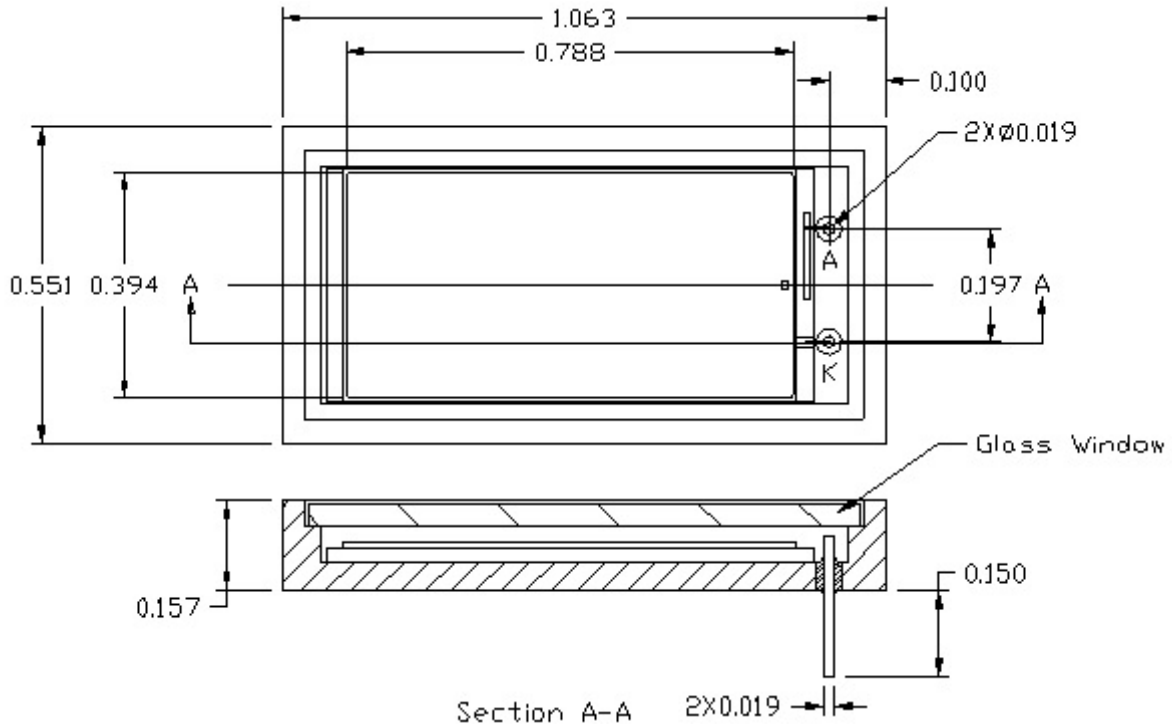


**DESCRIPTION**

This is a 200 mm<sup>2</sup> 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<sup>2</sup> square active area



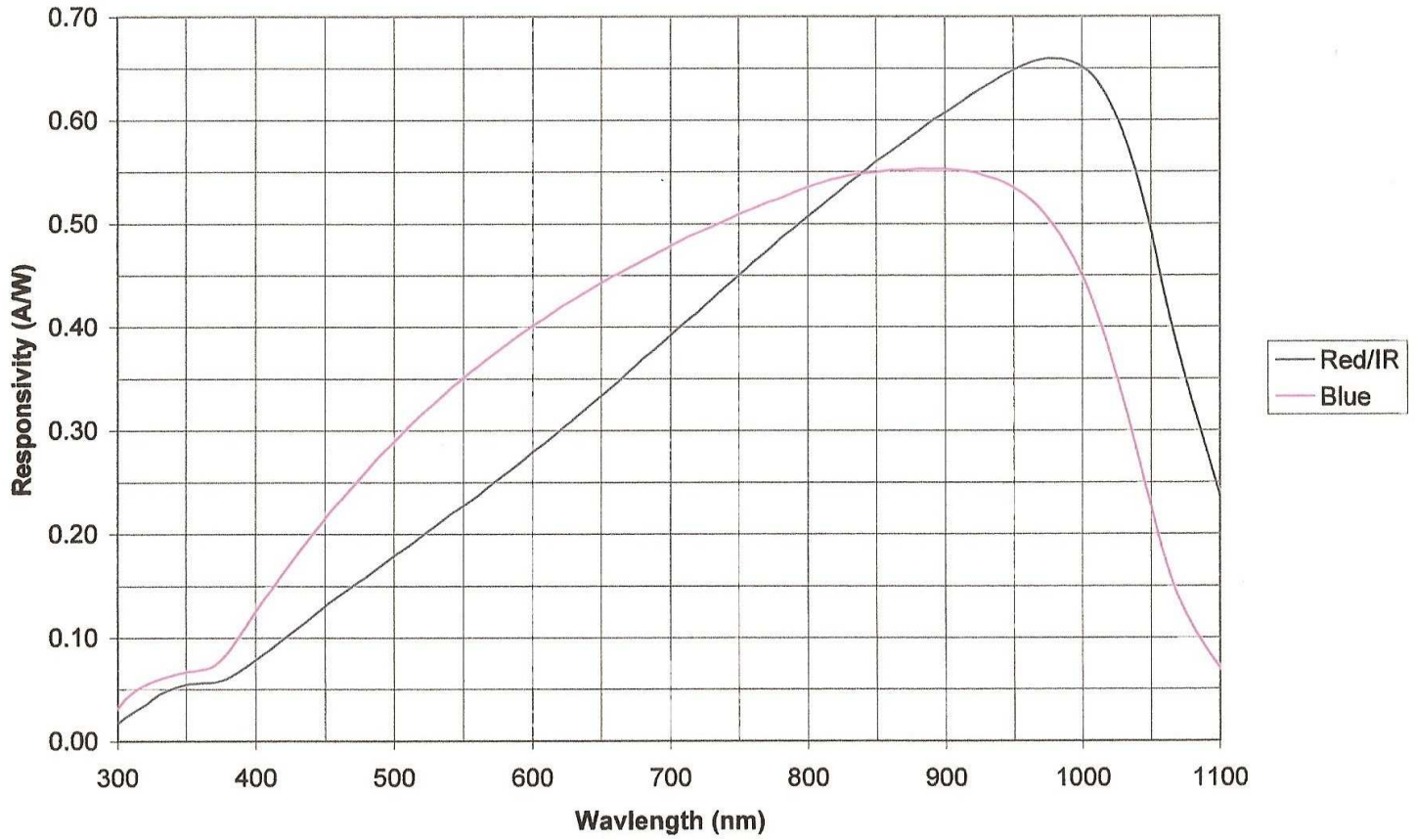
**ABSOLUTE MAXIMUM RATINGS**

- Storage temperature..... -65°C to +125°C
  - Case operating temperature..... -55°C to +100°C
- Tolerances are +/-0.005 inches, except as noted

**OUTLINE DIMENSIONS**

PARAMETER	TEST CONDITION	SYMBOL	MIN	TYP	MAX	UNIT
Dark Current	H = 0 mW/cm <sup>2</sup> , Vr=20V	I <sub>d</sub>		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	I <sub>r</sub> = 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.