

EIFys DP-PIN100s

Demonstration Photodetector Datasheet



1. Product Description and Key Features

The demonstration photodetector of the PIN series from EIFys consists of black silicon photosensitive surface and induced junction structure as default. Both technologies provide the key benefits of high sensitivity and very wide effective sensing angle. The product is suitable for highly demanding UV, Vis and NIR applications with precision photometry. The UV response is available down to 170 nm.

Name	Photosensitive area dimension (mm)	Chip outline dimension (mm)	Default packaging dimension (mm)	Window / Filter material	Breakdown Voltage (V)
DP-PIN100sH	10.0 x 10.0	11.5 x 11.5	30 x 20	No	80
DP-PIN100sM	10.0 x 10.0	11.5 x 11.5	30 x 20	No	80

Key Features:

DP-PIN100sH : high responsivity, ultra-wide effective sensing angle, low capacitance

DP-PIN100sM : high responsivity, ultra-wide effective sensing angle, low dark current

Note: The demonstration photodetector is not sealed for environmental protection. Customized packaging dimensions and window / filter material are subject to customer specifications. Please contact us for more information: info@elfys.fi

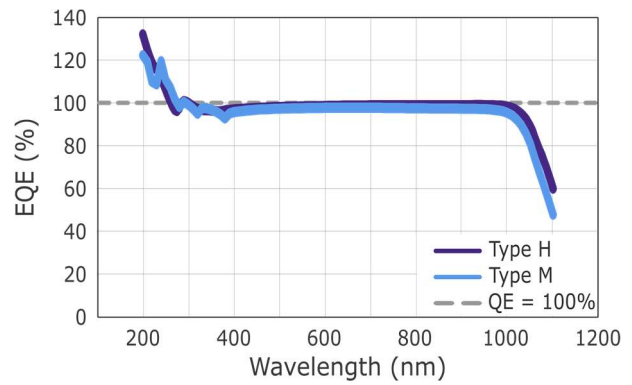
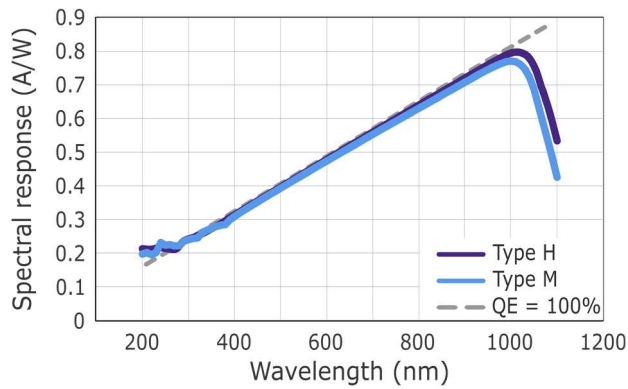
2. Indicative Values of Electrical and Optical Performance

Name	Spectral response range	Peak response wavelength	Photosensitivity				Dark current @ $V_R=10\text{mV}$, Typ.	Capacitance @ $V_R=0\text{V}$, $f=100\text{kHz}$, Typ.	Shunt resistance @ $V_R=10\text{mV}$, Typ.
			200nm Typ.	630nm Typ.	930nm Typ.	1000nm Typ.			
	nm	nm	A/W	A/W	A/W	A/W	pA	pF	MΩ
DP-PIN100sH	170-1100	1000	0.21	0.50	0.74	0.79	670	250	15
DP-PIN100sM	170-1100	1000	0.21	0.50	0.74	0.77	50	1200	210

