Integrated Optical Power Monitor

CORNING

Features and Benefits

Integrated, Low-Loss Device
Custom Tap Ratios Available
Broad Spectral Bandwidth
Compact Design

Standards

RoHS	Free of hazardous substances according to RoHS2011/65/EU
Design and Test Criteria	Product is qualified to Telcordia GR-1209-CORE and GR-1221-CORE

Corning's miniature integrated power monitors are designed for channel monitoring in dense wavelength division multiplexing (DWDM) systems and Add/Drop modules. They can also be used for signal/pump power monitoring in erbium doped fiber amplifiers (EDFAs) and Raman amplifiers where integrated solutions tend to replace traditional fused fiber tap and photodiodes. Corning's power monitor offers high reliability, compact footprint with ultrawide bandwidth, and very low polarization dependent loss (PDL).

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Specifications[1,2]

Parameters			
	Minimum	Typical	Maximum
Center Wavelength (lc)		1310, 1550, or 1590 nm	
Bandwidth		±50 nm	
Tap Ratio	0.5 %	1 %	1-5 %
Responsivity	8 mA/W		
Insertion Loss[3]			0.35 dB
WDL			0.03 dB
PDL		0.03 dB	0.1 dB
Return Loss	45 dB		
Input Power Range	-13 dBm		17 dBm
Dark Current (25°C)	0.4 n/A		1.0 n/A
Capacitance		0.7 pF	0.9 pF
Reverse Voltage		5V	20V
Rise/Fall Time		0.3 ns	
Cut-Off Frequency (3dB, Impedance = 50 W)	2 GHz		
Operating Temperature		0°C to +70°C	
Storage Temperature		-40°C to +85°C	
Notes: [1] Values vary with tap ratio and do not include conector loss [2] 4, 8, 16, power monitor arrays are also available [3] Measured over entire temperature and wavelength range			

Shipping Package		
Packaging Dimensions	Fiber Type	Pigtail Length
(Φ) 5.6 mm x (L) 27 mm	Corning® MF-28e®	1 m (Standard)

THE RELATIONSHIP AMONG TAP RATIO, RESPONSIVITY, AND INSERTION LOSS

Tap Ratio	Responsivity (mA/W)	Insertion Loss (dB)
1%	8 ~ 20	< 0.35
3%	20 ~ 30	< 0.45
5%	40 ~ 60	< 0.60

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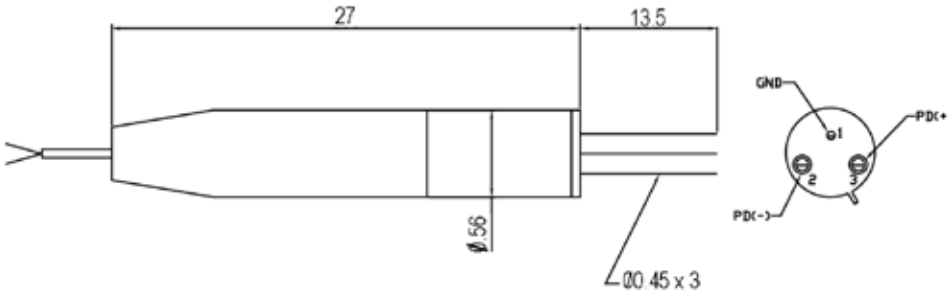

Ordering Information

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1 2 3 4 5 6

1 Select Type
2: 2 GHz
S: Custom

2 Select Wavelenth
31: 1310 nm
55: 1550 nm
59: 1590 nm

3 Select Tap Ratio
01: 1%
03: 3%
05: 5%

4 Select Fiber Type
0: 250 µm Bare Fiber
1: 900 µm Loose Tube
2: 900 µm Tight Buffer

5 Select Connector*
A: None
L : LC/PC
P: FC/PC
Q: FC/APC
S: SC/PC
T: SC/APC
U: MU/PC

6 Select Customization
000: Running number used for special types or custom made

Note:
** Specifications do not include connector loss*

RoHS COMPLIANT

These part numbers are specific to Corning Optical Communications OEM Solutions Business Unit. Please contact OEM sales at +1-408-736-6900 or oemsales@corning.com and visit www.corning.com/opcomm/oem for sales support.

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