

10mm Ge large light sensitive surface detector (BNC interface output)



● Product Description

Germanium photodiodes are often used to measure optical power in the near-infrared range, especially in cost-sensitive applications or where large area detectors are required. However, compared to similarly sized InGaAs detectors, Germanium detectors have lower shunt resistance and higher dark current, resulting in higher overall noise levels. Therefore, Germanium detectors are well suited for applications where the detection signal is much higher than the noise floor. Idealphotonics Photonics offers the "HS" series of Germanium photodiodes with higher than typical shunt resistances for improved performance.

● Part Number

GE-10X10-BNC

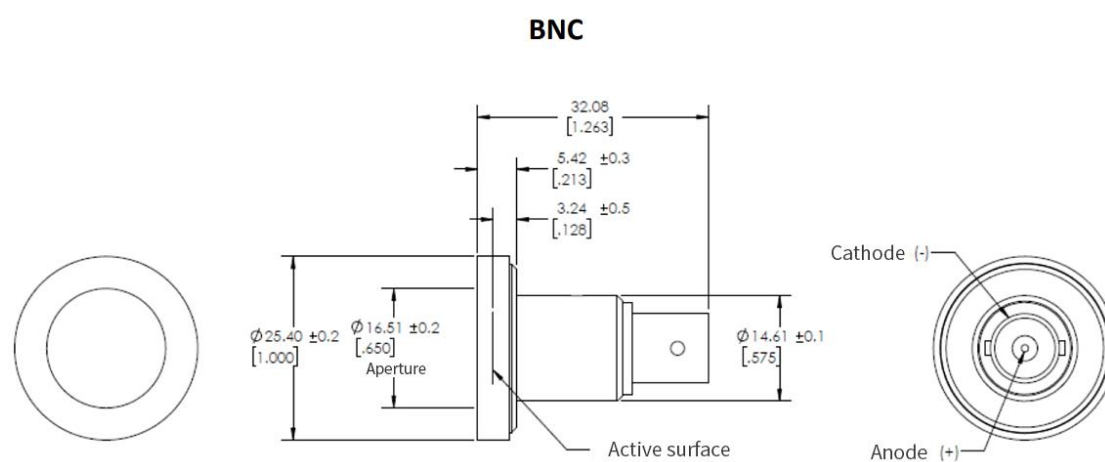
● Product features

Chip diameters from 1 mm to 25 mm、Spectral response from 800 nm to 1700 nm、Multiple window and lens options、Available optical filters (neutral density, bandpass, etc.)、Thermoelectric cooling options、Multiple package types: TO package, BNC options, chip on ceramic base, etc.

● Application area

Optical power measurement、Spectroscopy、Optical testing、Medical diagnostics、Fiber optic receivers

