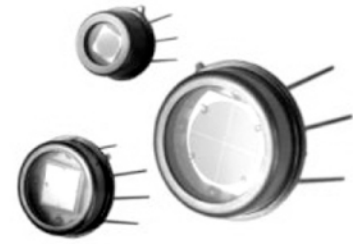
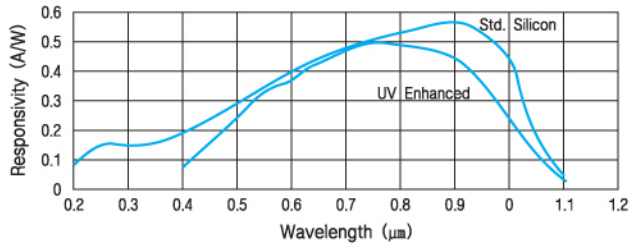


UV-VIS/NIR (200nm to 2.6µm)

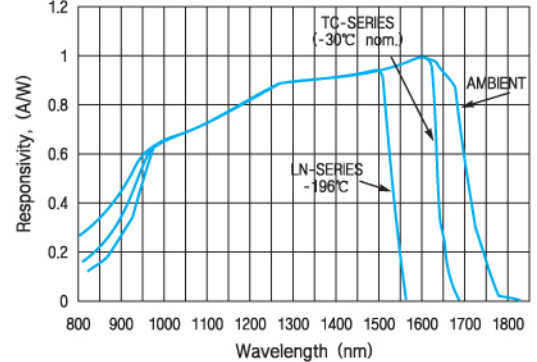
Components in this category are InGaAs, ex-InGaAs, Germanium and Silicon photodiodes that cover progressively from 0.2 to 2.6 microns. These detectors operate at room temperature or with TE-Coolers and are housed in a variety of TO-Style packages. Several standard diameters are available as well as specialty devices such as Si & InGaAs Quadrants, 2-color detectors, multi-element detectors and PSD's.



UVS & S-Series Photodiodes



IGA Series



| Type | Part number | Active Area | Operating Wavelength (nm) | Shunt Resistance (Ω) | Shunt Capacitance (pF), typ | Responsivity (A/W) | NEP (W/Hz ^{1/2}) |
|-------------|-------------|-------------|---------------------------|-------------------------------|-----------------------------|-----------------------|----------------------------|
| Silicon | S-010 | 1mm dia. | 300-1000 | 500M | 25 | 0.55 | $<10^{-14}$ |
| | S-010-TE2 | 1mm dia. | 300-1000 | $> 1000M$ | 25 | 0.55 | - |
| | S-025 | 2.5mm dia. | 300-1000 | 500M | 400 | 0.55 | $< 10^{-14}$ |
| | S-025-TE2 | 2.5mm dia. | 300-1000 | $> 1000M$ | 400 | 0.55 | $< 5 \times 10^{-15}$ |
| | S-050 | 5mm dia. | 350-1100 | 200M | 1500typ | 0.55 | $<1.5 \times 10^{-14}$ |
| | S-050-TE2 | 5mm dia. | 300-1000 | $> 1000M$ | 1000 | 0.55 | $< 10^{-14}$ |
| | S-100 | 10mm sq | 350-1100 | 10M | 1000 | 0.5 | $<10^{-13}$ |
| | S-100-TE2 | 10mm sq | 300-1000 | 500M | 900 | 0.5 | $< 1.0 \times 10^{-14}$ |
| | S-113 | 11.3mm dia. | 300-1100 | 200M | 9000 | 0.55 | $<1.5 \times 10^{-14}$ |
| UV Silicon | UVS-010 | 1mm dia. | 200-1000 | 500M | 50 | 0.55 | $< 10^{-14}$ |
| | UVS-010-TE2 | 1mm dia. | 200-1000 | $> 1000M$ | 50 | 0.55 | - |
| | UVS-025 | 2.5mm dia. | 200-1000 | 200M | 300 | 0.5 | $<1.5 \times 10^{-14}$ |
| | UVS-025-TE2 | 2.5mm dia. | 200-1000 | $> 1000M$ | 300 | 0.55 | $< 10^{-14}$ |
| | UVS-050 | 5mm dia. | 200-1100 | 50M | 1000 | 0.5 | $<3 \times 10^{-14}$ |
| | UVS-050-TE2 | 5mm dia. | 200-1000 | $> 1000M$ | 1000 | 0.55 | $< 10^{-14}$ |
| | UVS-100 | 10mm sq | 200-1000 | 50M | 1800 | 0.5 | $<5 \times 10^{-14}$ |
| | UVS-100-TE2 | 10mm sq | 200-1000 | 1000M | 1600 | 0.5 | $<1 \times 10^{-14}$ |
| | UVS-113 | 11.3mm dia. | 200-1000 | 10M | 4000 | 0.5 | $<1 \times 10^{-13}$ |
| InGaAs | IGA-001 | 0.1mm dia. | 1000-1700 | $> 1000M$ | 1 (-5V) | 0.9 | - |
| | IGA-003 | 0.3mm dia. | 1000-1700 | $> 500M$ | 5 (-5V) | 0.9 | - |
| | IGA-010 | 1mm dia. | 1000-1700 | $> 100M$ | 50. (-5V) | 0.9 | - |
| | IGA-010-TE2 | 1mm dia. | 1000-1700 | $> 1000M$ | 80 | 0.9 | - |
| | IGA-020 | 2mm dia. | 1000-1700 | $\geq 10M$ | 400 | 0.9 | $< 5 \times 10^{-14}$ |
| | IGA-020-TE2 | 2mm dia. | 1000-1700 | 200M | 400 | 0.9 | $<10^{-14}$ |
| | IGA-030 | 3mm dia. | 1000-1700 | $\geq 5M$ | 1000 | 0.9 | $< 7 \times 10^{-14}$ |
| | IGA-030-TE2 | 3mm dia. | 1000-1700 | 50M | 1000 | 0.9 | $<2.0 \times 10^{-14}$ |
| | IGA-050 | 5mm dia. | 800-1700 | 250k min ; 500k typ | 2000 | 0.9 | $< 3.0 \times 10^{-13}$ |
| IGA-050-TE2 | 5mm dia. | 800-1700 | 10M | 1500 | 0.9 | $< 4 \times 10^{-14}$ | |

