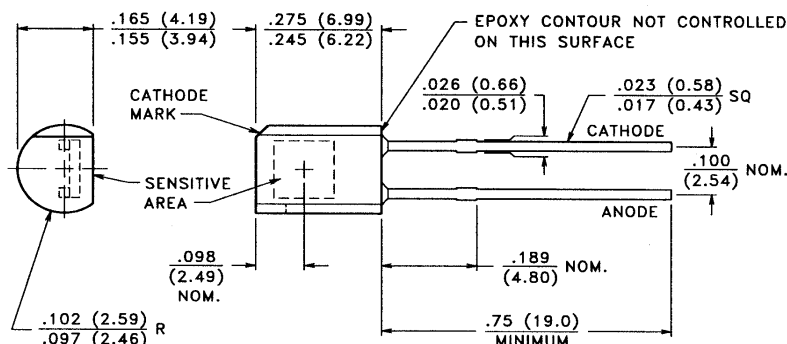




## PACKAGE DIMENSIONS inch (mm)



CASE 61 TO-92 TYPE (FLAT LENS)  
CHIP ACTIVE AREA: .011 in<sup>2</sup> (7.41 mm<sup>2</sup>)

## PRODUCT DESCRIPTION

Large area planar silicon photodiode in a waterclear, cast epoxy sidelooker, similar in outline to the TO-92 package. These diodes exhibit low dark current under reverse bias and fast speed of response.

## ABSOLUTE MAXIMUM RATINGS

Storage Temperature:

-40°C to 100°C

Operating Temperature:

-40°C to 100°C

**RoHS Compliant**



## ELECTRO-OPTICAL CHARACTERISTICS @ 25°C

| SYMBOL            | CHARACTERISTIC                       | TEST CONDITIONS                    | VTD206KH |      |      | UNITS   |
|-------------------|--------------------------------------|------------------------------------|----------|------|------|---------|
|                   |                                      |                                    | Min.     | Typ. | Max. |         |
| $I_{SC}$          | Short Circuit Current                | 1000 Lux, 2856 K                   | 50       | 80   |      | $\mu A$ |
| TC $I_{SC}$       | $I_{SC}$ Temperature Coefficient     | 2856 K                             |          | .20  |      | %/°C    |
| $V_{OC}$          | Open Circuit Voltage                 | 940 nm, H = 0.5 mW/cm <sup>2</sup> | 310      | 365  |      | mV      |
| TC $V_{OC}$       | $V_{OC}$ Temperature Coefficient     | 2856 K                             |          | -2.6 |      | mV/°C   |
| $I_D$             | Dark Current                         | H = 0, $V_R$ = 10 V                |          | 2    | 30   | nA      |
| $C_J$             | Junction Capacitance                 | H = 0, $V_R$ = 0 V, 1 MHz          |          | 72   |      | pF      |
| $t_R/t_F$         | Rise/Fall Time @ $R_L$ = 50 $\Omega$ | $V_R$ = 5 V, 850 nm                |          | 20   |      | nsec    |
| $S_R$             | Sensitivity                          | @ Peak                             |          | 0.6  |      | A/W     |
| $\lambda_{range}$ | Spectral Application Range           |                                    | 400      |      | 1100 | nm      |
| $\lambda_p$       | Spectral Response - Peak             |                                    |          | 925  |      | nm      |
| $V_{BR}$          | Breakdown Voltage                    |                                    | 20       | 50   |      | V       |
| $\theta_{1/2}$    | Angular Resp. -50% Resp. Pt.         |                                    |          | ±60  |      | Degrees |