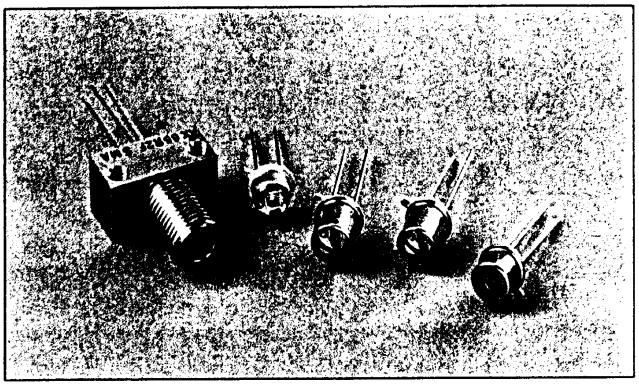
Silicon Photodetector BPX65 Series

HIGH SPEED

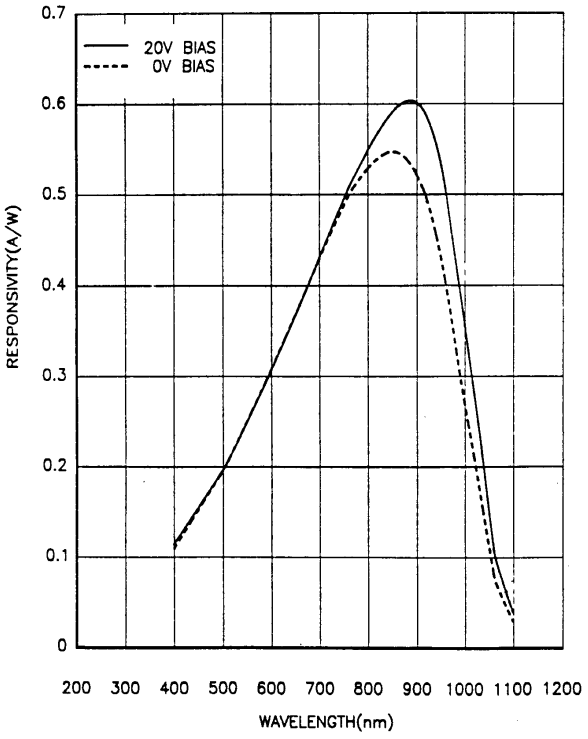
The BPX65 family of detectors feature Centronic's 1mm² high speed, high sensitivity chip already successful in a wide variety of applications. The chip can be packaged in various forms suitable for fibre-optic communication, such as the AX65-RF (precisely centred, isolated, low chip to window spacing) a standard 2 or 3 lead TO18 or even epoxy encapsulated. It has also been used for encoder designs and with MIL SPEC release at the heart of advanced laser warning systems.



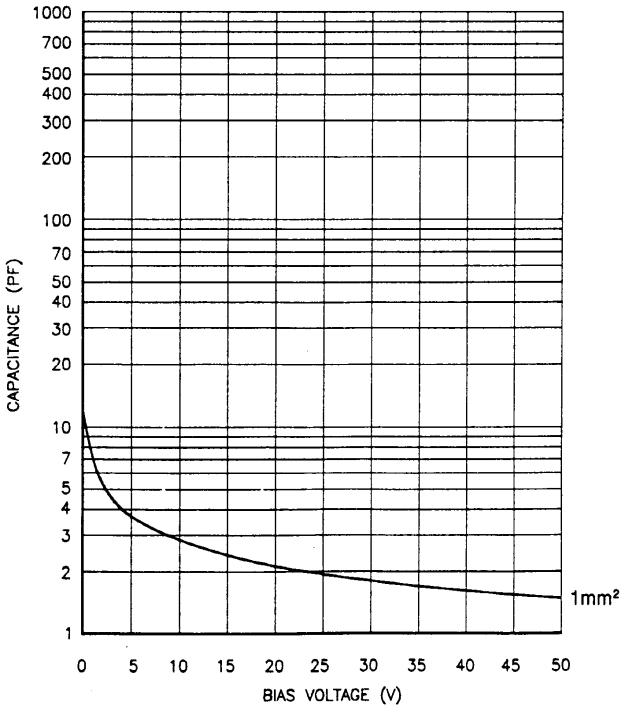
ABSOLUTE MAXIMUM RATINGS

	Max. Rating
DC Reverse Voltage	50V
Peak Pulse Current (1 µs, 1% duty cycle)	200mA
Peak DC Current	10mA
Illumination level for saturation	5W/cm²
Storage Temperature Range	-55°C + 125°C
Operating Temperature Range	-55°C + 120°C
Soldering Temperature Range	200°C

Series BPX65 - Typical Spectral Response



Series BPX65 - Typical Capacitance versus Bias Voltage



Tel: 0689 842121

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Electrical / Optical Specifications

Characteristics measured at 22°C (±2) ambient, and a reverse bias of 20 volts, unless otherwise stated.

Single Elements

Type No.	Active Area		Responsivity A/W λ = 900 nm		Dark Current nA		NEP WHz^{-} λ = 900nm	Capacitance pF		Risetime ns λ = 820 nm R_L = 50 Ω	Package
	mm²	mm	Min.	Typ.	Max.	Typ.	Typ.	Vr = 0V Max	Vr = 20V Max.	Typ.	
BPX65	1	1 x 1 mm	0.52	0.55	5	1	3.3×10^{-14}	15	3.5	3.5	1
AX65R2F	1	1 x 1 mm	0.52	0.55	5	1	3.3×10^{-14}	15	3.5	3.5	2A
X65EB	1	1 x 1 mm	0.52	0.55	5	1	3.3×10^{-14}	15	3.5	3.5	1B

Highlighted items are Centronic standard products generally available from stock