Dimensional Drawing

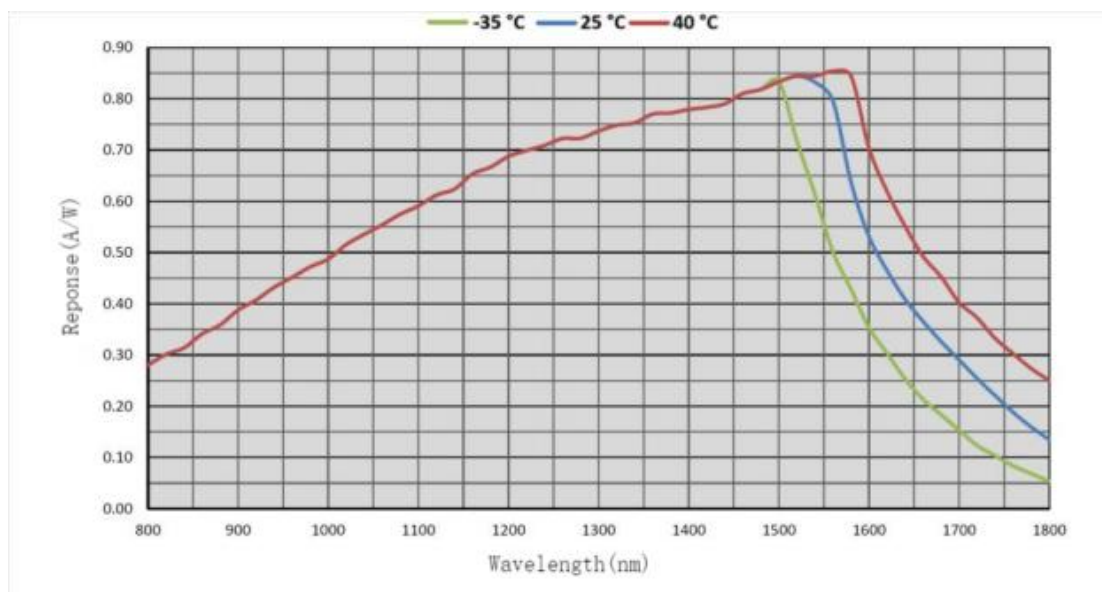


Parameter

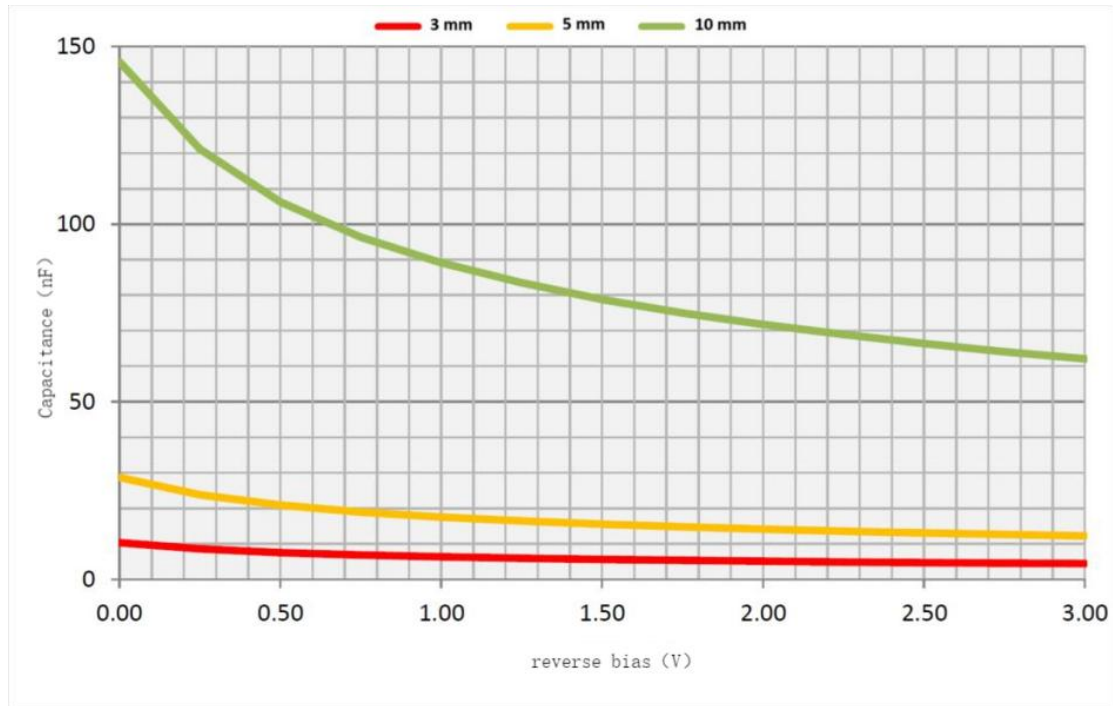
10X10mm Germanium Photodiode Performance Specifications				
PN#		GB10M-XX	GE-10X10-BNC	GV10M-XX
Photoelectric properties@ 23 °C ± 2 °C				Unit
RSHUNT	@ 10mV (minimum/typical)		2/3.5	kΩ
IDARK (Max)			50	μA
电容 (Max)			90000	pF
VREVERSE			0.5	V
Noise equivalent power (typical)			6	pW/Hz ^{1/2}
Maximum reverse voltage			1	V

Germanium Photodiode		
Photoelectric properties @ 23 °C ± 2 °C		
Spectral response range	800-1700	nm
Responsivity @ 850 nm (typical)	0.30	A/W
Responsivity @ 1300 nm (typical)	0.75	A/W
Responsivity @ 1550 nm (typical)	0.85	A/W
Linearity	10	dBm
Storage temperature	-40 to 125	°C
Operating temperature	-40 to 85	°C
Maximum Ratings @ 23 °C ± 2 °C		
Reverse current	20	mA
Forward current	10	mA

Wavelength response curves at different temperatures:



Capacitor Bias Voltage Curve:



Order Info:

PN#: GE-10X10-BNC