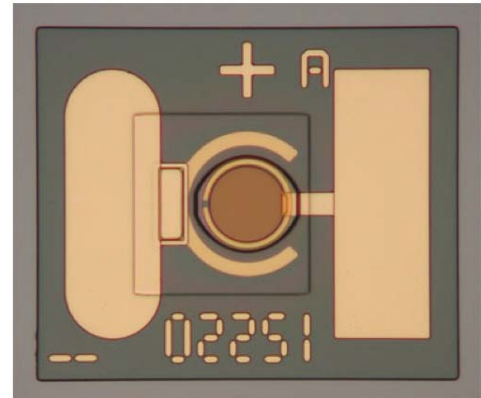


PDCS60T-USB

10Gb/s InGaAs Photodiode

PDCS60T-USB is a high speed, dual wavelength photodiode chip that combines a large aperture with a high speed of response and allows operation at both 850 and 1310 nm wavelengths. The top-illuminated p-i-n photodiode structure has a 60 μm optical aperture allowing easy alignment to single mode as well as multimode fibers. Despite the large aperture, the photodiode has a low capacitance and can be used for applications up to 10 Gb/s. The photodiode is manufactured with a dual wavelength AR coating, offering an excellent responsivity at both 850 nm and 1310 nm and is therefore highly suitable for optical USB or Light Peak interfaces. The chip is available with a pad metallization optimized for wire-bonding.



BENEFITS

- Volume production
- Dual wavelength
- High speed
- Top-illuminated
- Low capacitance

FEATURES

- Top illuminated 10 Gb/s InGaAs dual-wavelength photodiode, combining a large optical aperture with a low chip capacitance
- Optimized for optical USB / Light Peak interfaces operating at 850 / 1310 nm
- Large optical aperture of 60 μm
- Low capacitance: 240 fF
- Operating temperature range: -40 to 85 $^{\circ}\text{C}$

APPLICATIONS

- 10Gb/s optical USB / Light Peak

DATA SHEET

SPECIFICATIONS

Parameter	Sym	U_R	Min	Typ	Max	Unit
Responsivity $\lambda = 850 \text{ nm}$ $\lambda = 1310 \text{ nm}$	R	2.5 V	0.46 0.75	0.85		A/W
Dark current T = 25 °C T = 65 °C	I_D	5 V		2	10 100	nA
Rise- / fall time (10% -90%, $R_L = 50 \text{ W}$)	$T_{r,f}$	2.5 V		40	45	ps
Bandwidth	B	2.5 V	8			GHz
Total capacitance	C	2.5 V			250	fF

DIMENSIONS

Parameter	Min	Typ	Max	Unit
Aperture diameter		60		μm
Chip length	340	350	360	μm
Chip width	290	300	310	μm
Chip thickness	145	150	155	μm

For more information
visit www.enablence.com