# **TOP ILLUMINATED LARGE AREA MONITOR PHOTO DIODE CHIP**



# **FEATURES**

- Top illuminated monitor photo diode with 500 μm diameter active area
- Extremely low dark current with high reliability
- Response to 1270-1620 nm with typical responsivity of 1 A/W
- RoHS compliant



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#### **Electro-Optical Characteristics**

Parameter	Symbol	Condition	Min	Typical	Max	Unit
Responsivity	R	VR =1.2 - 5 V, λ = 1270 - 1620 nm, T = 25 °C		1		A/W
Dark Current	ID	VR = 5 V, T = 25 °C		1		nA
Breakdown Voltage	VVD	IR = 10 μA, T = 25 °C		35		V
Capacitance	С	VR = 5 V, f= 1 MHz, T = 25 °C		20		pF

#### **Absolute Maximum Ratings**

Parameter	Conditions	Rating	Units
Reverse Voltage		10	V
Forward Current		10	mA
Max. Optical Input Power		10	mW
Operating Temperature	Hermetic	-40 to 90	C°
Storage Temperature	Non-Condensing	-40 to 125	C°
ESD threshold (HBM)		300	V

#### **Caution! ESD sensitive device**



Exceeding any one or a combination of the Absolute Maximum Rating conditions may cause permanent damage to the device. Extended application of Absolute Maximum Rating conditions to the device may reduce device reliability. Specified typical performance or functional operation of the device under Absolute Maximum Rating conditions is not implied.



RoHS status based on EU RoHS Directive 2011/65/EU (at time of this document revision). The information in this publication is believed to be accurate and reliable. However, no responsibility is assumed by Coherent Compound Semiconductors Ltd for its use, nor for any infringement of patents, or other rights of third parties, resulting from its use. No license is granted by implication or otherwise under any patent or patent rights of Coherent Compound Semiconductors Ltd. Coherent Compound Semiconductors Ltd reserves the right to change component circuitry, recommended application circuitry and specifications at any time without prior notice.

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#### **Chip Dimensions**

Parameter	Nom	Tolerance	Unit
Chip Size (length, width)	615	+/- 25	μm
Chip thickness	110	+/- 10	μm
Active Area Size (diameter)	500	+/- 10	μm
Bond Pad Center Distance from Contact Ring	75	+/- 5	μm
Contact Ring Width	20	+/-2	μm
Bond Pad Distance from chip edge	35	+/- 25	μm
Bond Pad Diameter	80	+/- 5	μm



