



# SLDA-61S10-XX Series

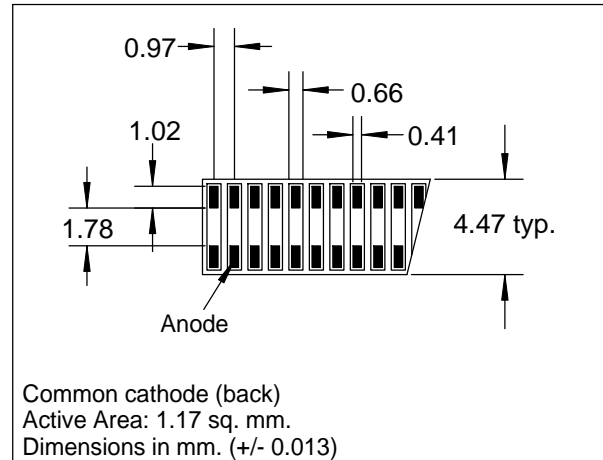
## Multi-element Photodiode Array

### Features

- Photodiodes spaced on 0.97 mm centers
- Dual solderable anode contacts
- Common cathode contact on back of array
- Up to 16 elements per monolithic array

### Description

The Silonex SLDA-61S10-XX series of photodiode arrays are monolithic devices that can be used in precision position sensing applications. The array can be easily attached with conductive epoxy to a ceramic, other substrate or wire soldered to back side. The conductive epoxy provides the electrical connection to the common cathode contact.



### Absolute Maximum Ratings

|                       |                 |
|-----------------------|-----------------|
| Storage Temperature   | -40 to +125°C   |
| Operating Temperature | -40 to +125°C   |
| Soldering Temperature | 260°C for 2 sec |

To order this part, the 'XX' refers to the number of elements in the array (from 1 to 16 elements).

### Electrical Characteristics (per element, $T_A=25^\circ\text{C}$ unless otherwise noted)

| Symbol      | Parameter                      | Min | Typ  | Max  | Units         | Test Conditions                                   |
|-------------|--------------------------------|-----|------|------|---------------|---------------------------------------------------|
| $I_{SC}$    | Short Circuit Current          | 60  | 80   |      | $\mu\text{A}$ | $V_R = 0\text{V}$ , $E_e = 25\text{ mW/cm}^2$ (1) |
| $V_{OC}$    | Open Circuit Voltage           |     | 0.40 |      | V             | $E_e = 25\text{ mW/cm}^2$ (1)                     |
| $I_D$       | Dark Current                   |     |      | 3    | $\mu\text{A}$ | $E_e = 0$ , $V_R = 1\text{V}$                     |
| $V_{BR}$    | Breakdown Voltage              | 20  |      |      | V             | $I_R = 100\ \mu\text{A}$                          |
| $TC_I$      | Temp. Coef., $I_{SC}$          |     | +0.2 |      | %/°C          | (1)                                               |
| $C_J$       | Junction Capacitance           |     | 100  |      | pF            | $F = 1\text{ Mhz}$ , $V_R = 0$                    |
| $\lambda_P$ | Maximum Sensitivity Wavelength |     | 930  |      | nm            |                                                   |
| $\lambda_R$ | Sensitivity Spectral Range     | 400 |      | 1100 | nm            |                                                   |

Specifications subject to change without notice.

103075 REV 1

Note: (1)  $E_e$  = light source @ 2854 °K

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