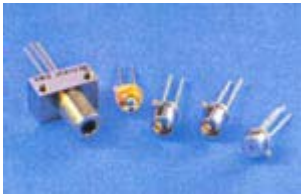


## High Speed Detectors (BPX65)



The BPX65 family of detectors feature Centronic's 1mm<sup>2</sup> 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.

### Electrical / Optical Specifications

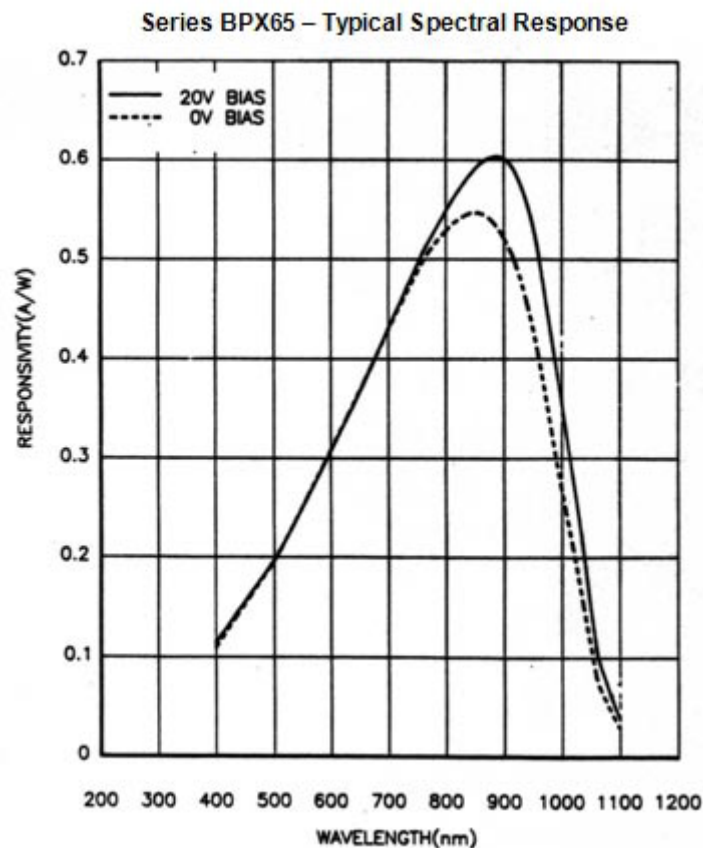
Characteristics measured at 22°C (±2) ambient, and a reverse bias of 12 volts, unless otherwise stated.

#### Single Elements

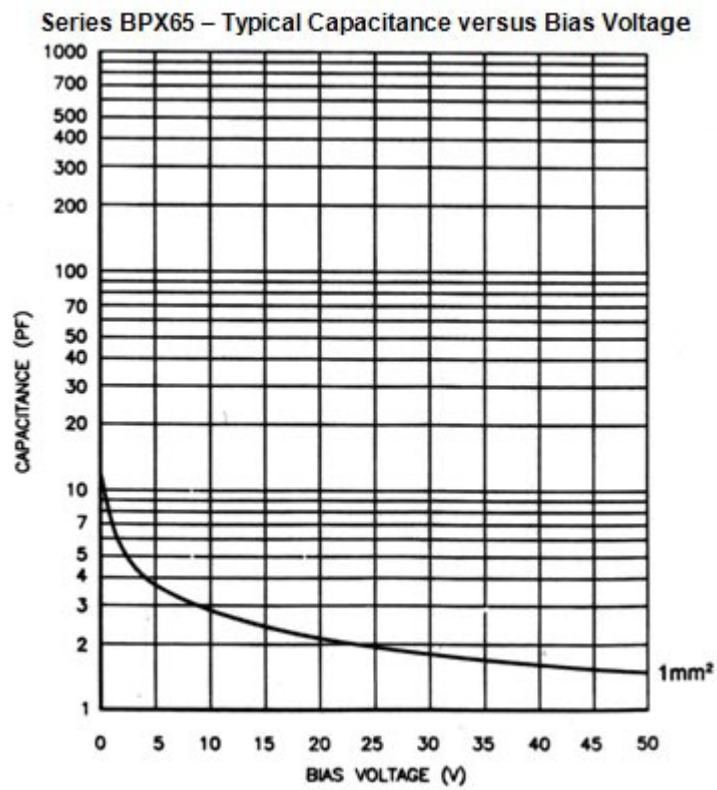
| Type No. | Active Area     |          | Responsivity A/W<br>$\lambda = 900 \text{ nm}$ |      | Dark Current (nA) |      | NEP $\text{WHz}^{-1/2}$<br>$\lambda = 900 \text{ nm}$<br>Typ. | Capacitance pF |                | Risetime ns<br>$\lambda = 820 \text{ nm}$<br>RL = 50 $\Omega$ Typ. | Package |
|----------|-----------------|----------|--|------|-------------------|------|---|----------------|----------------|--|---------|
|          | mm <sup>2</sup> | mm       | Min.   | Typ. | Max.              | Typ. |   | Vr=0 V<br>Max. | Vr=20V<br>Max. |  |         |
| BPX65    | 1               | 1 x 1 mm | 0.52   | 0.55 | 5                 | 1    | 3.310e-14   | 20             | 3.5            | 3.5  | 1       |
| BPX65T   | 1               | 1 x 1 mm | 0.52   | 0.55 | 5                 | 1    | 3.310e-14   | 20             | 3.5            | 13   | 1       |
| AX65R2F  | 1               | 1 x 1 mm | 0.52   | 0.55 | 5                 | 1    | 3.310e-14   | 20             | 3.5            | 3.5  | 2A      |
| BPX65RT  | 1               | 1 x 1 mm | 0.52   | 0.55 | 5                 | 1    | 3.310e-14   | 20             | 3.5            | 8  | 2       |
| X65EB    | 1               | 1 x 1 mm | 0.52   | 0.52 | 5                 | 1    | 3.310e-14   | 20             | 3.5            | 3.5  | 1B      |

Highlighted items are Centronic standard products generally available from stock

## Series BPX Spectral Response Graph



## Capacitance versus Bias Voltage



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