

Monolithic Linear PIN Photodiode Arrays

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

The photodiode used is a near square diode — 0.66mm^2 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.

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 $\pm 0.12\text{mm}$.

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

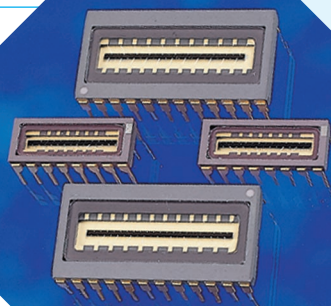
Parameter	Units	Typ
Peak responsivity	A/W	0.5
Dark current	nA (VR = 5V)	30
Capacitance	pF (VR = 0V)	9
Response time	ns (VR = 10V RL = 100Ω)	4
Peak spectral response	nm	800
Reverse breakdown voltage	V	60
Active area	mm^2	0.66
Diode pitch	mm	1.02
Diode separation	mm	0.2

IPL 10220

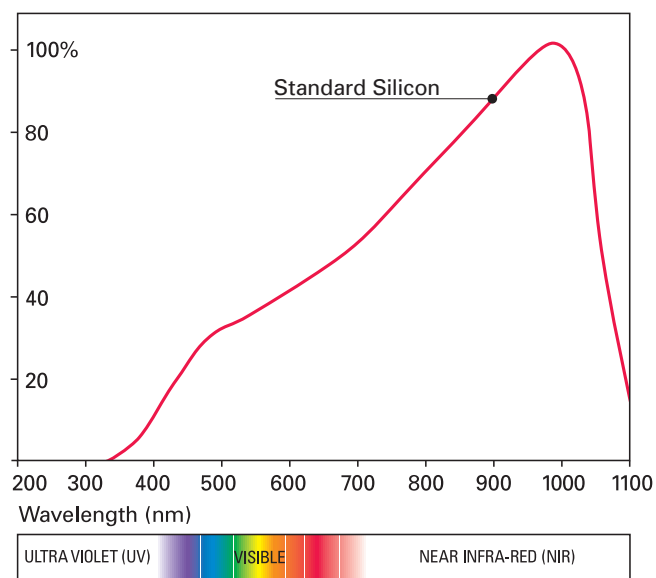
- High stability
- Extreme positional accuracy
- Epoxy bonded

Applications

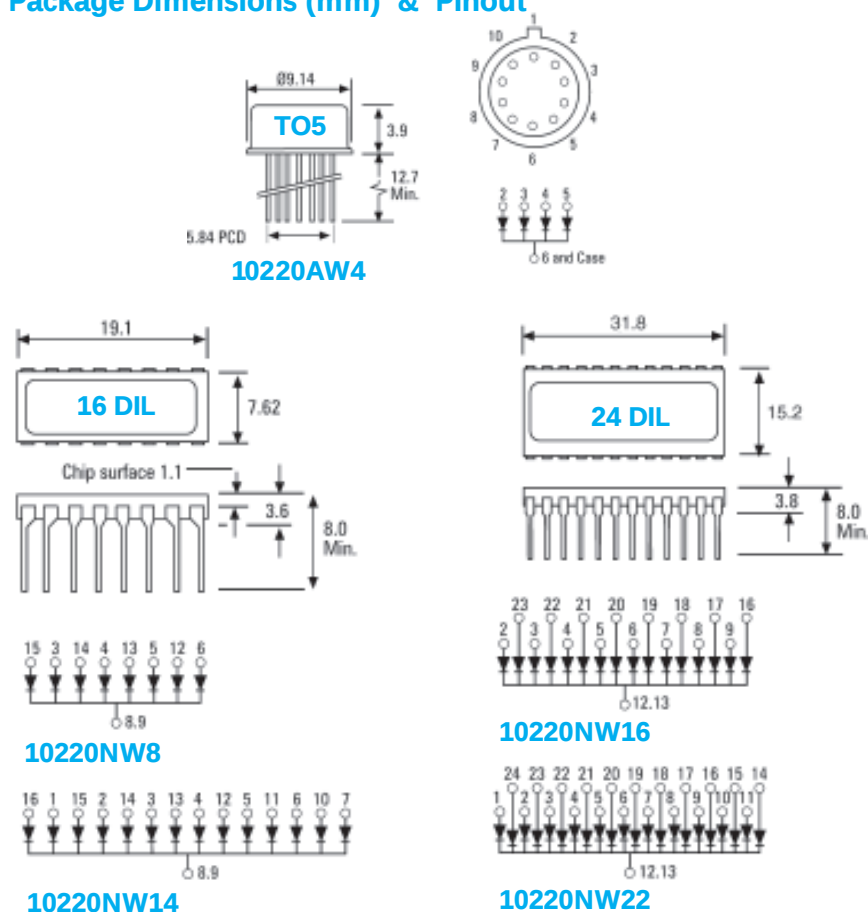
- Laser beam alignment
- Position sensing
- Edge & hole detection
- Spectro photometers



Silicon Relative Spectral response



Package Dimensions (mm) & Pinout



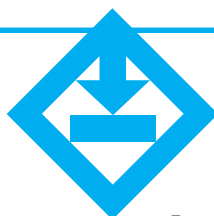
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