

Features

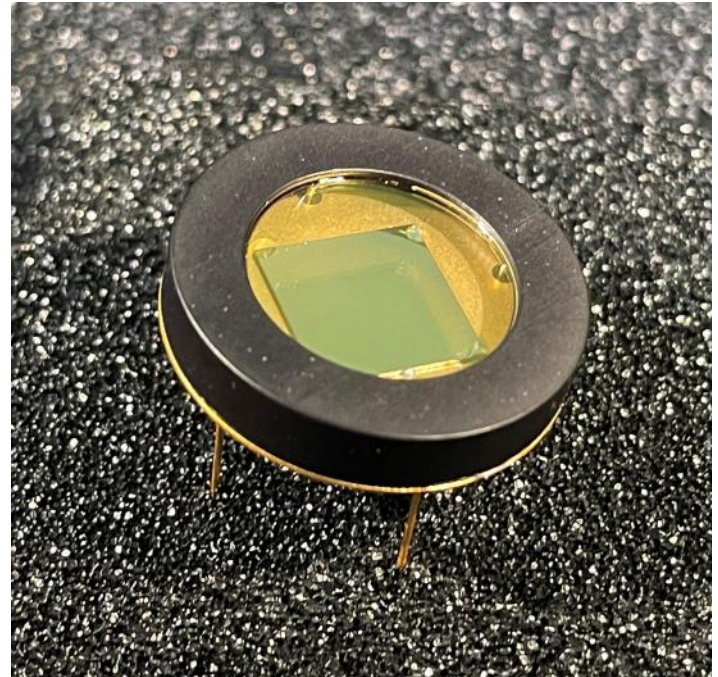
- 10 x 10 mm detection area
- Tetralateral PSD

Applications

- Position sensing
- Beam alignment

Mechanical Characteristics

Parameter	Value
Detector Material	Ge
Active Region	10 x 10 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)



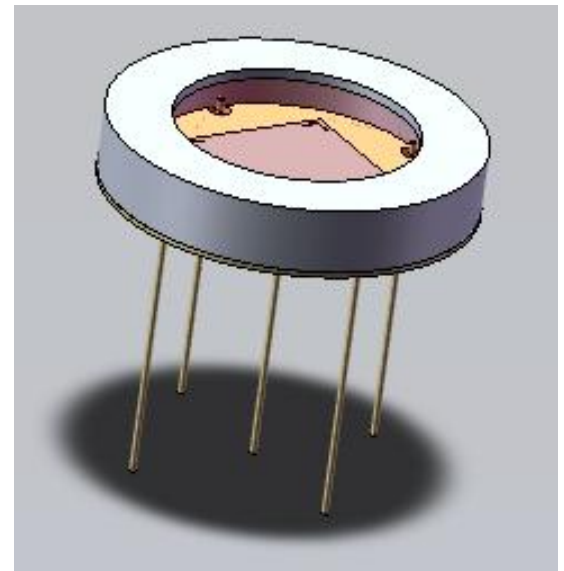
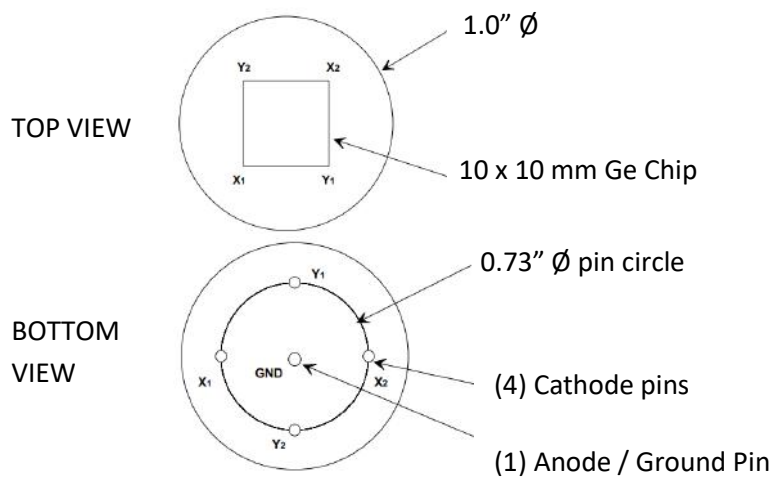
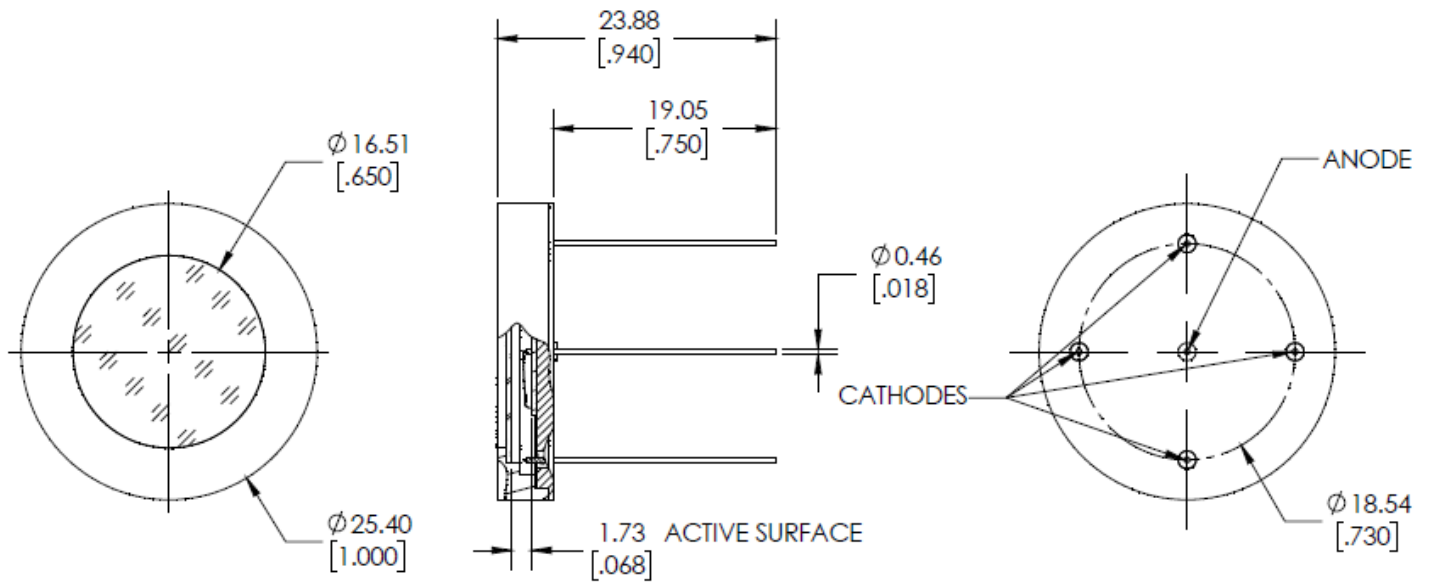
1. Other packaging and window/filter options are available beyond those listed here

Electro-Optical Characteristics (PRELIMINARY)

Parameter	Symbol	Min.	Typical	Max.	Units	Test Conditions (@ 23°C ± 2°C)
Responsivity	R_{λ}	0.20	0.28			$\lambda = 850$ nm (single contact)
Responsivity	R_{λ}	0.80	0.9		A/W	$\lambda = 1330$ nm (single contact)
Responsivity	R_{λ}	0.9	0.98			$\lambda = 1550$ 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	μA	$V_R = 0.3$ 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