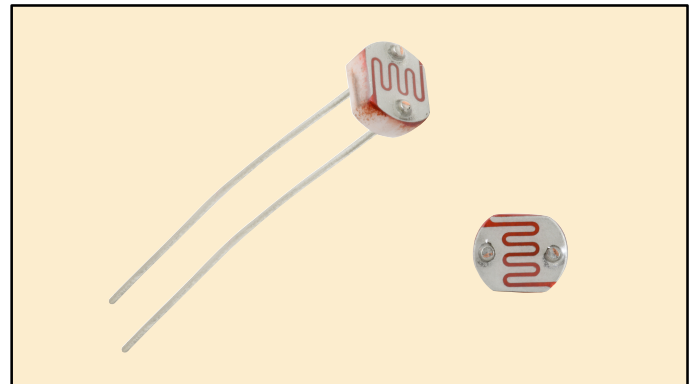
Specifications

Spectral Response Peak:

5mm Types: 540nm

12mm & 20mm Types: 560nm

Ambient Temperature Range: -30° to +70°C



NEW
NEW
NEW
NEW
NEW
NEW
NEW
NEW
NEW
NEW

NTE Type	Diameter	Max. DC Voltage	Power Dissipation (mW)	Light Resistance (10Lux)(KΩ)	Dark Resistance (MΩ)	$\gamma \frac{100}{10}$	Response Times (ms)	
							Increase	Decrease
02-LDR1	.201 (5.0)	150	100	50 - 100	5.0	0.8	20	30
02-LDR2	.201 (5.0)	150	90	5 - 10	0.2	0.5	30	30
02-LDR3	.201 (5.0)	150	100	100 - 200	10.0	0.9	20	30
02-LDR4	.201 (5.0)	150	100	30 - 50	3.0	0.7	20	30
02-LDR12	.472 (12.0)	250	200	5 - 10	1.0	0.6	30	30
02-LDR13	.472 (12.0)	250	200	10 - 20	2.0	0.6	30	30
02-LDR14	.472 (12.0)	250	200	30 - 50	5.0	0.7	30	30
02-LDR15	.472 (12.0)	250	200	50 - 100	8.0	0.8	30	30
02-LDR20	.787 (20.0)	500	500	5 - 10	1.0	0.6	30	30
02-LDR21	.787 (20.0)	500	500	10 - 20	2.0	0.6	30	30
02-LDR22	.787 (20.0)	500	500	30 - 50	5.0	0.7	30	30
02-LDR23	.787 (20.0)	500	500	50 - 100	8.0	0.8	30	30

Soldering Notes:

1. Soldering times should be kept as short as possible.
2. The soldering iron should be positioned at least 4mm from the ceramic base.

Terms

- Light Resistance:
Measured at 10Lux with standard light A (2854K color temperature) and 2H pre-illumination at 400-600Lux prior to testing.
- Dark Resistance:
Measured 10 seconds after pulsed 10Lux.
- Gamma Characteristic:
Between 10Lux and 100Lux and given by: $T = \frac{\log(R_{10} / R_{100})}{\log(100 / 10)} = \log(R_{10} / R_{100})$
R10, R100 cell resistance at 10Lux and 100Lux. The error of T is +0.1.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Adafruit Accessories](#) category:

Click to view products by [NTE manufacturer](#):

Other Similar products are found below :

[3209](#) [3561](#) [3560](#) [3562](#) [2503](#) [3011](#) [3048](#) [2973](#) [2868](#) [2958](#) [2836](#) [2968](#) [3610](#) [3568](#) [3551](#) [2858](#) [3353](#) [3584](#) [3484](#) [2865](#) [3556](#) [3559](#) [3262](#)
[3348](#) [2499](#) [2878](#) [2963](#) [3219](#) [3005](#) [2882](#) [PGM1202](#) [02-LDR1](#) [02-LDR12](#) [02-LDR13](#) [02-LDR14](#) [02-LDR15](#) [02-LDR2](#) [02-LDR3](#) [02-LDR4](#)
[2194](#) [862](#) [460](#) [905](#) [02-LDR20](#) [02-LDR21](#) [02-LDR22](#) [02-LDR23](#) [1008](#) [1020](#) [1031](#)