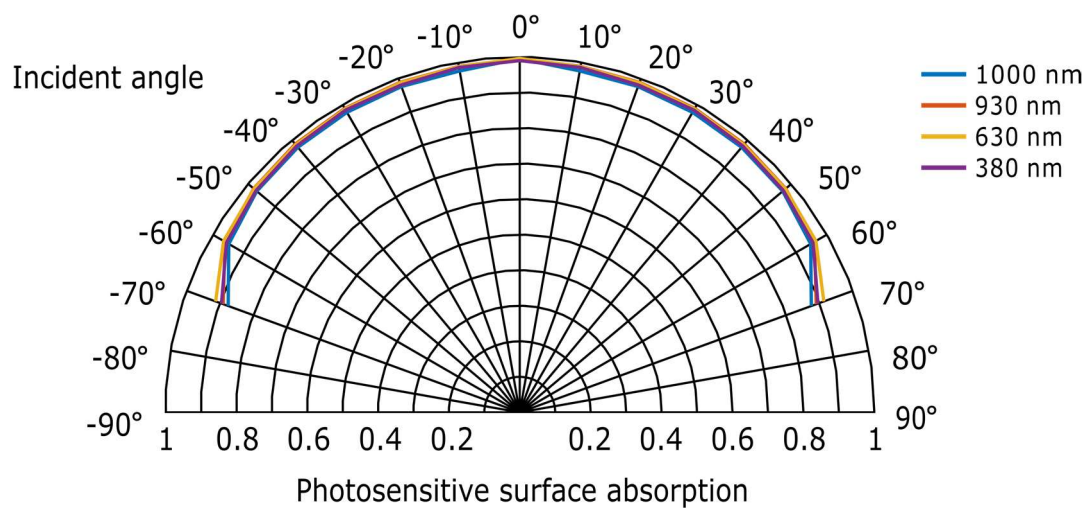
Note: All data are typical values from room temperature and normal working conditions. These indicative values are for performance evaluation purposes only, as the actual performance of the product is subject to design specifications and the final measurement setup. Please contact us for more information: info@elfys.fi



3. Spectral Response

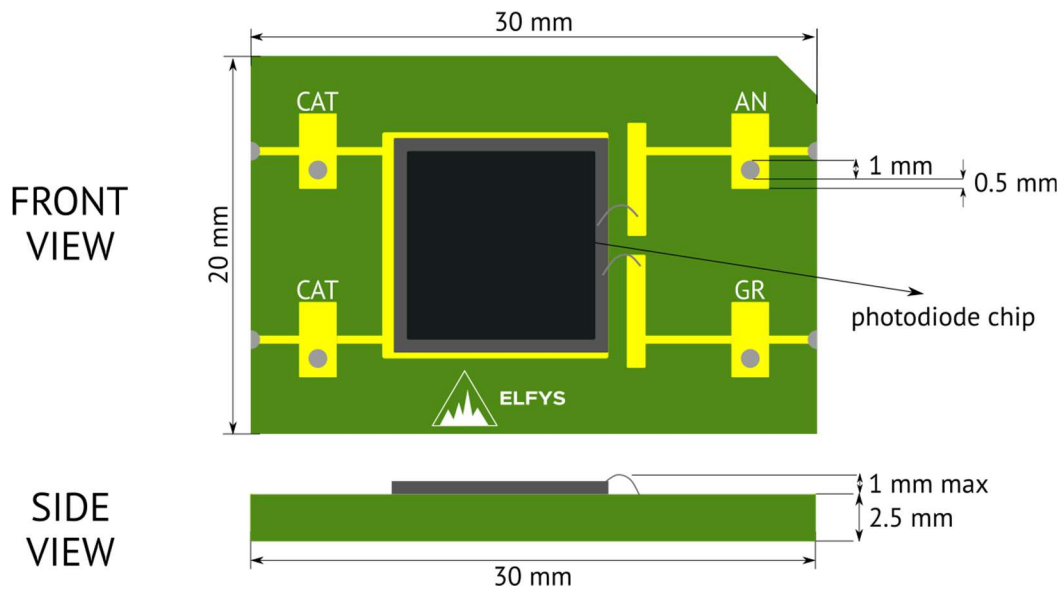


4. Surface Absorption



5. Packaging and Connections

The demonstration photodetector is available by default on a demonstration board (30mm x 20mm). Customized demonstration board is available upon request according to customer specifications. The electrical connections are: anode (AN), cathode (CAT) and guard ring (GR). The default demonstration board is suitable for Surface Mount, Through Hole Mount, and Soldering Wire.



6. How to purchase the demonstration photodetector

Contact us for purchasing the sample: Ji Fan / ji.fan@elfys.fi / +358 40 557 7716