

**MXP1045 PC/PV - UV**  
**MXP1046 PC/PV - UV**  
**MXP1047 PC/PV - UV**

## UV Enhanced Photo Detectors

### Features

- Photovoltaic / Photoconductive
- Ultra High Shunt Resistance
- Ultra Low Noise
- All Detectors have Quartz Windows

### Applications

- Biomedical Test Equipment and Instruments
- Chemical and Fluorescence Analysis
- Spectrometers
- UV Exposure Meters
- UV Chemical Analysis

### Electrical Characteristics @ 25°C

#### PV

DEVICE #

	ACTIVE AREA		R	C <sub>J</sub>	R <sub>SH</sub>	NEP	T <sub>R</sub>
	mm <sup>2</sup>	Dia. Inch	250nm A/W	0V / 1kHz pF	+/-10 mV MOhms	250nm/1kHz W/(Hz) <sup>1/2</sup>	0V/250nm 50Ohm Load ns
<b>MXP1045 PV-UV</b>	1.0	0.044	0.1	50	1,000	5 X 10 <sup>-14</sup>	10
<b>MXP1046 PV-UV</b>	5.1	0.100	0.1	250	100	2 X 10 <sup>-13</sup>	30
<b>MXP1047 PV-UV</b>	100	0.444	0.1	5,000	10	5 X 10 <sup>-13</sup>	600

PHOTOVOLTAIC

#### PC

DEVICE #

	ACTIVE AREA		R		ID			V <sub>B</sub>	C <sub>J</sub>			NEP	T <sub>R</sub>	
	mm <sup>2</sup>	Dia. Inch	A / W		nA			10 μA	1 kHz			10V/250nm 1kHz W/(Hz) <sup>1/2</sup>	250nm/50Ohm Load ns	
			250nm	PEAK	0.01V	-1.0V	-10V	min	0 V	-1 V	-10 V		0 V	-10 V
<b>MXP1045 PC-UV</b>	1.0	0.044	0.1	0.45	0.01	0.10	2.0	50	50	40	20	5 X 10 <sup>-13</sup>	10	5
<b>MXP1046 PC-UV</b>	5.1	0.100	0.1	0.45	0.10	1.00	10.0	50	250	200	80	1 X 10 <sup>-12</sup>	30	10
<b>MXP1047 PC-UV</b>	100	0.444	0.1	0.45	1.00	10.00	100	50	5,000	4,000	1,500	5 X 10 <sup>-12</sup>	600	200

PHOTOCONDUCTIVE