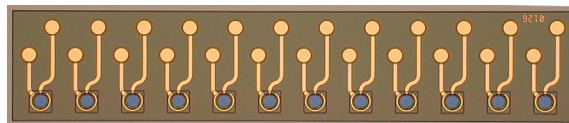


# PDCA12-68

## 12 Channel InGaAs p-i-n Photodiode



REV 09/01

### Features

**1x12 p-i-n photodiode array**

**Array pitch 250  $\mu\text{m}$**

**Diameter of light sensitive area 68  $\mu\text{m}$**

**Individual pads for each photodiode**

**High Speed Response:  $t_r/t_f$  80 ps**

**AR-coatings for 850, 1300 or 1500 nm**

### Product Description

The PDCA12-68 is a linear 1 x 12 InGaAs photodiode array based on a top-illuminated p-i-n structure. The 68  $\mu\text{m}$  diameter of the light sensitive area allows tolerant alignment to SM and MM fibres together with high-speed response. The photodiode pitch of 250  $\mu\text{m}$  is suitable for coupling to fibre ribbon cable. The devices offer excellent responsivity besides the high- speed response in the wavelength region from 800 to 1600 nm.

### Specifications T=25°C

Parameter	Sym	Min	Typ	Max	Unit
Responsivity	$\lambda = 830 \text{ nm}$	R	0.45		A/W
	$\lambda = 1300 \text{ nm}$		0.85		
	$\lambda = 1550 \text{ nm}$		0.85		
Variation of Responsivity in	$\Delta R$		1	3	%
Dark Current	$I_D$		10		nA
Capacitance	C		0.5		pF
Speed of Response	$t_r, t_f$		80	100	ps
Bandwidth	B		5		GHz
Bias voltage	V+		2		V

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