

**MXP1042 PC/PV - B**  
**MXP1043 PC/PV - B**  
**MXP1044 PC/PV - B**

## Blue Enhanced Photo Detectors

### Features

- Photovoltaic
- Ultra High Shunt Resistance
- Ultra Low Noise
- Photoconductive

### Applications

- Biomedical Test Equipment and Instruments
- Fluorescence Analysis

Datasheet.Live

### Electrical Characteristics @ 25°C

| PV<br>DEVICE # | ACTIVE AREA     |           | R            | C <sub>J</sub>  | R <sub>SH</sub>    | NEP                                 | T <sub>R</sub>               |
|----------------|-----------------|-----------|--------------|-----------------|--------------------|-------------------------------------|------------------------------|
|                | mm <sup>2</sup> | Dia. Inch | 450nm<br>A/W | 0V / 1kHz<br>pF | +/- 10 mV<br>MOhms | 450nm/1kHz<br>W/(Hz) <sup>1/2</sup> | 0V/450nm<br>50Ohm Load<br>ns |
| MXP1042 PV-B   | 1.0             | 0.044     | 0.20         | 150             | 5,000              | 1 X 10 <sup>-14</sup>               | 18                           |
| MXP1043 PV-B   | 5.1             | 0.100     | 0.20         | 550             | 500                | 5 X 10 <sup>-14</sup>               | 70                           |
| MXP1044 PV-B   | 100             | 0.444     | 0.20         | 50              | 50                 | 2 X 10 <sup>-13</sup>               | 1,300                        |

PHOTOVOLTAIC

| PC<br>DEVICE # | ACTIVE AREA     |           | R     |      | ID    |      | V <sub>B</sub> | C <sub>J</sub> |     | NEP                   | T <sub>R</sub>                             |     |
|----------------|-----------------|-----------|-------|------|-------|------|----------------|----------------|-----|-----------------------|--|-----|
|                | mm <sup>2</sup> | Dia. Inch | 450nm | PEAK | 0.01V | -10V | 10μA<br>V      | 1kHz<br>pF     | 0 V | -10 V                 | 10V/450nm<br>1kHz<br>W/(Hz) <sup>1/2</sup> | 0 V |
| MXP1042 PC-B   | 1.0             | 0.044     | 0.20  | 0.50 | 0.01  | 2.0  | 50             | 25             | 10  | 5 X 10 <sup>-14</sup> | 4  | 2   |
| MXP1043 PC-B   | 5.1             | 0.100     | 0.20  | 0.50 | 0.10  | 10.0 | 50             | 100            | 25  | 1 X 10 <sup>-13</sup> | 13   | 4   |
| MXP1044 PC-B   | 100             | 0.444     | 0.20  | 0.50 | 1.00  | 100  | 50             | 2,000          | 650 | 5 X 10 <sup>-13</sup> | 230  | 80  |

PHOTOCONDUCTIVE