

FEATURES

- 1.00 X 1.00 mm active area
- High sensitivity
- High shunt resistance
- UV/ Blue enhanced

DESCRIPTION

1.0 mm² UV Silicon Photodiode with N on P construction. Hermetically packaged in a TO-52 with a UV transmitting clear glass window cap.

APPLICATIONS

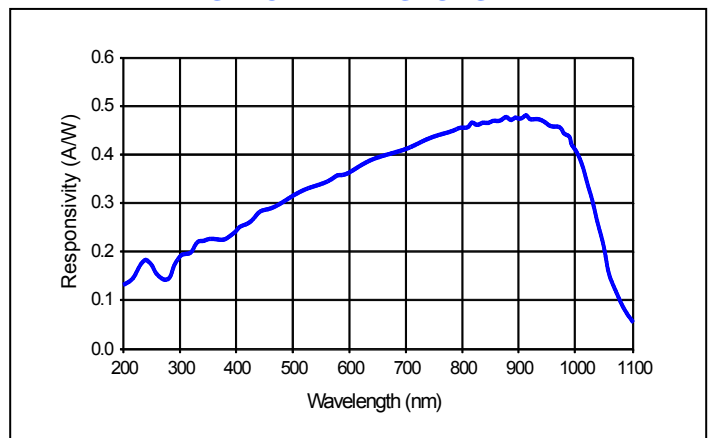
- UV exposure meters
- Pollution monitoring
- Fluorescent analyzers
- Medical instrumentation



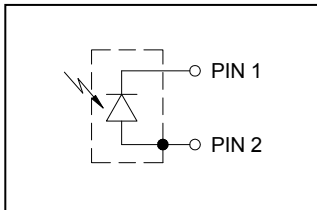
ABSOLUTE MAXIMUM RATING

SYMBOL	PARAMETER	MIN	MAX	UNITS
T _{STG}	Storage Temp	-55	+125	°C
T _{OP}	Operating Temp	-40	+100	°C
V _{R(OP)}	Reverse Operating Voltage	-	20	V
I _(PEAK)	Peak DC Current	-	10	mA

SPECTRAL RESPONSE



SCHEMATIC



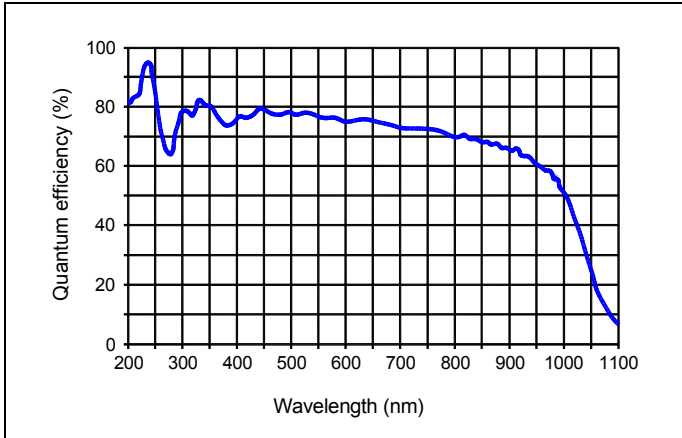
ELECTRO-OPTICAL CHARACTERISTICS @ 23° C

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
R _{SH}	Shunt Resistance	V _R = ±10 mV	5	10	---	GΩ
I _D	Dark Current	V _R = 5 V	---	0.01	0.05	nA
C	Capacitance	V _R = 0 V	---	50	---	pF
		V _R = 5 V	---	16	---	
	Responsivity	V _R = 0 V; λ = 340 nm	---	0.22	---	A/W
		V _R = 0 V; λ = 450 nm	---	0.29	---	
NEP	Noise Equivalent Power	V _R = 5 V; λ = 410 nm; R _L = 50 Ω	---	7.2 E-15	---	W/√Hz
V _{BR}	Breakdown Voltage	I _R = 2 μA	20	30	---	V
t _r	Rise Time	V _R = 0 V; λ = 410 nm; R _L = 50 Ω	---	200	---	ns
		V _R = 5 V; λ = 410 nm; R _L = 50 Ω	---	50	---	

