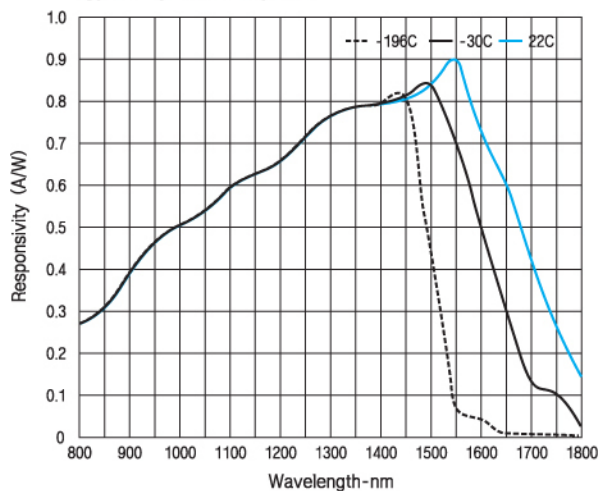


Features

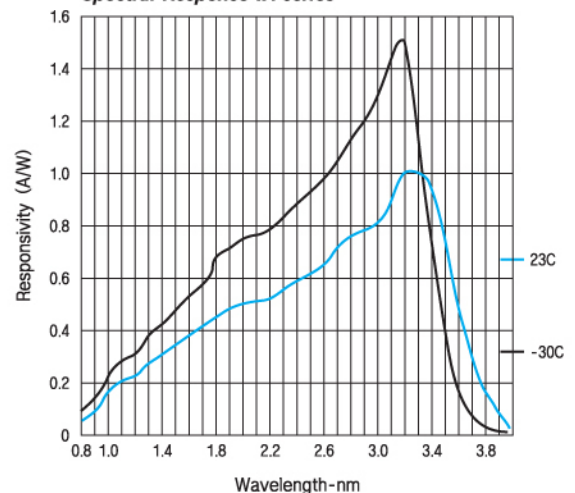
- High sensitivity photodetector elements
- Housing with either current more transimpedance amplifiers or low-noise voltage amplifiers
- Provided a complete IR measurement capability
- Dual Gain Amplifier (Switch selectable)
- BNC output connector
- 1.035"-40 threaded adapter / mount
- 1/4"-20 threaded hole for post, mounting
- Shielded power cable for use with power supplies
- 1-and 2-stage TE cooling options



G-series PHOTODIODE
Typical Spectral Response



Spectral Response-IA-series



Type	Part Number	Active Area	Operating Wavelength	Responsivity (V/W)	Noise (V/Hz ^{1/2})	NEP (W/Hz ^{1/2})	Bandwidth (-3dB)-Hz
Silicon	S-010-H	1mm dia.	300-1000nm	$0.5 \times 10^9 / 1 \times 10^8$	$5 \times 10^{-6} / 0.5 \times 10^{-6}$	$< 1.0 \times 10^{-14}$	DC-500/2K
	S-010-TE2-H	1mm dia.	300-1000nm	$0.6 \times 10^9 / 1 \times 10^8$	$5 \times 10^{-6} / 1 \times 10^{-6}$	$< 1.0 \times 10^{-14}$	DC-500/2K
	S-025-H	2.5mm dia.	300-1000nm	$0.5 \times 10^9 / 1 \times 10^8$	$5 \times 10^{-6} / 1 \times 10^{-7}$	$< 1.0 \times 10^{-14}$	DC-500/2K
	S-025-TE2-H	2.5mm dia.	300-1000nm	$0.6 \times 10^9 / 1 \times 10^8$	$5 \times 10^{-6} / 1 \times 10^{-6}$	$< 1.0 \times 10^{-14}$	DC-500/2K
	S-050-H	5mm dia.	300-1000nm	$0.5 \times 10^8 / 1 \times 10^7$	$1.3 \times 10^{-6} / 1 \times 10^{-7}$	$< 2.5 \times 10^{-14}$	DC-2K
	S-050-TE2-H	5mm dia.	300-1000nm	$0.6 \times 10^9 / 1 \times 10^8$	$5 \times 10^{-6} / 1 \times 10^{-6}$	$< 1.0 \times 10^{-14}$	DC-500/2K
	S-100-H	10mm dia.	300-1000nm	$0.6 \times 10^8 / 0.6 \times 10^7$	$1 \times 10^{-6} / 1 \times 10^{-5}$	1.5×10^{-14}	DC-2K
	S-100-TE2-H	10mm dia.	300-1000nm	$1 \times 10^9 / 1 \times 10^8$	$5 \times 10^{-6} / 1 \times 10^{-6}$	$< 1.0 \times 10^{-14}$	DC-500/2K
UV Silicon	UVS-025-H	2.5mm dia.	200-1000nm	$0.5 \times 10^9 / 1 \times 10^8$	$5 \times 10^{-6} / 1 \times 10^{-6}$	$< 1.0 \times 10^{-14}$	DC-500/2K
	UVS-050-H	5mm dia.	200-1000nm	$0.5 \times 10^8 / 1 \times 10^7$	$1.3 \times 10^{-6} / 1 \times 10^{-7}$	$< 3.0 \times 10^{-14}$	DC-2K
	UVS-100-H	10mm sq	200-1000nm	$0.5 \times 10^8 / 1 \times 10^7$	$1 \times 10^{-6} / 1 \times 10^{-5}$	1.5×10^{-14}	DC-2K

