Santa Ana, CA
Microsemi
Progress Powered by Technology

2830 S. Fairview St.
Santa Ana, CA 92704
PH: 714.979.8220
FAX: 714.557.5989

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 900nm	C_J 0V / 1kHz	R_{SH} +/-10 mV	NEP 900nm / 1kHz	T_R 0V/900nm 50Ohm Load
	mm^2	Dia. Inch	A/W	pF	MOhms	$W/(Hz)^{1/2}$	ns
MXP1048 PV-IR	1.0	0.044	0.5	150	5,000	5×10^{-15}	5,000
MXP1049 PV-IR	5.1	0.100	0.5	550	500	2×10^{-14}	500
MXP1050 PV-IR	100	0.444	0.5	11,000	50	1×10^{-13}	50
MXP1002 PV-IR	1.8	0.10 x .028	0.5	275	2,500	3×10^{-14}	2,500

PHOTOVOLTAIC

PC
DEVICE #

	ACTIVE AREA		R A / W		ID nA			V_B 10 µA V	C_J 1kHz pF			NEP 10V/900nm 1kHz	T_R 900nm/50Ohm Load ns	
	mm^2	Dia. Inch	900nm	PEAK	0.01V	-1.0V	-10V	min	0 V	-1 V	-10 V	$W/(Hz)^{1/2}$	0 V	-10 V
MXP1048 PC-IR	1.0	0.044	0.5	0.6	0.01	0.10	2.0	50	25	20	10	5×10^{-14}	1,000	50
MXP1049 PC-IR	5.1	0.100	0.5	0.6	0.10	1.00	10.0	50	100	85	35	1×10^{-13}	3,000	100
MXP1050 PC-IR	100	0.444	0.5	0.6	1.00	10.0	100	50	2,000	1,700	650	5×10^{-13}	5,000	500
MXP1002 PC-IR	1.8	0.10 x 0.28	0.5	0.6	0.20	0.20	5.0	50	50	40	20	1×10^{-13}	2,000	50

PHOTOCONDUCTIVE