

Data Sheet**Si Photodiode****EOPD-940-0-2.52**

Spectral range	Type	Case
UV ... infrared	Si	TO-5, glass window cap

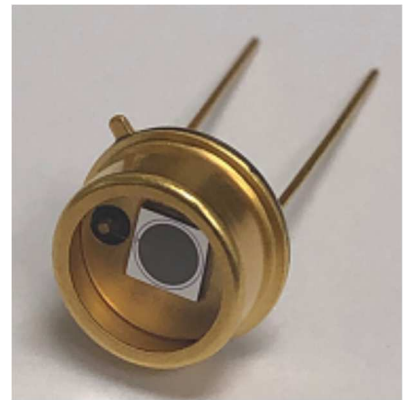
Circular ($\varnothing 2.52$) 5 mm² active area photodiode in a hermetic TO-5 metal can. It is well suited for applications requiring visible and near infrared (NIR) light detection.

Features:

- > Wide dynamic range
- > High shunt resistance
- > Ultra low noise
- > Broadband spectral coverage

Applications:

- > Colorimeters
- > Photometers
- > Spectroscopy equipment
- > Fluorescence

**Absolute maximum ratings**

Parameters	Symbol	Rating	Unit
Reverse voltage	V_R	50	V
Operating temperature range	T_{OPR}	-40...+100	°C
Storage temperature range	T_{STG}	-55...+125	°C
Lead soldering temperature*	T_{LS}	260	°C

*Time 5 sec max, position: up to 3 mm from the body

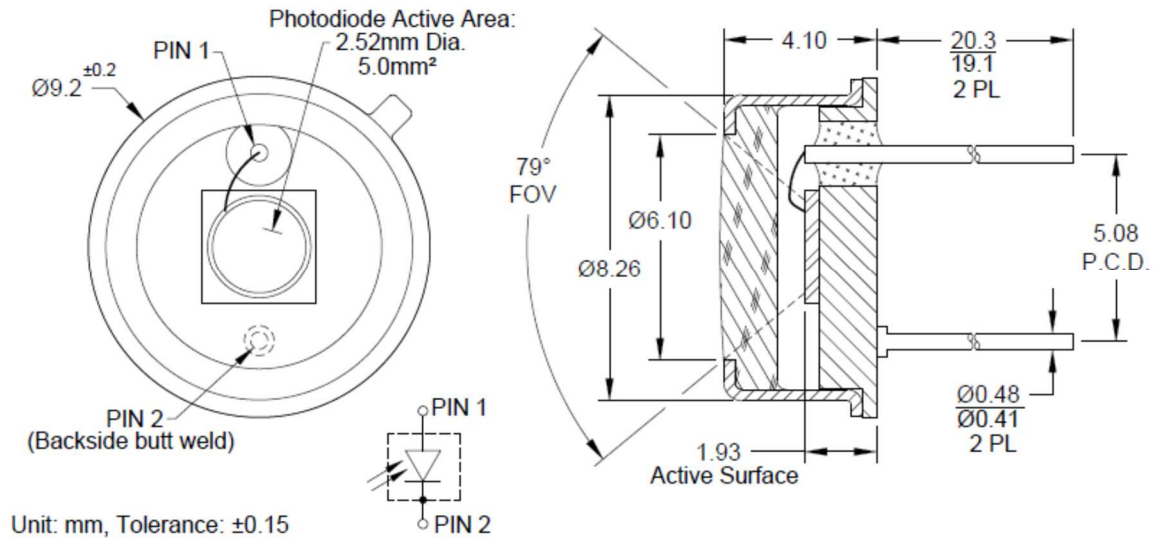
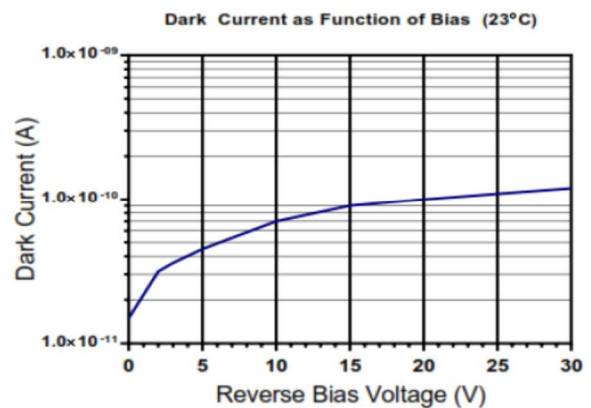
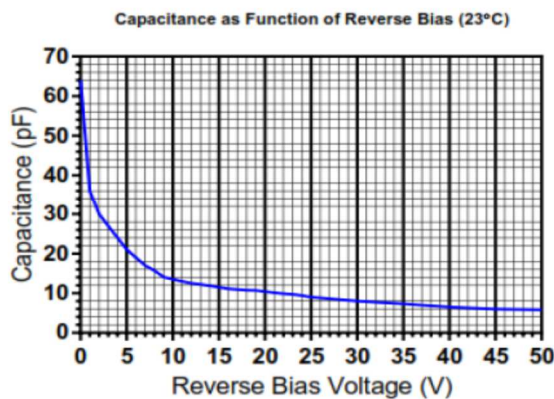
**Electro-optical characteristics:**