*Other bandwidths are available on request.

Type	Part Number	Active Area	Operating Wavelength	Responsivity (V/W)	Noise (V/Hz ^{1/2})	NEP (W/Hz ^{1/2})	Bandwidth (-3dB)-Hz
Germanium	G-020-H	2mm dia.	800-1800nm	$0.8 \times 10^7 / 1 \times 10^6$	$4 \times 10^{-6} / 1 \times 10^{-7}$	5×10^{-13}	DC-2K
	G-020-TE2-H	2mm dia.	800-1800nm	$0.8 \times 10^7 / 0.8 \times 10^6$	$4 \times 10^{-7} / 4 \times 10^{-8}$	5×10^{-14}	DC-2K
	G-030-H	3mm dia.	800-1800nm	$0.8 \times 10^7 / 1 \times 10^6$	$6 \times 10^{-6} / 1 \times 10^{-7}$	7.5×10^{-13}	DC-2K
	G-030-TE2-H	3mm dia.	800-1700nm	$0.9 \times 10^7 / 1 \times 10^6$	$4 \times 10^{-7} / 1 \times 10^{-6}$	$< 4 \times 10^{-14}$	DC-2K
	G-050-H	5mm dia.	800-1800nm	$0.8 \times 10^6 / 1 \times 10^5$	$1 \times 10^{-6} / 1 \times 10^{-7}$	1.2×10^{-12}	DC-2K
	G-050-TE2-H	5mm dia.	800-1700nm	$0.9 \times 10^7 / 1 \times 10^6$	$1 \times 10^{-6} / 0.1 \times 10^{-6}$	$< 6 \times 10^{-14}$	DC-2K
	G-100-H	10mm dia.	700-1800nm	$1 \times 10^5 / 1 \times 10^4$	$2.5 \times 10^{-7} / 1 \times 10^{-8}$	$< 2.5 \times 10^{-12}$	DC-2K
	G-100-TE2-H	10mm sq	700-1700nm	$1 \times 10^6 / 1 \times 10^5$	$5 \times 10^{-7} / 1 \times 10^{-8}$	$< 5 \times 10^{-13}$	DC-2K
InGaAs	IGA-010-H	1mm dia.	800-1700nm	$0.9 \times 10^9 / 0.9 \times 10^8$	$15 \times 10^{-6} / 1.5 \times 10^{-6}$	$< 2 \times 10^{-14}$	DC-500/2K
	IGA-010-TE2-H	1mm dia.	800-1600nm	$0.9 \times 10^9 / 1 \times 10^8$	$4 \times 10^{-6} / 1.2 \times 10^{-6}$	$< 0.5 \times 10^{-14}$	DC-1K
	IGA-020-H	2mm dia.	1000-1700nm	$0.9 \times 10^8 / 1 \times 10^7$	$5.5 \times 10^{-6} / 1 \times 10^{-7}$	6×10^{-14}	DC-2K
	IGA-020-TE2-H	2mm dia.	800-1600nm	$0.9 \times 10^8 / 1 \times 10^7$	$1.2 \times 10^{-6} / 0.4 \times 10^{-6}$	$< 1.5 \times 10^{-14}$	DC-2K
	IGA-030-H	3mm dia.	1000-1700nm	$0.9 \times 10^8 / 1 \times 10^7$	$5.5 \times 10^{-6} / 1 \times 10^{-7}$	6×10^{-14}	DC-2K
	IGA-030-TE2-H	3mm dia.	800-1600nm	$0.9 \times 10^8 / 1 \times 10^7$	$2 \times 10^{-6} / 0.4 \times 10^{-6}$	$< 2 \times 10^{-14}$	DC-2K
	IGA-050-H	5mm dia.	1000-1700nm	$0.9 \times 10^7 / 1 \times 10^6$	$1.8 \times 10^{-6} / 1 \times 10^{-7}$	2×10^{-13}	DC-2K
	IGA-050-TE2-H	5mm dia.	800-1600nm	$0.9 \times 10^8 / 1 \times 10^7$	$4 \times 10^{-6} / 0.4 \times 10^{-6}$	$< 4 \times 10^{-14}$	DC-2K
Extended InGaAs	IGA1.9-010-H	1mm dia.	1200-2100nm	$0.9 \times 10^7 / 0.9 \times 10^6$	$5 \times 10^{-6} / 0.5 \times 10^{-6}$	$< 5 \times 10^{-13}$	DC-2K
	IGA1.9-0.0-TE2-H	1mm dia.	1200-2100nm	$1 \times 10^7 / 1 \times 10^6$	$1.5 \times 10^{-6} / 0.3 \times 10^{-7}$	$< 1.5 \times 10^{-13}$	DC-2K
	IGA2.2-010-H	1mm dia.	1300-2600nm	$0.9 \times 10^6 / 0.9 \times 10^5$	$5 \times 10^{-6} / 0.5 \times 10^{-6}$	$< 5 \times 10^{-12}$	DC-2K
	IGA2.2-010-TE2-H	1mm sq	1200-2500nm	$1.2 \times 10^6 / 1 \times 10^5$	$6 \times 10^{-8} / 0.3 \times 10^{-9}$	$< 5 \times 10^{-13}$	DC-2K
	IGA-2.2-030-H	3mm sq	1200-2600nm	$1 \times 10^5 / 1 \times 10^4$	$7.5 \times 10^{-7} / 1 \times 10^{-8}$	$< 7.5 \times 10^{-12}$	DC-200K
