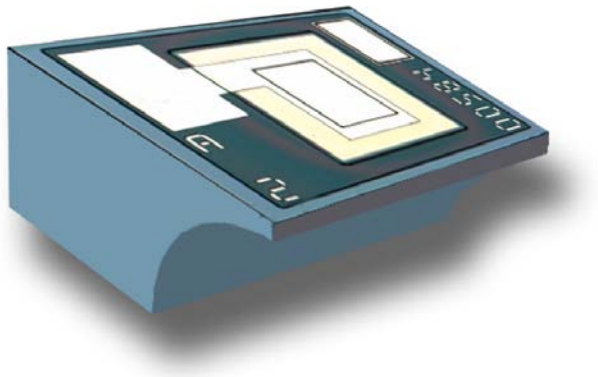
PDCS200E SIDE ILLUMINATED InGaAs MONITOR PHOTODIODE

PDCS200E is a side illuminated monitor photodiode chip that has a curved side facet and a large optical area for monitoring the optical output emitted from the backside of edge emitting lasers. This side illuminated monitor photodiode is optimized for monitoring FP or DFB lasers used in single-mode data- and telecom applications as well as EDFA pump lasers. The monitor diode offers excellent responsivity in the wavelength region from 980 to 1620 nm.



BENEFITS

- Volume production
- Side illuminated monitor
- Curved side facet
- Large optical area
- Optimized for monitoring FP or DFB lasers

FEATURES

- Side illuminated InGaAs monitor photodiode, without the need for a “wrap-around” submount
- Unique curved side facet for high coupling efficiency
- Large active area: 180 x 220 µm
- Low bias voltage: 1.5 V
- Operating temperature range: -40 to 85 °C

APPLICATIONS

- Back facet laser monitoring

DATA SHEET

The incoming laser light is refracted by the curved side facet onto the active area, thus producing a photocurrent proportional to the light emitted at the laser backside. Thanks to this unique side facet, a bulky and expensive “wrap-around” submount is not required. The topside anode pad is optimized for wire-bonding whereas the cathode pad on the bottom can either be soldered or glued using conductive epoxy. As an option, the cathode on the bottom is available with a deposited layer of AuSn solder.

CHARACTERISTICS (T = 25º C)

Parameter	Sym	U_R	Min	Typ	Max	Unit
Responsivity λ = 1260 – 1620 nm	R	2.5 V	0.3			A/W
Dark current T = 25 °C T = 85 °C	I_D	5 V		10	50 500	nA
Total capacitance	C	5 V	2		4	pF
Linearity	Lin	5 V	-10		10	%

DIMENSIONS

Parameter	Min	Typ	Max	Unit
Chip length	300	320	330	µm
Chip width	390	400	410	µm
Chip thickness	170	180	190	µm
Curved facet depth	120	130	140	µm

For more information
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