UV-VIS/NIR (200nm - 2.6µm)

| Type | Part number | Active Area | Operating Wavelength (nm) | Shunt Resistance (Ω) | Shunt Capacitance (pF), typ | Responsivity (A/W) | NEP (W/Hz ^{1/2}) |
|-----------------|----------------|-------------|---------------------------|----------------------|-----------------------------|--------------------|----------------------------|
| Extended InGaAs | IGA1.9-010 | 1mm dia. | 1200-2100 | > 100k | 100 | 1.2 | < 4.0 x 10 ⁻¹³ |
| | IGA1.9-010-TE2 | 1mm dia. | 1200-2100 | 5M | 100 | 1 | - |
| | IGA2.2-003 | 0.3mm dia. | 1200-2600 | 30k | 40 | 1.1 | < 7.0 x 10 ⁻¹³ |
| | IGA2.2-010 | 1mm dia. | 1200-2600 | 3k | 300 | 1.1 | < 2.0 x 10 ⁻¹² |
| | IGA2.2-010-TE2 | 1mm dia. | 1200-2600 | 60k | 120 | 1 | - |
| | IGA2.2-030 | 3mm dia. | 1200-2600 | ≥ 300 | 2000 (0V) | 1.1 | < 7 x 10 ⁻¹² |
| Germanium | G-010 | 1mm dia. | 800-1800 | 200k | 1500 | 0.9 | < 3 x 10 ⁻¹³ |
| | G-010-TE2 | 1mm dia. | 800-1800 | 100M | 1500 | 0.9 | 1.5 x 10 ⁻¹⁴ |
| | G-020 | 2mm dia. | 800-1800 | ≥ 90k | 9000 | 0.9 | < 4.5 x 10 ⁻¹³ |
| | G-020-TE2 | 2mm dia. | 800-1700 | 50M | 9000 | 0.9 | 2.0 x 10 ⁻¹⁴ |
| | G-030 | 3mm dia. | 800-1800 | ≥ 40k | 13000 | 0.9 | < 7 x 10 ⁻¹³ |
| | G-030-TE2 | 3mm dia. | 800-1700 | 10M | 13000 | 0.9 | 4x 10 ⁻¹⁴ |
| | G-050 | 5mm dia. | 800-1800 | 10k min ; 15k typ | 30000 | 0.9 | < 1.5 x 10 ⁻¹² |
| | G-050-TE2 | 5mm dia. | 800-1700 | 5M | 30000 | 0.9 | 6.0 x 10 ⁻¹⁴ |
| | G-100 | 10mm sq | 1000-1800 | 2k min ; 4k typ | 30000 | 0.9 | < 3.5 x 10 ⁻¹² |
| | G-100-TE2 | 10mm sq | 800-1800 | 50k | 30000 | 0.9 | < 7.0 x 10 ⁻¹³ |
| | G-130 | 13mm dia. | 1000-1800 | 1k min ; 2k typ | 40000 | 0.9 | < 5 x 10 ⁻¹² |
| | G-130-TE2 | 13mmx10mm | 1000-1800 | 25k | 40000 | 0.9 | < 1.0 x 10 ⁻¹² |

Detectors included in this category are InAs and InSb photodiodes as well as PbS, PbSe and HgCdTe photoconductors that cover the 1 to 5.5 micron spectral range. Room temperature, TE-Cooled and Cryogenic packages are utilized, depending on sensitivity requirements. A variety of standard and custom sizes are available.

NIR-MWIR (1.0 to 5.5µm)



| Type | Part number | Active Area | Operating Wavelength (nm) | Shunt Resistance (Ω) | Shunt Capacitance (pF), typ | Responsivity (A/W) | NEP (W/Hz ^{1/2}) |
|------|----------------|-------------|---------------------------|----------------------|-----------------------------|--------------------|----------------------------|
| InAs | IA-010 | 1mm dia. | 1000-3400 | ≥ 15 | 400 | 1 | 33 x 10 ⁻¹² |
| | IA-010-TE2/TO8 | 1mm dia. | 1000-3400 | 500 | 450 | 1.4 | - |
| | IA-020 | 2mm dia. | 1000-3400 | ≥ 10 | 1200 | 0.8 | 5.5 x 10 ⁻¹¹ |
| | IA-020-TE2/TO8 | 2mm dia. | 1000-3400 | 100 | 1200 | 1.5 | - |