Texas Photonics, Inc.

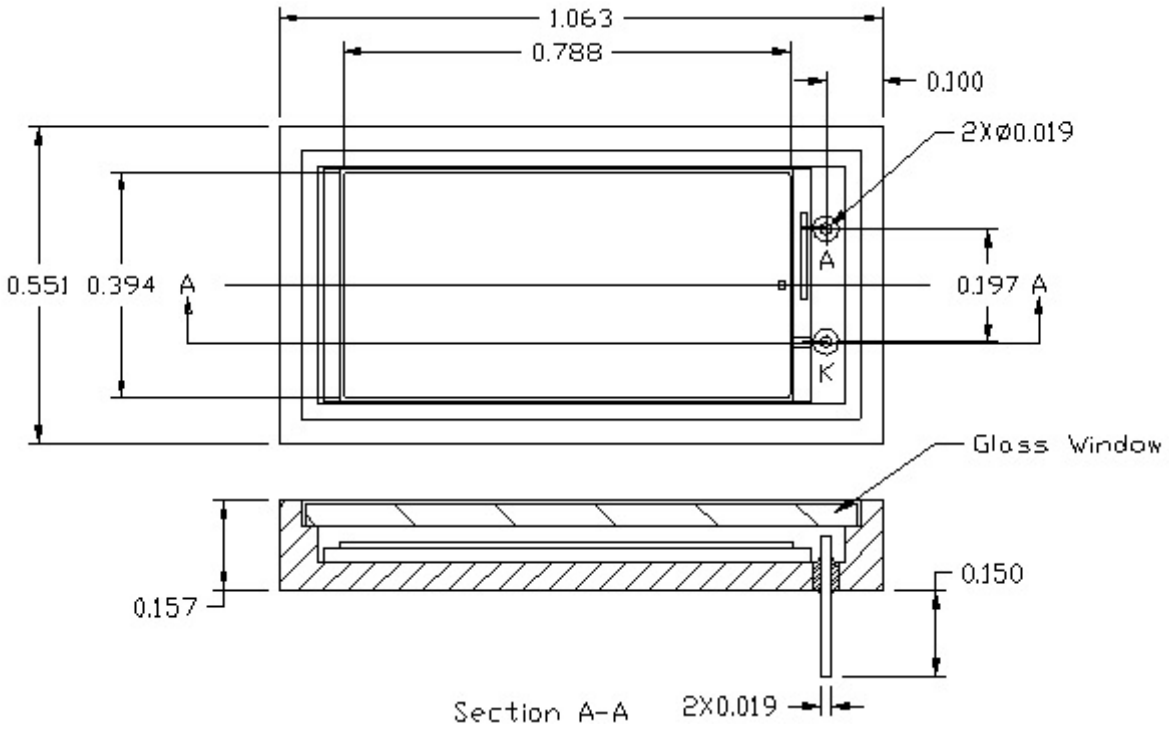
TXPI 1326
Silicon PIN Detector

DESCRIPTION

This is a 200 mm^2 square Silicon PIN Detector that has been optimized for applications requiring high Responsivity and a large detection area.

FEATURES

- ❒ High Responsivity, 0.25 A/W minimum
- ❒ Silicon P/N structure
- ❒ High Reliability
- ❒ 200 mm^2 square active area



