

**MXP1048 PC/PV - IR**  
**MXP1049 PC/PV - IR**  
**MXP1050 PC/PV - IR**  
**MXP1002 PC/PV - IR**

# IR Enhanced Photo Detectors

## Features

- High Break Down Voltage
- Low Dark Current
- Low Noise
- Fast Rise/Fall Time

## Applications

- Fiber Optics
- Military / Aerospace
- Industrial Controls

**Electrical Characteristics @ 25°C**

PV DEVICE #	ACTIVE AREA		R		C <sub>J</sub>	R <sub>SH</sub>	NEP	T <sub>R</sub>
	900nm		0V / 1kHz		0V / 1kHz	+/- 10 mV	900nm / 1kHz	0V/900nm 50Ohm Load
	mm <sup>2</sup>	Dia. Inch	A/W	pF	MOhms	W/(Hz) <sup>1/2</sup>	ns	
<b>MXP1048 PV-IR</b>	1.0	0.044	0.5	150	5,000	5 X 10 <sup>-15</sup>	5,000	
<b>MXP1049 PV-IR</b>	5.1	0.100	0.5	550	500	2 X 10 <sup>-14</sup>	500	
<b>MXP1050 PV-IR</b>	100	0.444	0.5	11,000	50	1 X 10 <sup>-13</sup>	50	
<b>MXP1002 PV-IR</b>	1.8	0.10 x .028	0.5	275	2,500	3 X 10 <sup>-14</sup>	2,500	

PHOTOVOLTAIC

PC DEVICE #	ACTIVE AREA		R		ID			V <sub>B</sub>	C <sub>J</sub>			NEP	T <sub>R</sub>	
	900nm		A / W		nA			10 μA	1kHz			10V/900nm 1kHz	900nm/50Ohm Load ns	
	mm <sup>2</sup>	Dia. Inch	900nm	PEAK	0.01V	-1.0V	-10V	min	0 V	-1 V	-10 V	W/(Hz) <sup>1/2</sup>	0 V	-10 V
<b>MXP1048 PC-IR</b>	1.0	0.044	0.5	0.6	0.01	0.10	2.0	50	25	20	10	5 X 10 <sup>-14</sup>	1,000	50
<b>MXP1049 PC-IR</b>	5.1	0.100	0.5	0.6	0.10	1.00	10.0	50	100	85	35	1 X 10 <sup>-13</sup>	3,000	100
<b>MXP1050 PC-IR</b>	100	0.444	0.5	0.6	1.00	10.0	100	50	2,000	1,700	650	5 X 10 <sup>-13</sup>	5,000	500
<b>MXP1002 PC-IR</b>	1.8	0.10 x 0.28	0.5	0.6	0.20	0.20	5.0	50	50	40	20	1 X 10 <sup>-13</sup>	2,000	50

PHOTOCONDUCTIVE