

Monolithic Linear PIN Photodiode Arrays

IPL 10220

The IPL 10220 Series is a family of linear photodiode arrays, available in a variety of lengths from 4 to 22 elements.

- High stability
- Extreme positional accuracy
- Epoxy bonded

The photodiode used is a near square diode — 0.66mm² in area — on a 1.02mm pitch. Each diode can be individually addressed by its anode, all the common cathode connections are epoxy bonded to the package substrate.

Applications

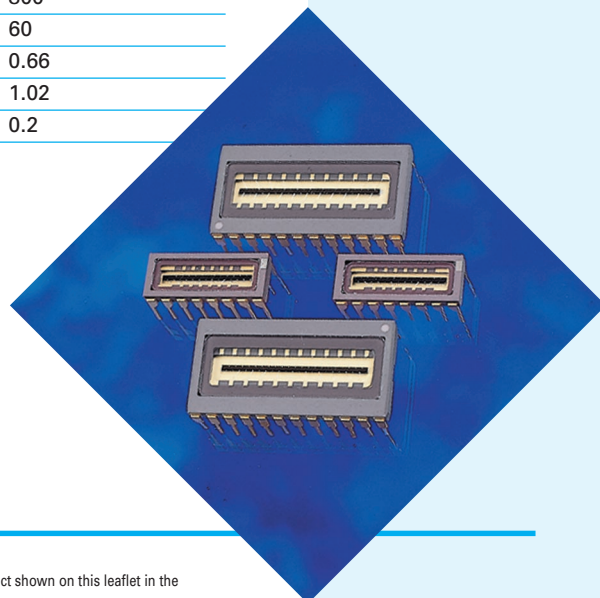
- Laser beam alignment
- Position sensing
- Edge & hole detection
- Spectro photometers

In DIL packages two pins are used for substrate connections, hence the maximum number of elements is limited to 14 for a 16 lead DIL and 22 for a 24 lead DIL.

In all devices the array is centrally placed within the package to ± 0.12mm.

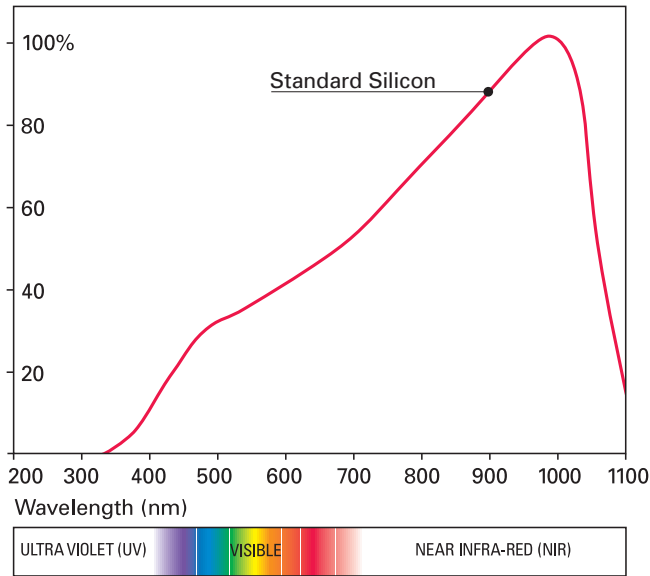
Individual Photodiode Characteristics @ 25°C (unless otherwise stated)

Parameter	Units	Typ
Peak responsivity	A/W	0.5
Dark current	nA (VR = 5V)	30
Capacitance	pF (VR = 0V)	9
Response time	ns (VR = 10V RL = 100Ω)	4
Peak spectral response	nm	800
Reverse breakdown voltage	V	60
Active area	mm ²	0.66
Diode pitch	mm	1.02
Diode separation	mm	0.2

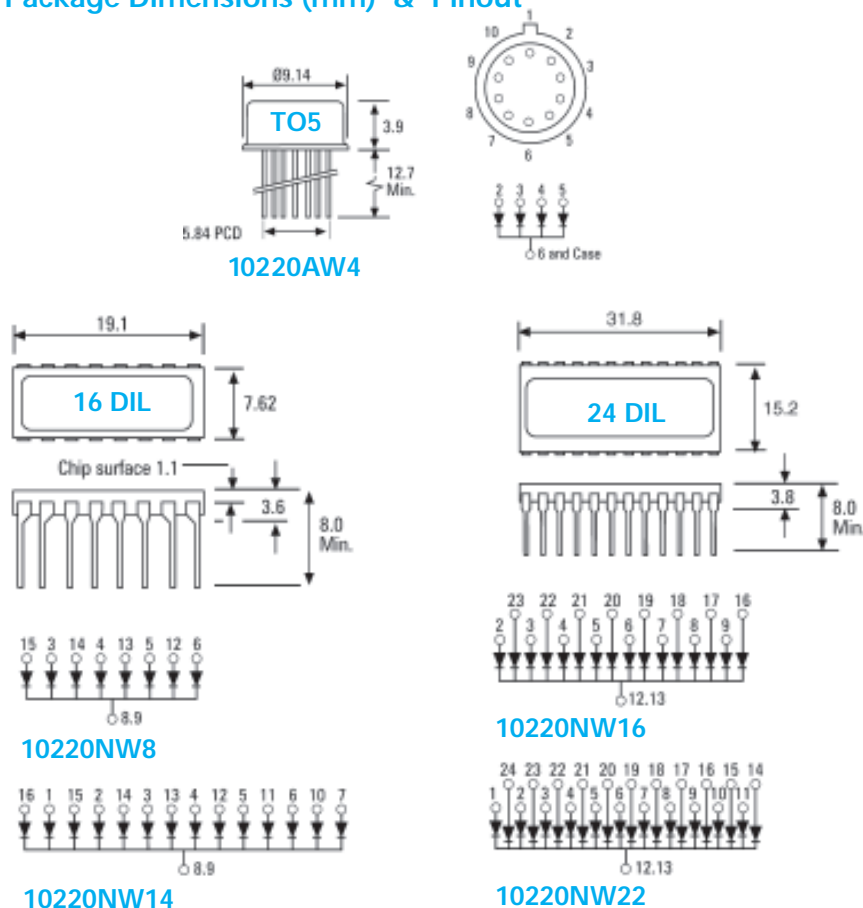


All characteristics are typical values at 25°C. IPL reserves the right to change the product shown on this leaflet in the interests of improved specification. No responsibility is assumed for the use of information contained herein, nor for any infringement of patent or rights of others which may result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

Silicon Relative Spectral response



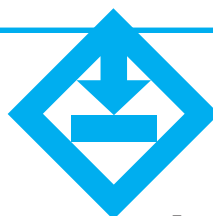
Package Dimensions (mm) & Pinout



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