

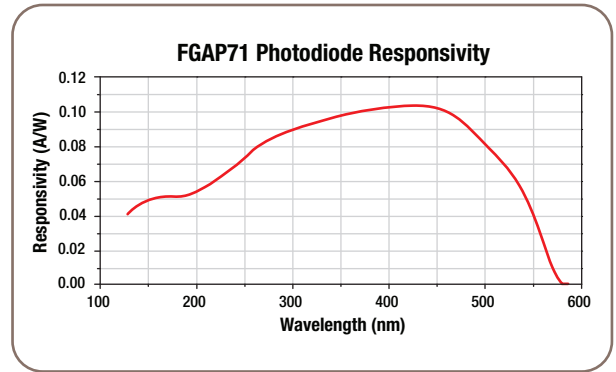
GaP Photodiode



FGAP71

The FGAP71 has a wide bandwidth and high spectral sensitivity in the UV and visible ranges (150 – 550 nm). The diode is mounted in a hermetically sealed, TO-5 package with a sapphire window.

- Wavelength Range: 150 – 550 nm
- 1 ns Rise Time, 140 ns Fall Time



| ITEM # | \$ | £ | € | RMB | RISE/FALL TIME* | ACTIVE AREA | NEP | DARK CURRENT | WAVELENGTH |
|--------|----------|---------|---------|----------|-----------------|---------------------|-------------------------------|--------------|--------------|
| FGAP71 | \$ 85.90 | £ 61.85 | € 74.73 | ¥ 684.62 | 1 ns /140 ns | 4.8 mm ² | 1.0 x 10 ⁻¹⁴ W/√Hz | 40 nA (1 V) | 150 – 550 nm |

*Photodiodes measured with 50 Ω load

Si Photodiodes

Our silicon photodiode offerings include two calibrated photodiodes (FDS100-CAL and FDS1010-CAL), which come with device-specific calibration data. Thorlabs' calibrated photodiodes have a measurement uncertainty of ±5% and are NIST traceable.



FDS010

TO-5 Package
UV Fused Silica Window



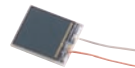
FDS100

Largest Sensor in TO-5 Package



FDS02

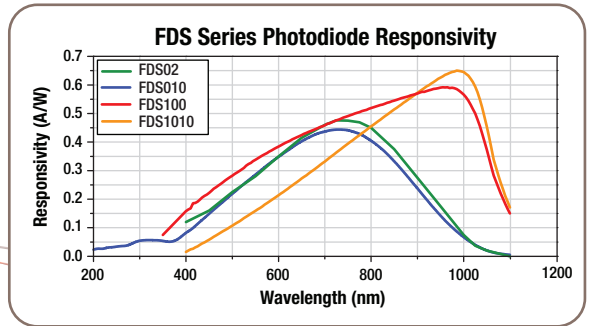
FC/PC Package for Fiber Coupling



FDS1010

Ceramic Wafer

Calibrated Photodiodes Available



| ITEM # | \$ | £ | € | RMB | RISE TIME* | ACTIVE AREA | NEP | DARK CURRENT | WAVELENGTH |
|-------------|-----------|----------|----------|------------|------------|-------------------------------------|-------------------------------|---------------|---------------|
| FDS010 | \$ 42.10 | £ 30.31 | € 36.63 | ¥ 335.54 | 1 ns | 0.8 mm ² (Ø1 mm) | 5 x 10 ⁻¹⁴ W/√Hz | 2.5 nA (20 V) | 200 – 1100 nm |
| FDS100 | \$ 13.10 | £ 9.43 | € 11.40 | ¥ 104.41 | 10 ns | 13 mm ² (3.6 x 3.6 mm) | 1.2 x 10 ⁻¹⁴ W/√Hz | 20 nA (20 V) | 350 – 1100 nm |
| FDS02 | \$ 73.50 | £ 52.92 | € 63.95 | ¥ 585.80 | 47 ps | Ø0.25 mm | 9.3 x 10 ⁻¹⁵ W/√Hz | 35 pA (5 V) | 400 – 1100 nm |
| FDS1010 | \$ 48.80 | £ 35.14 | € 42.46 | ¥ 388.94 | 45 ns | 94.1 mm ² (9.7 x 9.7 mm) | 5.0 x 10 ⁻¹³ W/√Hz | 0.6 µA (5 V) | 400 – 1100 nm |
| FDS100-CAL | \$ 146.60 | £ 105.55 | € 127.54 | ¥ 1,168.40 | 10 ns | 13 mm ² (3.6 x 3.6 mm) | 1.2 x 10 ⁻¹⁴ W/√Hz | 20 nA (20 V) | 350 – 1100 nm |
| FDS1010-CAL | \$ 176.30 | £ 126.94 | € 153.38 | ¥ 1,405.11 | 45 ns | 94.1 mm ² (9.7 x 9.7 mm) | 4 x 10 ⁻¹³ W/√Hz | 0.6 µA (5 V) | 400 – 1100 nm |

