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ElFys DP-PIN25s Demonstration Photodetector Datasheet



1. Product Description and Key Features

The demonstration photodetector of the PIN series from ElFys 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	Chip outline dimension (mm)	Default packaging dimension (mm)	Window / Filter material	Breakdown Voltage (V)	
	(mm)	differision (fillin)	differision (fillin)	materiat	voltage (v)	
DP-PIN25sH	5.0 x 5.0	6.3 x 6.3	30 x 20	No	80	
DP-PIN25sM	5.0 x 5.0	6.3 x 6.3	30 x 20	No	80	

Key Features:

DP-PIN25sH: high responsivity, ultra-wide effective sensing angle, <u>low capacitance</u> **DP-PIN25sM**: high responsivity, ultra-wide effective sensing angle, <u>low dark current</u>

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

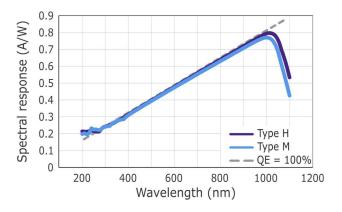
Name	Spectral response range	Peak response wave- length	Photosensitivity			Dark current	Capacitance	Shunt resistance	
			200nm Typ.	630nm Typ.	930nm Typ.	1000nm Typ.	@ V _R =10mV, Typ.	@ V _R =0V, f=100kHz, Typ.	@ V _R =10mV, Typ.
	nm	nm	A/W	A/W	A/W	A/W	pA	pF	МΩ
DP- PIN25sH	170-1100	1000	0.21	0.50	0.74	0.79	320	85	30
DP- PIN25sM	170-1100	1000	0.21	0.50	0.74	0.77	10	350	800

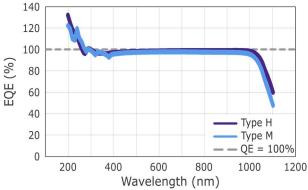
Note: All data are typical values from room temperature and normal working conditions. These indictive values are for performance evaluation purposes only, as the actual performance of the product is subject to design specifications and the final measurement setup. Please contact us for more information: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



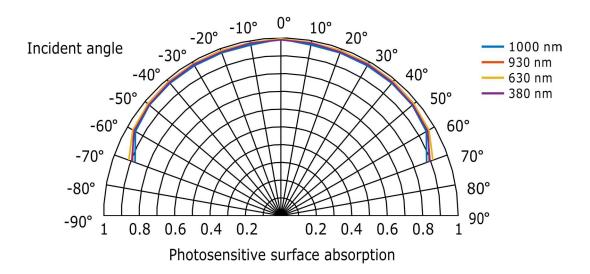
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3. Spectral Response





4. Surface Absorption

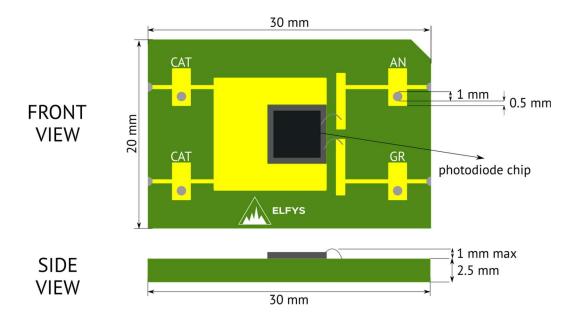




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5. Packaging and Connections

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

