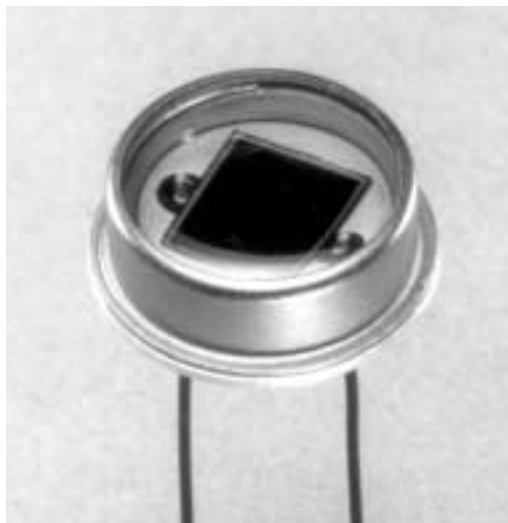
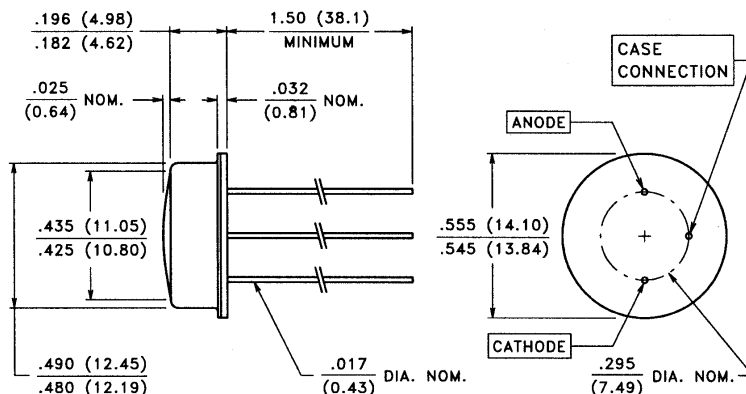




## PACKAGE DIMENSIONS inch (mm)



CASE 15 TO-8 HERMETIC  
CHIP ACTIVE AREA: .058 in<sup>2</sup> (37.7 mm<sup>2</sup>)

## PRODUCT DESCRIPTION

Large area planar silicon photodiode in a "flat" window, three lead TO-8 package. Chip is isolated from case. The third lead allows case to be grounded. These diodes have very high shunt resistance and have good blue response.

## ABSOLUTE MAXIMUM RATINGS

Storage Temperature: -40°C to 110°C  
Operating Temperature: -40°C to 110°C

## ELECTRO-OPTICAL CHARACTERISTICS @ 25°C (See also VTB curves, pages 21-22)

| SYMBOL             | CHARACTERISTIC                          | TEST CONDITIONS               | VTB6061J |                                |      | UNITS     |
|--------------------|-----------------------------------------|-------------------------------|----------|--------------------------------|------|-----------|
|                    |                                         |                               | Min.     | Typ.                           | Max. |           |
| I <sub>SC</sub>    | Short Circuit Current                   | H = 100 fc, 2850 K            | 260      | 350                            |      | μA        |
| TC I <sub>SC</sub> | I <sub>SC</sub> Temperature Coefficient | 2850 K                        |          | .12                            | .23  | %/°C      |
| V <sub>OC</sub>    | Open Circuit Voltage                    | H = 100 fc, 2850 K            |          | 490                            |      | mV        |
| TC V <sub>OC</sub> | V <sub>OC</sub> Temperature Coefficient | 2850 K                        |          | -2.0                           |      | mV/°C     |
| I <sub>D</sub>     | Dark Current                            | H = 0, V <sub>R</sub> = 2.0 V |          |                                | 2.0  | nA        |
| R <sub>SH</sub>    | Shunt Resistance                        | H = 0, V = 10 mV              |          | .10                            |      | GΩ        |
| TC R <sub>SH</sub> | R <sub>SH</sub> Temperature Coefficient | H = 0, V = 10 mV              |          | -8.0                           |      | %/°C      |
| C <sub>J</sub>     | Junction Capacitance                    | H = 0, V = 0                  |          | 8.0                            |      | nF        |
| S <sub>R</sub>     | Sensitivity                             | 365 nm                        |          | 0.1                            |      | A/W       |
| λ <sub>range</sub> | Spectral Application Range              |                               | 320      |                                | 1100 | nm        |
| λ <sub>p</sub>     | Spectral Response - Peak                |                               |          | 920                            |      | nm        |
| V <sub>BR</sub>    | Breakdown Voltage                       |                               | 2        | 40                             |      | V         |
| θ <sub>1/2</sub>   | Angular Resp. - 50% Resp. Pt.           |                               |          | ±55                            |      | Degrees   |
| NEP                | Noise Equivalent Power                  |                               |          | 5.7 x 10 <sup>-14</sup> (Typ.) |      | W/√Hz     |
| D*                 | Specific Detectivity                    |                               |          | 1.1 x 10 <sup>13</sup> (Typ.)  |      | cm√Hz / W |