*Photodiodes measured with 50 Ω load

Ge Photodiodes

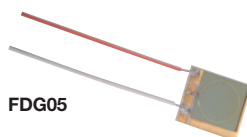
- Wavelength Range: 800 – 1800 nm
- Large Active Area
- Ideal for Pulsed and CW Sources

Thorlabs' germanium photodiode offerings include two calibrated photodiodes (FDG03-CAL and FDG05-CAL), which come with device-specific calibration data. All of Thorlabs' calibrated photodiodes have a measurement uncertainty of ±5% and are NIST traceable.



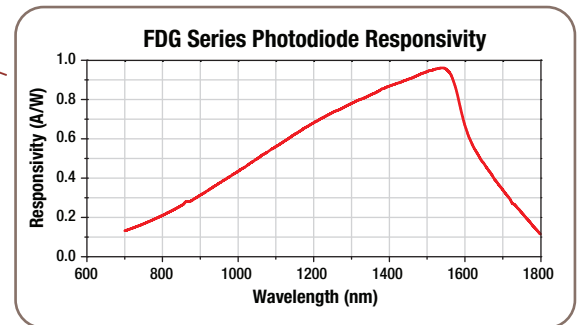
FDG1010

Largest Area on a Ceramic Substrate



FDG05

Calibrated Photodiodes Available



| ITEM # | \$ | £ | € | RMB | RISE TIME* | ACTIVE AREA | NEP | DARK CURRENT | WAVELENGTH |
|-----------|-----------|----------|----------|------------|--------------|----------------------------------|-------------------------------|---------------|---------------|
| FDG03 | \$ 121.50 | £ 87.48 | € 105.71 | ¥ 968.36 | 500 ns @ 3 V | 7 mm ² (Ø3 mm) | 1 x 10 ⁻¹² W/√Hz | 4.0 µA (1 V) | 800 – 1800 nm |
| FDG05 | \$ 232.40 | £ 167.33 | € 202.19 | ¥ 1,852.23 | 220 ns @ 3 V | 19.6 mm ² (Ø5 mm) | 4.0 x 10 ⁻¹² W/√Hz | 40 µA (3 V) | |
| FDG1010 | \$ 426.00 | £ 306.72 | € 370.62 | ¥ 3,395.22 | 3.5 µs @ 1 V | 100 mm ² (10 x 10 mm) | 4.0 x 10 ⁻¹² W/√Hz | 50 µA (0.5 V) | |
| FDG03-CAL | \$ 271.00 | £ 195.12 | € 235.77 | ¥ 2,159.87 | 500 ns @ 3 V | 7 mm ² (Ø3 mm) | 1.0 x 10 ⁻¹² W/√Hz | 4.0 µA (1 V) | |
| FDG05-CAL | \$ 374.00 | £ 269.28 | € 325.38 | ¥ 2,980.78 | 220 ns @ 5 V | 19.6 mm ² (Ø5 mm) | 4.0 x 10 ⁻¹² W/√Hz | 40 µA (3 V) | |

*Photodiodes measured with 50 Ω load