

# T0-8 PHOTOCONDUCTIVE CELLS

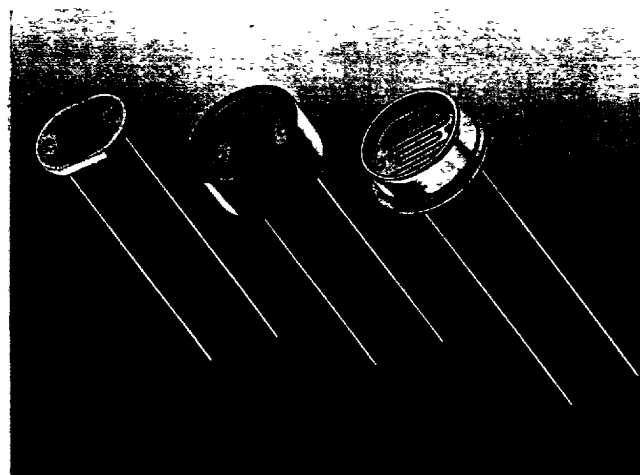
T-41-41

## FEATURES

- Five Photoconductive Materials
- Power Dissipation @ 25°C  
500 mW – Hermetically Sealed  
250 mW – Plastic Encapsulated
- Resistance Tolerance:  $\pm 40\%$  @ 1 Ftc  
 $\pm 33\text{--}1/3\%$  @ 2 Ftc
- Temperature Range:  
–60°C to +75°C

## GENERAL DESCRIPTION

The Silonex T0-8 series of photoconductive cells provide up to five standard resistance ranges in CdS or CdSe materials. Two standard mechanical configurations are available; a hermetically sealed package, and a moisture resistant plastic encapsulated version.



## HERMETIC PACKAGE

| SILONEX<br>PART NO | SENSITIVE<br>MATERIAL | PEAK SPECTRAL<br>RESPONSE<br>(nm) | RESISTANCE<br>@ 1 ftc<br>(ohms) | RESISTANCE<br>@ 2 ftc<br>(ohms) | TYPICAL<br>RESISTANCE<br>@ 100 ftc (ohms) | MIN. DARK RESISTANCE<br>5 SEC. AFTER 2 ftc<br>(ohms) | MAXIMUM<br>VOLTAGE RATING<br>(PEAK AC or DC) |
|--------------------|-----------------------|-----------------------------------|---------------------------------|---------------------------------|-------------------------------------------|------------------------------------------------------|----------------------------------------------|
| NSL-4910           | Type 4<br>CdS         | 515                               | 9.3K                            |                                 | 150                                       | 5.0 Meg                                              | 80                                           |
| NSL-4920           |                       |                                   | 4.0K                            |                                 | 80                                        | 3.2 Meg                                              | 80                                           |
| NSL-4930           |                       |                                   | 1.7K                            |                                 | 50                                        | 400 K                                                | 80                                           |
| NSL-4940           |                       |                                   | .725K                           |                                 | 30                                        | 50 K                                                 | 80                                           |
| NSL-4950           |                       |                                   | 40K                             |                                 | 860                                       | 32 Meg                                               | 320                                          |
| NSL-4960           |                       |                                   | 17K                             |                                 | 500                                       | 4.0 Meg                                              | 320                                          |
| NSL-4970           |                       |                                   | 7.25K                           |                                 | 260                                       | 540 K                                                | 320                                          |
| NSL-4980           |                       |                                   | 114K                            |                                 | 2.5K                                      | 100 Meg                                              | 320                                          |
| NSL-5910           | Type 5<br>CdS         | 550                               |                                 | 1.5K                            | 150                                       | 100 K                                                | 170                                          |
| NSL-5920           |                       |                                   |                                 | 3.0K                            | 300                                       | 200 K                                                | 170                                          |
| NSL-5930           |                       |                                   |                                 | 6.0K                            | 500                                       | 400 K                                                | 250                                          |
| NSL-5940           |                       |                                   |                                 | 9.0K                            | 700                                       | 600 K                                                | 250                                          |
| NSL-6910           | Type 6<br>CdSe        | 690                               |                                 | 250                             | 25                                        | 67 K                                                 | 170                                          |
| NSL-6920           |                       |                                   |                                 | 510                             | 50                                        | 300 K                                                | 170                                          |
| NSL-6930           |                       |                                   |                                 | 1.02K                           | 100                                       | 680 K                                                | 170                                          |
| NSL-6940           |                       |                                   |                                 | 1.5K                            | 150                                       | 1.0 Meg                                              | 250                                          |
| NSL-7910           | Type 7<br>CdS         | 615                               |                                 | 7.5K                            | 800                                       | 1.5 Meg                                              | 250                                          |
| NSL-9910           | Type 9<br>CdS         | 550                               |                                 | 11K                             | 350                                       | 7.3 Meg                                              | 170                                          |

