

Features

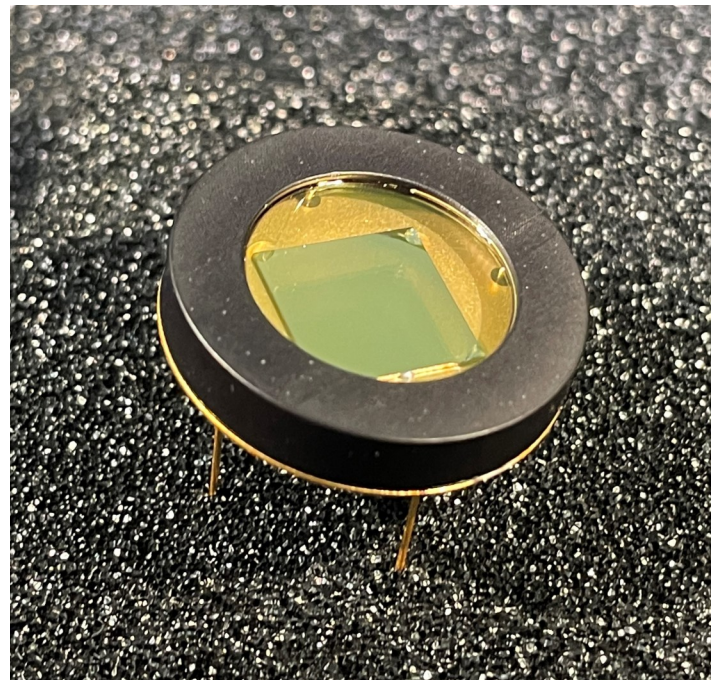
- 10 x 10 mm Ge chip
- Tetralateral PSD

Applications

- Position sensing
- Beam alignment

Mechanical Characteristics

| Parameter | Value |
|---|--|
| Detector Material | Ge |
| Active region | 10 mm x 10 mm |
| Linear Region | 4.5 x 4.5 mm |
| Operating Wavelength | 750 — 1620 nm |
| Standard Package ¹ | TO-9 5-lead |
| Window Material ¹ | Sapphire |
| Standard Window Thickness ¹ | 0.0225" ± 0.005" |
| Window Index of Refraction ¹ | 1.754 (nom @ 1064 nm) 1.745 (nom @ 1550 nm) |



