

# PIN Photodiodes

## IPL 10020 - 60 Series

IPL 10020 — IPL 10060 is a range of discrete, fast photodiodes available in various size packages including plane, lensed windows, and surface mount formats.

Filtered versions are available including 'eye response', IR and others to customer specification.

- High stability
- Wide dynamic range
- Epoxy bonded

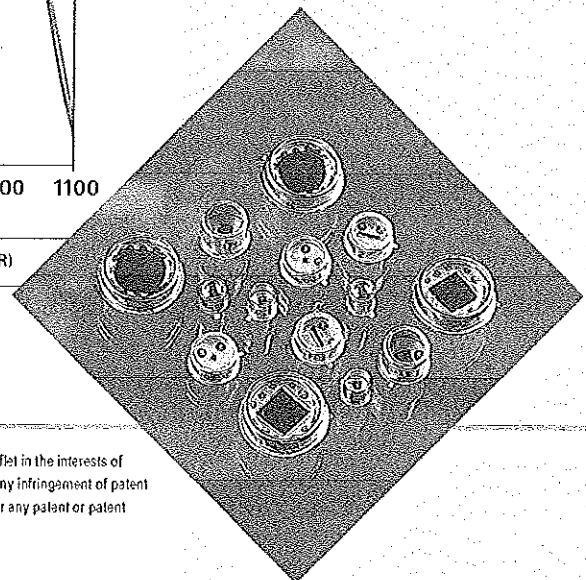
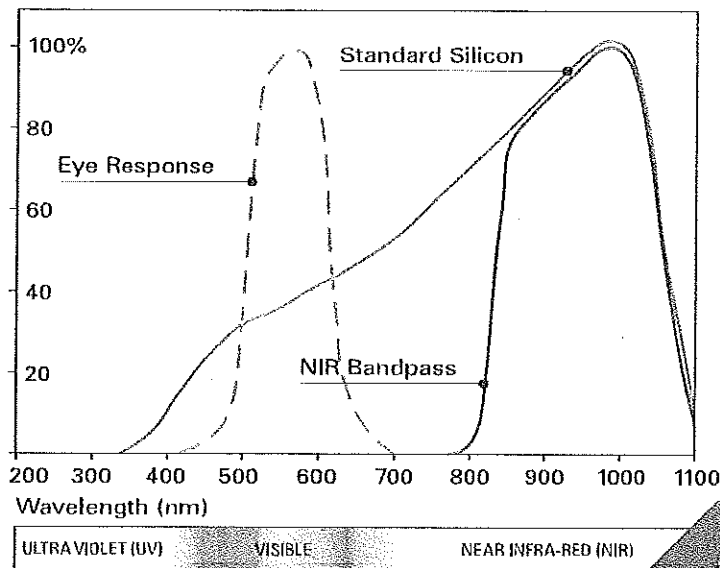
### Applications

- Position sensing
- Light monitoring
- Beam detection
- Proximity sensing

### Electrical Characteristics @ 25°C (unless otherwise stated)

Parameter	Typ
Peak responsivity	0.5 A/W @ 900nm
Breakdown voltage	60 Volts min.
Temp. coefficient of responsivity (0°C to 70°C)	0.35% per °C
Temp. coefficient of dark current (0°C to 70°C)	x2 per 10°C rise
Storage temperature	- 65°C to +150°C
Operating temperature	- 55°C to +125°C
Soldering time @ 200°C	5 seconds max.

### Spectral response



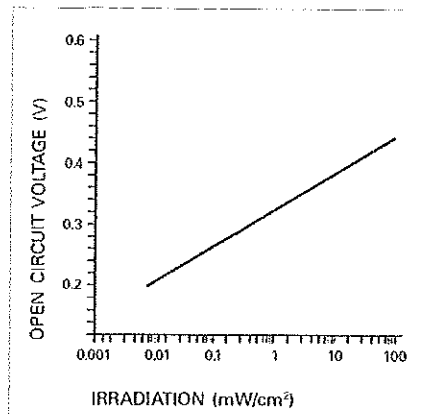
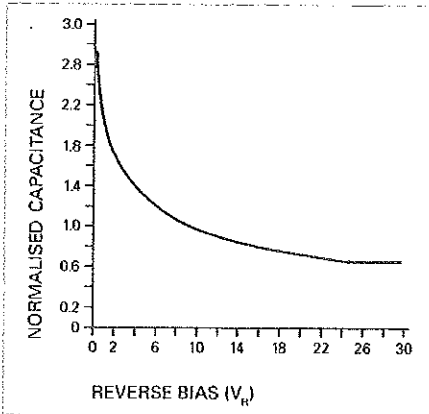
All characteristics are typical values at 25°C. IPL reserves the right to change the product shown on this leaflet in the interests of improved specification. No responsibility is assumed for the use of information contained herein, nor for any infringement of patent or rights of others which may result from such use. No license is granted by implication or otherwise under any patent or patent right of Integrated Photomatrix Limited or others.

# Product Data

## Typical Characteristics @ 25°C (unless otherwise stated)

Parameter	Units	10020	10030	10040	10046	10050	10060
Capacitance @ Reverse bias	pF	8	17	80	190	400	800
		0V	8	17	80	190	400
Dark current	pA	25	65	110	220	275	400
		-20V	2.5	4	8	22	65
Shunt Resistance	GΩ	2.5	1.9	0.85	0.5	0.25	0.15
		-20V	50	125	290	500	420
Rise/Fall into 25Ω	nS	7/11	8/10	9/12	10/12	15/21	24/28
10 - 90% levels @ -20V							
Photodiode Nominal Outline	mm	1.0x1.0	1.5x1.5	2.5x2.5	4x4	7x7	9x9
Photodiode Active Area	mm <sup>2</sup>	0.66	1.75	5.5	4.5	41.3	78.5

## General Characteristics



## Package Dimensions (mm) & Pinout

W = window L = lens