# TO-8 PHOTOCONDUCTIVE CELLS

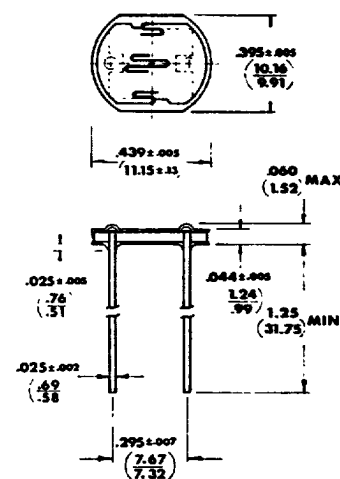
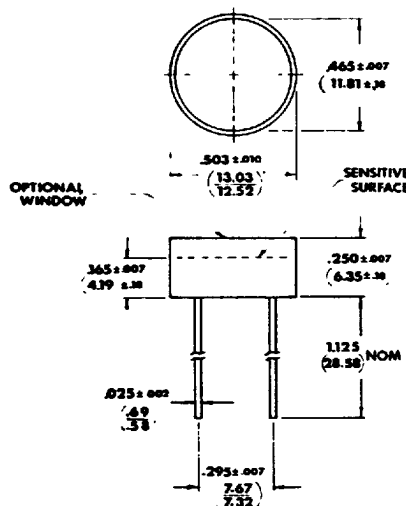
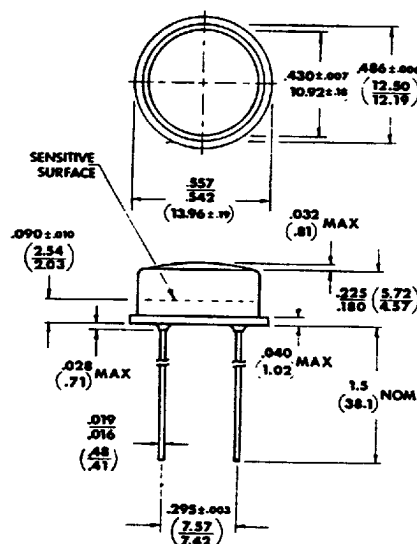
## PLASTIC ENCAPSULATED

| SILONEX PART NO | SENSITIVE MATERIAL | PEAK SPECTRAL RESPONSE (nm) | RESISTANCE @ 1 ftc (ohms) | RESISTANCE @ 2 ftc (ohms) | TYPICAL RESISTANCE @ 100 ftc (ohms) | MIN. DARK RESISTANCE 5 SEC. AFTER 2 ftc (ohms) | MAXIMUM VOLTAGE RATING (PEAK AC or DC) |
|-----------------|--------------------|-----------------------------|---------------------------|---------------------------|-------------------------------------|------------------------------------------------|----------------------------------------|
| NSL-4912        | Type 4<br>CdS      | 515                         | 9.3K                      |                           | 150                                 | 5.0 Meg                                        | 80                                     |
| NSL-4922        |                    |                             | 4.0K                      |                           | 80                                  | 3.2 Meg                                        | 80                                     |
| NSL-4932        |                    |                             | 1.7K                      |                           | 50                                  | 400 K                                          | 80                                     |
| NSL-4942        |                    |                             | .725K                     |                           | 30                                  | 50 K                                           | 80                                     |
| NSL-4952        |                    |                             | 40K                       |                           | 860                                 | 32 Meg                                         | 320                                    |
| NSL-4962        |                    |                             | 17K                       |                           | 500                                 | 4.0 Meg                                        | 320                                    |
| NSL-4972        |                    |                             | 7.25K                     |                           | 260                                 | 540 K                                          | 320                                    |
| NSL-4982        |                    |                             | 114K                      |                           | 2.5K                                | 100 Meg                                        | 320                                    |
| NSL-5912        | Type 5<br>CdS      | 550                         |                           | 1.5K                      | 150                                 | 100 K                                          | 170                                    |
| NSL-5932        |                    |                             |                           | 6K                        | 500                                 | 400 K                                          | 250                                    |
| NSL-5942        |                    |                             |                           | 9K                        | 700                                 | 600 K                                          | 250                                    |
| NSL-6922        | Type 6<br>CdSe     | 690                         |                           | 510                       | 50                                  | 300 K                                          | 170                                    |
| NSL-6952        |                    |                             |                           | 2.7K                      | 200                                 | 720 K                                          | 170                                    |
| NSL-9912        | Type 9<br>CdS      | 550                         |                           | 11K                       | 350                                 | 7.3 Meg                                        | 170                                    |

MEASUREMENT DATA: Cells light adapted at 30-50 Ftc for 16 hours minimum prior to test. All measurements conducted at 25°C ambient, 2854°K.

Dark resistances measured 5 seconds after removal of room light (30-50 Ftc). Power derating. Linearly to 75°C

### Special Order Only



### Part Number Coding

**NSL - 4930**

Photoconductive Material

TO-8 size

Resistance Range

- 0 - Hermetic package
- 1 - Encapsulated cell in plastic casing
- 2 - Plastic encapsulated cell
- 3 - Encapsulated cell in plastic casing with glass window

Subject to change without notice