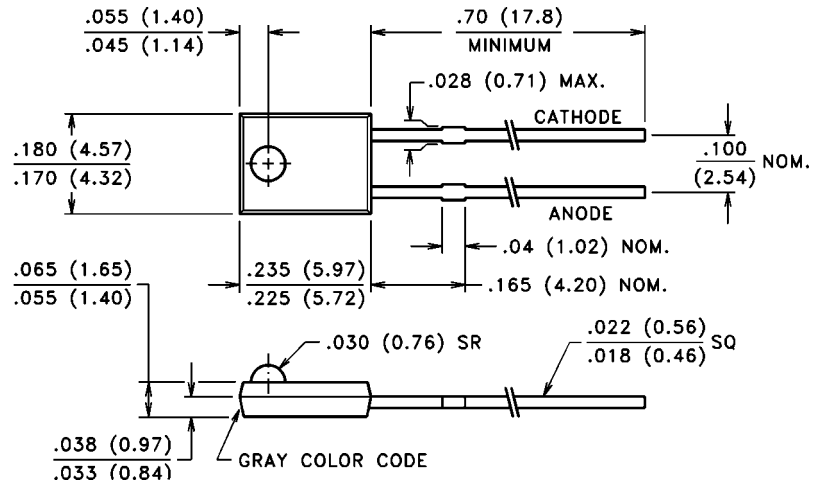


PACKAGE DIMENSIONS inch (mm)



CASE 7 LATERAL
CHIP ACTIVE AREA: .0011 in² (0.684 mm²)

PRODUCT DESCRIPTION

Small area planar silicon photodiode in a lensed sidelooking package. The package material filters out visible light but passes infrared. These diodes exhibit low dark current under reverse bias and fast speed of response.

ABSOLUTE MAXIMUM RATINGS

Storage Temperature: -40°C to 85°C
Operating Temperature: -40°C to 85°C

RoHS Compliant



ELECTRO-OPTICAL CHARACTERISTICS @ 25°C (See also VTP curves, pages 45-46)

| SYMBOL | CHARACTERISTIC | TEST CONDITIONS | VTP7210H | | | UNITS |
|--------------------|---|------------------------------|----------|--------------------------------|------|------------------------|
| | | | Min. | Typ. | Max. | |
| I _{SC} | Short Circuit Current | H = 100 fc, 2850 K | 5 | 7 | | μA |
| TC I _{SC} | I _{SC} Temperature Coefficient | 2850 K | | .26 | | %/°C |
| V _{OC} | Open Circuit Voltage | H = 100 fc, 2850 K | | 350 | | mV |
| TC V _{OC} | V _{OC} Temperature Coefficient | 2850 K | | -2.0 | | mV/°C |
| I _D | Dark Current | H = 0, V _R = 10 V | | | 35 | nA |
| R _{SH} | Shunt Resistance | H = 0, V = 10 mV | | 7 | | GΩ |
| C _J | Junction Capacitance | H = 0, V = 3 V | | | 25 | pF |
| Re | Responsivity | 940 nm | | .015 | | A/(W/cm ²) |
| S _R | Sensitivity | @ Peak | | .55 | | A/W |
| λ _{range} | Spectral Application Range | | 700 | | 1150 | nm |
| λ _p | Spectral Response - Peak | | | 925 | | nm |
| V _{BR} | Breakdown Voltage | | 30 | 140 | | V |
| θ _{1/2} | Angular Resp. - 50% Resp. Pt. | | | ±58 | | Degrees |
| NEP | Noise Equivalent Power | | | 1.9 x 10 ⁻¹³ (Typ.) | | W/√Hz |
| D* | Specific Detectivity | | | 5.3 x 10 ¹¹ (Typ.) | | cm√Hz/W |