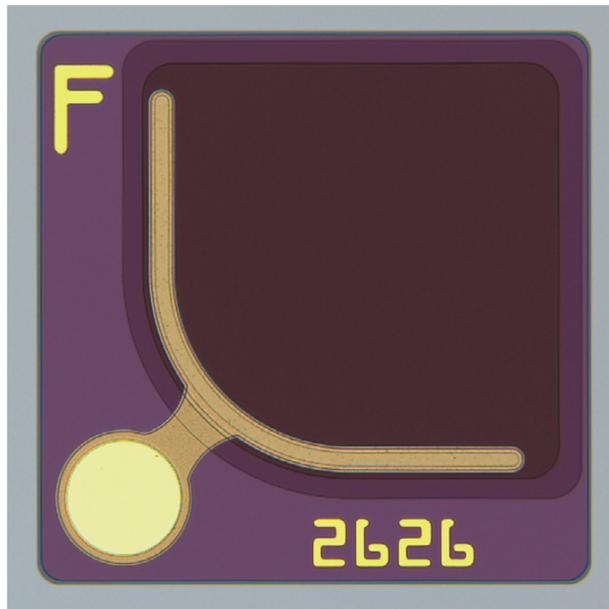


# TOP ILLUMINATED SELF-HERMETIC MONITOR PHOTODIODE (MPD) CHIP

INM00AA10D102



## FEATURES

- Top illuminated monitor photodiode with a nominal active area of 255  $\mu\text{m}$  x 255  $\mu\text{m}$
- Operating temperature -40  $^{\circ}\text{C}$  to 90  $^{\circ}\text{C}$
- Qualified according to GR-468 for use in non-hermetic packages
- Extremely low dark current with high reliability
- Response to 1270 -1620 nm with typical responsivity of 0.9 A/W at 1310 nm
- RoHS compliant

## SHIPPING REQUIREMENTS

- Tested and inspected chips on UV tape with grip ring  $\varnothing$  150 mm

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## Electro-Optical Characteristics

Electro-optics characteristics at 25 °C

Parameter	Symbol	Condition	Min	Typical	Max	Unit
Responsivity	R	$\lambda = 1310 \text{ nm}$		0.9		A/W
Dark Current	ID	VR = 5V			2	nA
Breakdown Voltage	VBD	IR=10 $\mu$ A	20			V
Capacitance	C	VR =5V, f=1MHz		5		pF

## Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
Reverse Bias Voltage	Vr	10	V
Reverse Current	Ir	10	mA
Forward Current	If	10	mA

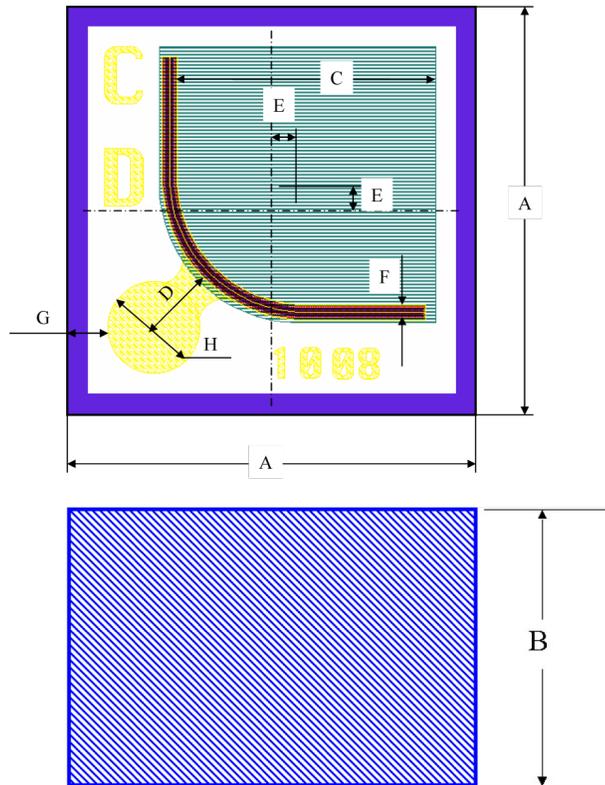
## Environmental Exposure Ratings

Parameter	Symbol	Rating	Unit
Operating Temperature	Top	-40 to 90	°C
Storage Temperature	Tstg	-40 to 120	°C
ESD threshold (HBM)	V <sub>ESD, th</sub>	300	V

## Chip Dimensions

	Parameter	Min	Nom	Max	Unit
A	Chip Size (length & width)	375	400	425	$\mu$ m
B	Chip Thickness	90	110	130	$\mu$ m
C	Active Area Size (length & width)	245	255	265	$\mu$ m
D	Bond Pad Center Distance from Contact Ring	75	85	95	$\mu$ m
E	Active Area Center Offset from Chip Center	20	25	30	$\mu$ m
F	Contact Ring Width	10	15	20	$\mu$ m
G	Bond Pad Distance from Chip Edge	25	35	45	$\mu$ m
H	Bond Pad Diameter	68	73	78	$\mu$ m

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## RoHS Compliance

Coherent is fully committed to environment protection and sustainable development and has set in place a comprehensive program for removing polluting and hazardous substances from all of its products. The relevant evidence of RoHS compliance is held as part of our controlled documentation for each of our compliant products. RoHS compliance parts are available to order, please refer to the ordering information section for further details.

## Ordering Information

Product Code	Wavelength	Description	Shipment Packaging
INM00AA10D102	1270 - 1620 nm	MPD Die	chips on Grip ring <sup>(1)</sup>

<sup>(1)</sup> Tested and inspected chips on blue tape on grip ring  $\varnothing$  150 mm (standard high volume)

## Important Notice

Performance figures, data and any illustrative material provided in this data sheet are typical and must be specifically confirmed in writing by Coherent before they become applicable to any particular order or contract. In accordance with the Coherent policy of continuous improvement specifications may change without notice. Further details are available from any Coherent sales representative.