IGA2.2-030-TE2-H	3mm sq	1200-2500nm	$1.2 \times 10^6 / 1 \times 10^5$	$1.8 \times 10^{-6} / 1 \times 10^{-7}$	$< 1 \times 10^{-12}$	DC-2K	
InAs	IA-010-H	1mm dia.	1000-3500nm	$1 \times 10^4 / 1 \times 10^3$	$1 \times 10^{-6} / 1 \times 10^{-7}$	1×10^{-10}	DC-10K
	IA-010-TE2-H	1mm dia.	1000-3400nm	$2.1 \times 10^4 / 2 \times 10^3$	$6.3 \times 10^{-8} / 1 \times 10^{-9}$	3×10^{-12}	DC-22K/100K
	IA-020-H	2mm dia.	1000-3500nm	$0.65 \times 10^4 / 1 \times 10^3$	$2 \times 10^{-6} / 1 \times 10^{-7}$	2×10^{-10}	DC-10K
	IA-020-TE2-H	2mm dia.	1000-3400nm	$2.1 \times 10^4 / 2 \times 10^3$	$2 \times 10^{-7} / 2 \times 10^{-8}$	0.8×10^{-11}	DC-22K/100K
PbS	PBS-010-H	1mm sq	1000-2800nm	$2 \times 10^7 / 1 \times 10^6$	$2 \times 10^{-5} / 1 \times 10^{-6}$	1×10^{-12}	5-500
	PBS-010-TE2-H	1mm sq	1000-2800nm	$5 \times 10^7 / 1 \times 10^6$	$1.5 \times 10^{-5} / 1 \times 10^{-6}$	$< 0.3 \times 10^{-12}$	5-400
	PBS-020-H	2mm sq	1000-2800nm	$1 \times 10^7 / 1 \times 10^6$	$2 \times 10^{-5} / 1 \times 10^{-6}$	$< 2 \times 10^{-12}$	5-500
	PBS-020-TE2-H	2mm sq	1000-2800nm	$2 \times 10^7 / 1 \times 10^6$	$2 \times 10^{-5} / 1 \times 10^{-6}$	$< 1 \times 10^{-12}$	5-400
	PBS-030-H	3mm sq	1000-2800nm	$1 \times 10^7 / 1 \times 10^6$	$3 \times 10^{-5} / 1 \times 10^{-6}$	3×10^{-12}	5-500
	PBS-030-TE2-H	3mm sq	1000-2800nm	$2 \times 10^7 / 1 \times 10^6$	$2 \times 10^{-5} / 1 \times 10^{-6}$	$< 1 \times 10^{-12}$	5-400
	PBS-050-H	5mm sq	1000-2800nm	$1 \times 10^6 / 1 \times 10^5$	$7.5 \times 10^{-6} / 1 \times 10^{-7}$	6.5×10^{-12}	5-500
	PBS-050-TE2-H	5mm sq	1000-2800nm	$2 \times 10^6 / 1 \times 10^5$	$5 \times 10^{-6} / 1 \times 10^{-7}$	$< 2.5 \times 10^{-12}$	5-400
	PBS-060-H	6mm sq	1000-2800nm	$1 \times 10^6 / 1 \times 10^5$	$7.5 \times 10^{-6} / 1 \times 10^{-5}$	7.5×10^{-12}	5-500
	PBS-060-TE2-H	6mm sq	1000-2800nm	$2 \times 10^6 / 1 \times 10^5$	$5 \times 10^{-6} / 1 \times 10^{-7}$	$< 2.5 \times 10^{-12}$	5-400
PbSe	PBSE-010-H	1mm sq	1000-4500nm	$1 \times 10^6 / 1 \times 10^5$	$2 \times 10^{-5} / 10^{-6}$	2×10^{-11}	5-10K
	PBSE-010-TE2-H	1mm sq	1000-4500nm	$2 \times 10^6 / 1 \times 10^5$	$1 \times 10^{-5} / 5 \times 10^{-6}$	$< 5 \times 10^{-12}$	5-10K
	PBSE-020-H	2mm sq	1000-4500nm	$5 \times 10^5 / 1 \times 10^4$	$2.5 \times 10^{-5} / 1 \times 10^{-6}$	$< 5 \times 10^{-11}$	5-10K
	PBSE-020-TE2-H	2mm sq	1000-4500nm	$2 \times 10^6 / 2 \times 10^5$	$2 \times 10^{-5} / 1 \times 10^{-6}$	$< 1 \times 10^{-11}$	5-10K
	PBSE-030-H	3mm sq	1000-4500nm	$3 \times 10^5 / 1 \times 10^4$	$3 \times 10^{-5} / 1 \times 10^{-6}$	$< 1 \times 10^{-10}$	5-10K
	PBSE-030-TE2-H	3mm sq	1000-4500nm	$1 \times 10^6 / 1 \times 10^5$	$2 \times 10^{-5} / 1 \times 10^{-6}$	$< 2 \times 10^{-11}$	5-10K
	PBSE-050-H	5mm sq	1000-4500nm	$2 \times 10^5 / 1 \times 10^4$	$5 \times 10^{-5} / 1 \times 10^{-6}$	$< 2.5 \times 10^{-10}$	5-10K
	PBSE-050-TE2-H	5mm sq	1000-4500nm	$1 \times 10^6 / 1 \times 10^5$	$5 \times 10^{-5} / 1 \times 10^{-6}$	$< 5 \times 10^{-11}$	5-10K