ABSOLUTE MAXIMUM RATINGS

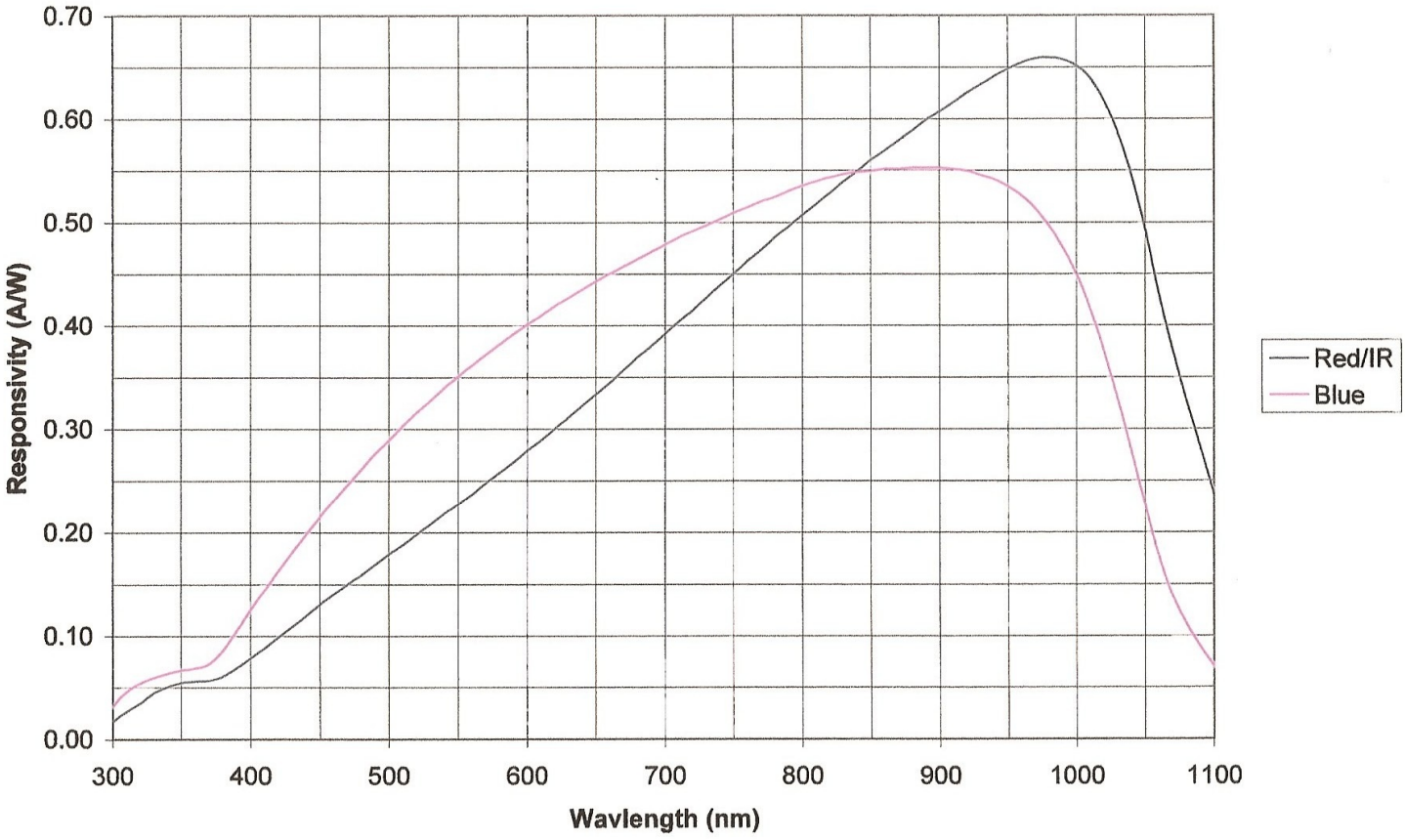
- ❒ Storage temperature..... -65°C to +125°C
- ❒ Case operating temperature..... -55°C to +100°C

OUTLINE DIMENSIONS

Tolerances are +/-0.005 inches, except as noted

PARAMETER	TEST CONDITION	SYMBOL	MIN	TYP	MAX	UNIT
Dark Current	H = 0 mW/cm^2, Vr=20V	I_D		10	200	nA
Responsivity	Vr = 0 V, λ = 880 µm H = 10 µW (see Red/IR)	R	0.40	.55		A/W
Spectral Response		Δλ	400		1100	nm
Capacitance	Vr = 20V, *f* = 1 MHz	C		90		pF
Reverse Breakdown Voltage	Ir = 10 µA	VBR	30	100		Volts
Response Time	Vr = 20 V	tr		25		nsec

ELECTRO-OPTICAL CHARACTERISTICS (Case T = 25°C)



DETECTOR RESPONSIVITY CURVE

Note:

The TXPI 1242 device is manufactured to meet the Red/IR Detector Responsivity Curve shown above.