

PDCS70T-GS

Short Wavelength 10 Gb/s GaAs Photodiode Chip

Product Description

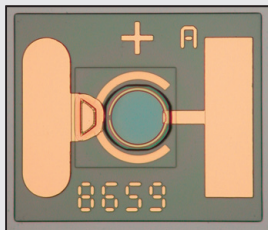
The PDCS70T-GS is a high-speed GaAs photodiode chip with a dual-pad layout and an optical aperture with a diameter of 70 μm allowing easy coupling to multi-mode fibers. The top-illuminated p-i-n photodiode structure is optimized for multi-mode fiber based data- and telecom applications up to 12 Gb/s and offers an excellent responsivity and high speed of response in the wavelength region from 830 to 860 nm. The device has a low capacitance and achieves full speed at low bias voltages. The photodiode is manufactured with a low reflectivity AR coating, providing low back reflection and high return loss over the specified wavelength range. The chip is available with a pad metallization optimized for wire-bonding with the pads positioned to enable easy and direct bonding to any TIA layout. In addition, the small chip footprint saves valuable space in small packages such as TO-46.

Highlights

- Large optical aperture: 70 μm
- Large bandwidth: 10 GHz
- Low capacitance: <240 fF
- Low dark current: <1 nA
- Low bias voltage: 2 V
- Pad layout allows easy bonding to any TIA layout
- Small chip size for easy assembly on TO headers

Applications

- 10 G Ethernet / Fiber Channel



Dimensions: 300 μm x 350 μm

Characteristics (T=25 °C)

Parameter	Sym	U_R	Min	Typ	Max	Unit
Diameter of optical aperture	\varnothing			70		μm
Responsivity $\lambda = 830\text{-}860\text{ nm}$	R	2.5 V		0.6		A/W
Dark current	I_D	5 V		1	5	nA
					T = 85 °C	100
Bandwidth	B	2.5 V		10		GHz
Total capacitance	C	3.0 V			240	fF

For the latest detailed product information visit www.albisopto.com



An Enablence Technologies Company

Albis Optoelectronics AG
Moosstrasse 2
8803 Rüslikon/Switzerland

Phone +41 43 388 06 10
Fax +41 43 388 06 11

www.albisopto.com

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