T_{amb} = 25°C, unless otherwise specified

Parameters	Symbol	Min	Typ	Max	Unit	Test conditions
Dark current	I_D		0.1	1	nA	$V_R=5$ V
Breakdown voltage	V_{BR}	50			V	$I_R=10$ μ A
Sensitivity range	λ	350		1100	nm	
Peak sensitivity WL	λ_P		950		nm	
Responsivity	S_λ		0.38		A/W	$V_R=0$ V, $\lambda=633$ nm
Responsivity	S_λ		0.55		A/W	$V_R=0$ V, $\lambda=940$ nm
Response time	t_R		30		ns	$V_R=5$ V, $R_L=50$ Ω , $\lambda=635$ nm
Junction capacitance	C_j		90		pF	$V_R=0$ V, 1 MHz
Junction capacitance	C_j		20	25	pF	$V_R=5$ V, 1 MHz
Shunt resistance	R_S	500	1000		M Ω	$V_R=10$ mV

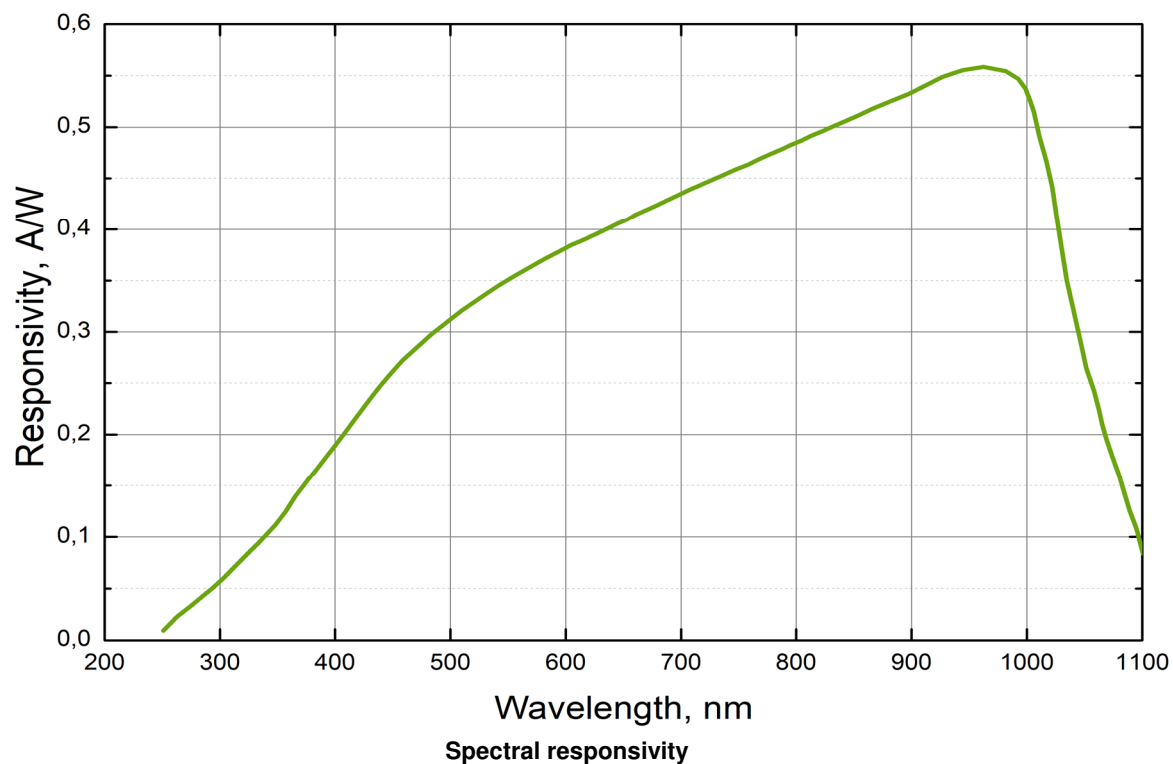
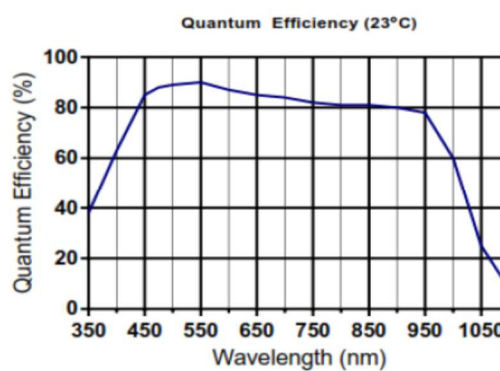
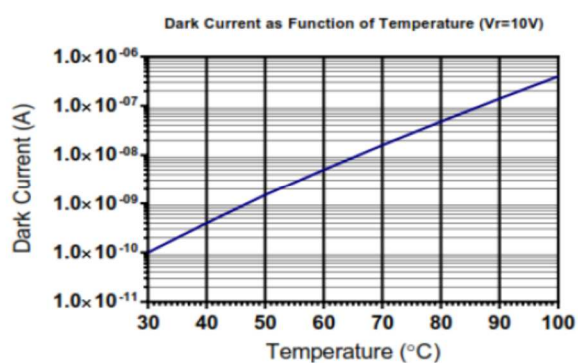
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**TO-5 package dimensions (2 pin)**

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We reserve the right to make changes to improve technical design and may do so without further notice. Parameters can vary in different applications. All operating parameters must be validated for each customer application by the customer.