

Data Sheet

Page 1 of 3

Si photodiode**EOPD-940-0-3.57**

Rev. 01, 2016

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

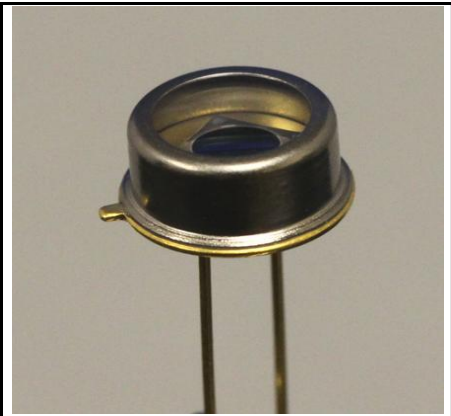
Circular ($\varnothing 3.57$) 10 mm² active area photodiode in a hermetic TO-5 metal can. It is well suited for applications requiring high sensitivity (green/blue) as well as visible-near IR applications.

Features:

- > Wide dynamic range
- > High shunt resistance
- > Ultra low noise
- > Blue enhanced

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
Photocurrent @ 1300 nm**	I_{PH}			10	mA	$V_R=10$ V, $E_e=5$ mW/cm ²
Dark current	I_D			1	nA	$V_R=10$ V
Sensitivity range	λ	400		1100	nm	
Peak sensitivity WL	λ_p		940		nm	
Responsivity	S_λ		0.22		A/W	$V_R=0$ V, $\lambda=410$ nm
Responsivity	S_λ		0.60		A/W	$V_R=0$ V, $\lambda=940$ nm
Response time	t_R		45		ns	$V_R=10$ V, $R_L=50$ Ω , $\lambda=940$ nm
Junction capacitance	C_j		115	120	pF	$V_R=0$ V, 1 MHz
Junction capacitance	C_j		47	50	pF	$V_R=5$ V, 1 MHz
Shunt resistance	R_S	200	300		M Ω	$V_R=10$ mV

**Standard Tungsten Lamp, Color Temperature=2870 K

Data Sheet**Si photodiode****EOPD-940-0-3.57****Page 2 of 3**

Rev. 01, 2016

TO-5 Package Dimensions (2 Pin)