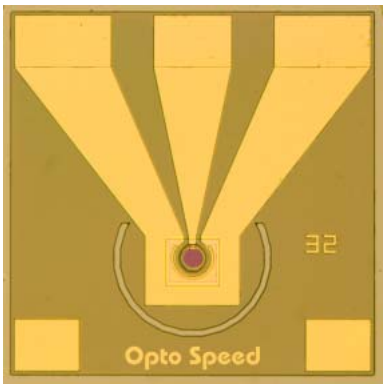
PDCS32T

High Speed InGaAs/InP Photodiode Chip



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Features

Top-illuminated InGaAs/InP pin photodiode
High speed response: t_{FWHM} 30 ps
On chip coplanar waveguide (Z = 50 Ω)
Diameter of light sensitive area 32 µm
Wire bondable or flip-chip solder able
High responsivity from 800 to 1600 nm

Product Description

The PDCS32T is an InGaAs/InP very high speed photodiode chip with a tapered coplanar transmission line. The top-illuminated p-i-n photodiode structure offers excellent responsivity and high speed of response for the wavelength region 800 to 1600 nm. The photodiode, which achieves full speed already at 1.5 volt bias, is intended for use in high- speed receiver front-ends and for optical measurement equipment with picosecond time resolution.

Specifications @ T=25°C

Parameter		Sym	Min	Typ	Max	Unit
Responsivity	λ = 1550 nm	R	0.7	0.8		A/W
	λ = 1300 nm		0.8	0.9		
Optical pulse energy		E_p			50	fJ
CW optical power		P_{cw}			3	dBm
Bias voltage		V^+		<2		V
Dark current	V_r = 2.5 V	I_D		10		nA
Bandwidth		B		14		GHz
Optical pulse response		t_{FWHM}		30		ps

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In case of optoelectronics

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