*Other bandwidths are available on request.

**Note : Power Requirements : $\pm 9\text{VDC}$ to $\pm 15\text{VDC}$

MCT Receivers

Type	Part Number	Active Area	Operating Wavelength	Responsivity (V/W)	Noise (V/Hz ^{1/2})	Detectivity (cm-Hz ^{1/2} /W)	Bandwidth (-3dB)-Hz
HgCdTe	MCT4.5-010-H	1mm sq.	1000-4500nm	1x10 ⁵ /1x10 ⁴	5x10 ⁻⁶ /1x10 ⁻⁷	>1x10 ¹⁰	5-50K
	MCT4.5-010-TE2-H	1mm sq.	1000-4500nm	1x10 ⁶ /1x10 ⁵	5/0.5x10 ⁻⁶	>4x10 ¹⁰	5-50K
	MCT4.5-020-H	2mm sq.	1000-4500nm	5x10 ⁴ /1x10 ³	1x10 ⁻⁶ /1x10 ⁻⁷	>1x10 ¹⁰	5-50K
	MCT4.5-020-TE2-H	2mm sq.	1000-4500nm	2x10 ⁵ /1x10 ⁴	1.3x10 ⁻⁶ /1x10 ⁻⁷	>3x10 ¹⁰	5-50K
	MCT5-010-H	1mm sq.	1000-5000nm	0.5x10 ⁵ /1x10 ⁴	1x10 ⁻⁶ /1x10 ⁻⁷	>5x10 ⁹	5-50K
	MCT5-010-TE2-H	1mm sq.	1000-5400nm	0.5x10 ⁶ /1x10 ⁵	2.5x10 ⁻⁶ /1x10 ⁻⁷	>2x10 ¹⁰	5-50K
	MCT5-020-H	2mm sq.	1000-5000nm	1x10 ⁴ /1x10 ³	5.0x10 ⁻⁶ /1x10 ⁻⁷	>5x10 ⁹	5-50K
	MCT5-020-TE2-H	2mm sq.	1000-5400nm	2x10 ⁵ /1x10 ⁴	2x10 ⁻⁶ /1x10 ⁻⁷	>1.5x10 ¹⁰	5-50K