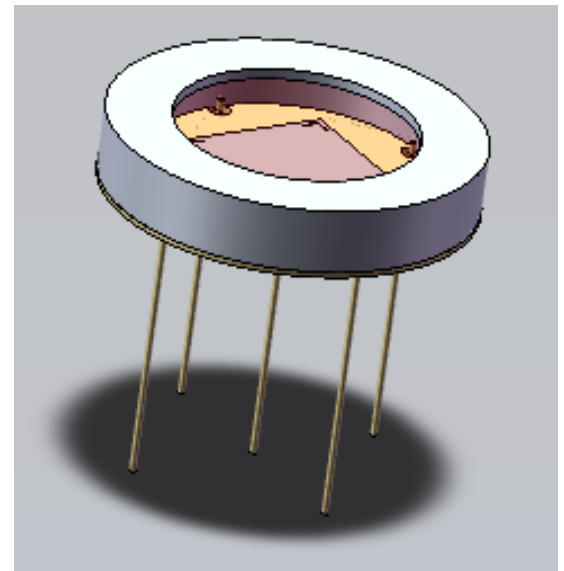
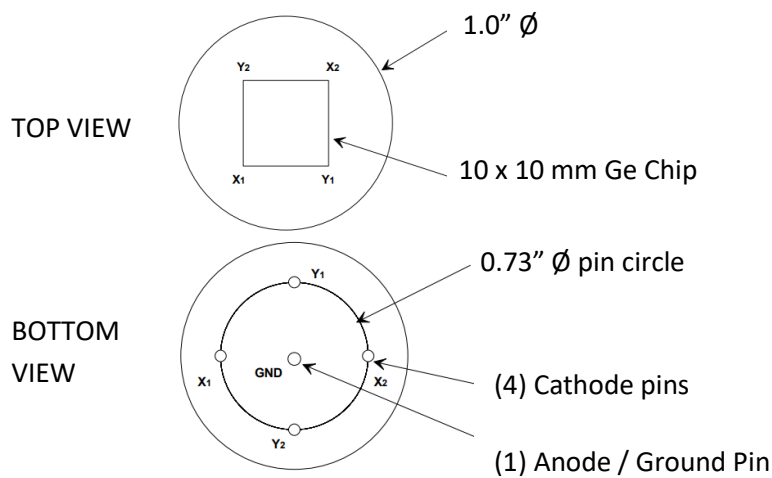
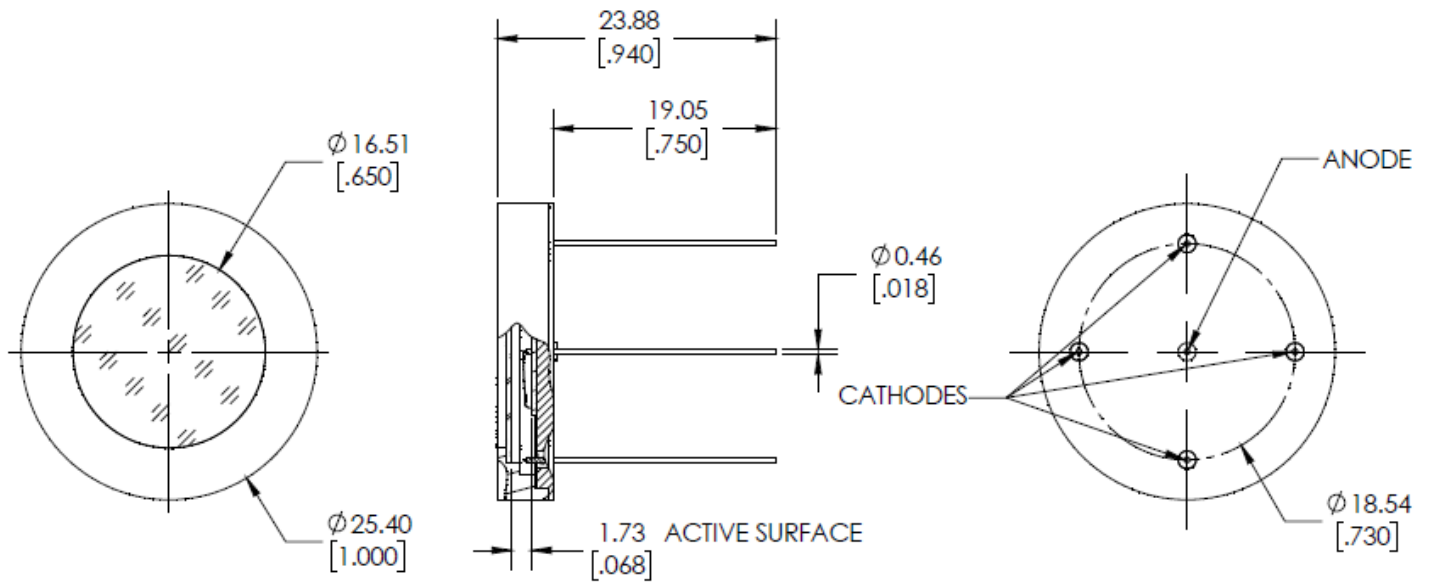
1. Other packaging and window/filter options are available beyond those listed here

Electro-Optical Characteristics (PRELIMINARY)

| Parameter | Symbol | Min. | Typical | Max. | Units | Test Conditions (@ 23°C ± 2°C) |
|----------------------------|---------------|------|---------|------|------------|---|
| Responsivity | R_{λ} | 0.18 | 0.20 | | | $\lambda = 850$ nm (single contact) |
| Responsivity | R_{λ} | 0.65 | 0.7 | | A/W | $\lambda = 1330$ nm (single contact) |
| Responsivity | R_{λ} | 0.75 | 0.85 | | | $\lambda = 1550$ nm (single contact) |
| Inter-Electrode Resistance | R_{IE} | 80 | 100 | 120 | Ω | Resistance measured to adjacent cathode |
| Shunt Resistance | R_S | 2 | 4 | | k Ω | $V_R = 10$ mV |
| Dark Current | I_D | | | 100 | μ A | $V_R = 0.3$ V |

Absolute Maximum Ratings

| Parameter | Symbol | Min. | Max. | Units | Parameter | Symbol | Min. | Max. | Units |
|-----------------|--------|------|------|-------|-----------------------|----------|------|------|-------|
| Forward Current | I_F | | 10 | mA | Storage Temperature | T_{ST} | -40 | 125 | °C |
| Reverse Current | I_R | | 20 | mA | Operating Temperature | T_{OP} | -40 | 85 | °C |
| Reverse Voltage | V_R | | 1 | V | | | | | |



GPD offers a variety of standard packaging options, including TO package configurations, chips on ceramic submounts, and SMT packages. Various filters and AR coatings can also be added for further enhancement. If you require something outside of our standard options, we are happy to discuss custom designs tailored to your unique specifications.

PRELIMINARY
REFERENCE ONLY