



# TO-18 Photocells

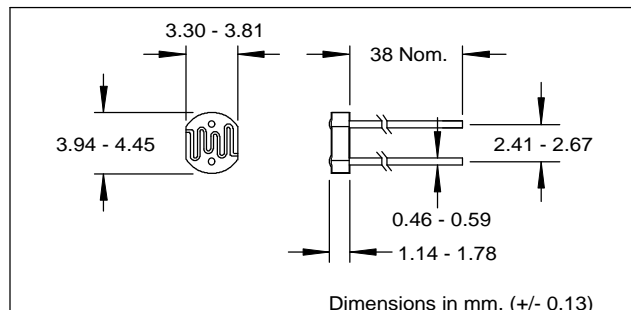
Ceramic Substrate

## Features

- Five photoconductive materials
- Tolerance:  $\pm 40\%$  @ 1 ftc,  $\pm 33\%$  @ 2 ftc

## Description

The Silonex TO-18 series of photoconductive cells provide up to seven standard resistance ranges in CdS or CdSe materials. These photocells are ceramic based with a moisture resistant plastic encapsulation. These devices are also available in a hermetic package.



## Absolute Maximum Ratings

Operating & Storage Temperature  $-60^{\circ}\text{C}$  to  $+75^{\circ}\text{C}$   
 Power Dissipation @  $25^{\circ}\text{C}$  (1) 50 mW

- Notes: (1) derate linearly to 0 at  $75^{\circ}\text{C}$   
 (2) cells to be light adapted at 30 to 50 Ftc for 16 hrs minimum prior to electrical tests  
 (3) 5 sec. after removal of test light.

## Electrical Characteristics ( $T_A=25^{\circ}\text{C}$ , source at $2854^{\circ}\text{K}$ )

| Silonex Part No | Sensitive Material | Spectral Peak (nm) | R @ 1 ftc (KOhms)(2) | R @ 2 ftc (Kohms)(2) | $R_{Typ}$ @ 100 ftc (ohms) | Min. $R_{Dark}$ (Mohms) (3) | Voltage Rating (peak AC or DC)(V) |
|-----------------|--------------------|--------------------|----------------------|----------------------|----------------------------|-----------------------------|-----------------------------------|
| NSL-4122        | Type 4 CdS         | 515                | 75                   |                      | 1,300                      | 4.5                         | 80                                |
| NSL-4132        |                    |                    | 30                   |                      | 500                        | 1.8                         | 80                                |
| NSL-4142        |                    |                    | 14                   |                      | 250                        | 0.8                         | 80                                |
| NSL-4152        |                    |                    | 550                  |                      | 9,000                      | 33                          | 320                               |
| NSL-4162        |                    |                    | 260                  |                      | 4,000                      | 15.6                        | 320                               |
| NSL-4172        |                    |                    | 110                  |                      | 1,700                      | 6.6                         | 320                               |
| NSL-4182        |                    |                    | 50                   |                      | 900                        | 3.0                         | 160                               |
| NSL-5112        | Type 5 CdS         | 550                |                      | 10                   | 700                        | 0.67                        | 100                               |
| NSL-5122        |                    |                    |                      | 20                   | 1,500                      | 1.3                         | 100                               |
| NSL-5152        |                    |                    |                      | 15                   | 400                        | 5                           | 60                                |
| NSL-5162        |                    |                    |                      | 100                  | 3,000                      | 67                          | 100                               |
| NSL-6112        | Type 6 CdSe        | 690                |                      | 2                    | 170                        | 1.3                         | 100                               |
| NSL-7142        | Type 7 CdS         | 615                |                      | 4.5                  | 250                        | 3                           | 60                                |
| NSL-7152        |                    |                    |                      | 24                   | 1,000                      | 16                          | 100                               |

Specifications subject to change without notice

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