Note : Power Requirements : ±9VDC to 15VDC

PSD Receivers

Type	Part Number	Active Area	Wavelength Range	Amplifier Gain (Rf)	Module Bandwidth	Position Resolution
Germanium PSD	G-050-PSD-E4	5mm dia.	800-1800nm	10K Ω	DC-10KHz	<1 μ , for 0.1mW
	G-100-PSD-E4	10mm sq	800-1800nm	10K Ω	DC-10KHz	<1 μ , for 0.1mW
	G-130-PSD-E4	13mm dia.	800-1800nm	10K Ω	DC-10KHz	<1 μ , for 0.1mW
InGaAs PSD	IGA-020-PSD-E4	2mm dia.	1000-1700nm	100K Ω	DC-50KHz	<1 μ , for 0.1mW
	IGA-030-PSD-E4	3mm dia.	1000-1700nm	100K Ω	DC-50KHz	<1 μ , for 0.1mW
	IGA-050-PSD-E4	5mm dia.	1000-1700nm	100K Ω	DC-50KHz	<1 μ , for 0.1mW

Note : Power Requirements : ±15VDC, 40mA

Thermal Receivers

Type	Part Number	Active Area	Operating Wavelength	Responsivity (V/W)	Noise (V/Hz ^{1/2})	NEP (W/Hz ^{1/2})	Bandwidth (-3dB)-Hz
Lithium Tantalate	LT-020-H	2mm dia.	2-16 μ m	1x10 ⁵ /1x10 ⁴	100x10 ⁻⁶ /1x10 ⁻⁷	<1x10 ⁻⁹	1-100
	LT-050-H	5mm dia.	2-16 μ m	1x10 ⁴ /1x10 ³	50x10 ⁻⁶ /1x10 ⁻⁷	<5x10 ⁻⁹	1-30
Thermopile	TH-020-H	2mm sq	2-16 μ m	2x10 ⁴ /1x10 ³	20x10 ⁻⁶ /1x10 ⁻⁷	<2x10 ⁻⁹	DC-10
	TH-060-H	6mm dia.	2-16 μ m	5x10 ³ /1x10 ²	30x10 ⁻⁶ /1x10 ⁻⁷	<7x10 ⁻⁹	DC-5

Note : Power Requirements : ±9VDC to 15VDC

Quadrant Receivers

Type	Part Number	Active Area	Wavelength Range	Responsivity (V/W)	Amplifier Gain (Rf)	NEP (W/Hz ^{1/2})	Module Bandwidth
Silicon Quadrant	S-025-QUAD-E4	2.5mm sq	400-1100nm	0.5x10 ⁸	100M Ω	<2x10 ⁻¹⁴	DC-2KHz
	S-025-QUAD-E4/1MHz	2.5mm sq	400-1100nm	2.5x10 ⁴	50M Ω	<1.5x10 ⁻¹²	DC-1MHz
	S-078-QUAD-E4	7.8mm dia.	400-1100nm	0.5x10 ⁸	100M Ω	<2x10 ⁻¹⁴	DC-2KHz
	S-078-QUAD-E4/1MHz	7.8mm dia.	400-1100nm	0.5x10 ⁴	10K Ω	<4x10 ⁻¹²	DC-1MHz
InGaAs Quadrant	IGA-010-QUAD-E4	1mm dia.	1000-1700nm	1x10 ⁸	100M Ω	<2x10 ⁻¹⁴	DC-2KHz
	IGA-020-QUAD-E4	2mm dia.	1000-1700nm	1x10 ⁸	100M Ω	<2x10 ⁻¹⁴	DC-2KHz
	IGA-020-QUAD-E4/1MHz	2mm dia.	1000-1700nm	1x10 ⁴	10K Ω	<4x10 ⁻¹²	DC-1MHz

Note : Power Requirements : ±15VDC, 20mA