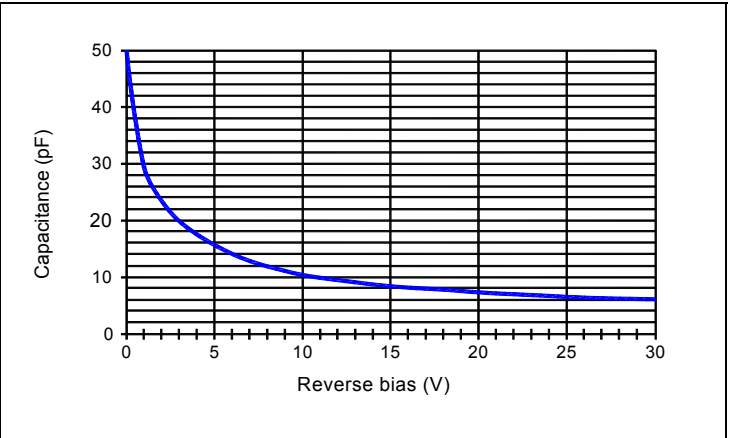
These devices are sensitive to electrostatic discharge. Please use ESD precautions when handling.

Disclaimer: Due to our policy of continued development, specifications are subject to change without notice.

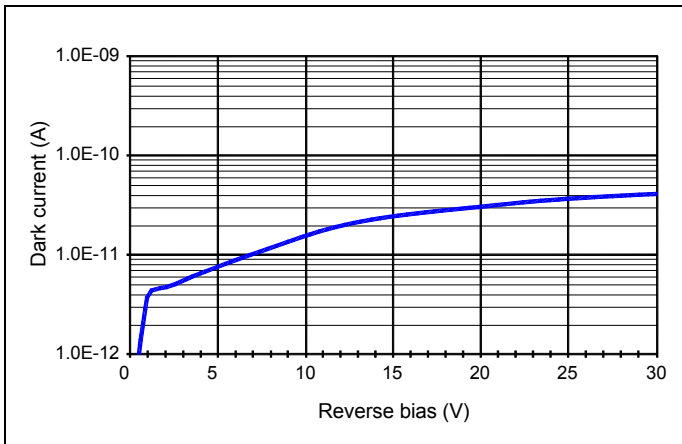
Quantum Efficiency (23 °C)



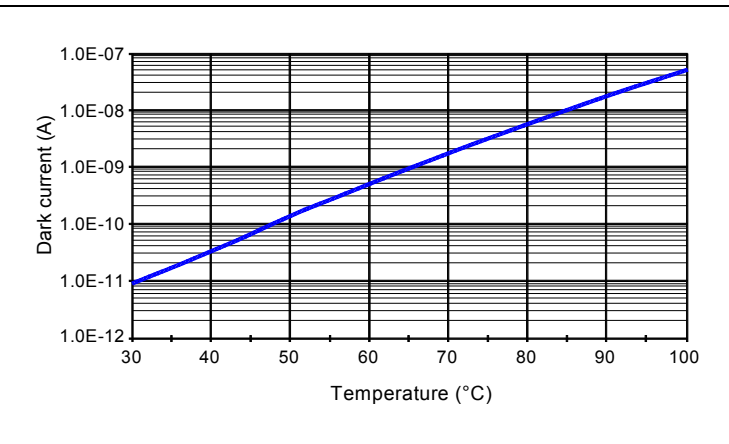
Capacitance vs. Reverse Bias (23 °C)



Dark Current vs. Reverse Bias (23 °C)



Dark Current vs. Temperature ($V_R = 5$ V)



Package Dimension:

Small quantities: Foam pad, boxed (12 cm x 16.5 cm)

Handling Precautions:

- Soldering temperature max. 260 °C for 10 seconds. The device must be protected against solder flux vapor.
- Minimum pin length is 2 mm.
- For ESD protection standard precautionary measures are sufficient.
- For further questions please refer to document "Instructions for handling and processing".

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