

ERBIUM AMPLIFIER COMPONENTS

TAP/DETECTOR

DiCon's Tap/Detector is a hybrid component that combines the ultra flat spectral response of a thin film tap with a high sensitivity PIN photodiode for power monitoring applications. Hybrid Tap/Detectors minimize integration costs and module size by combining two functions in one temperature stable package.



FEATURES

- Ultra flat, broadband spectral response
- Integrates tap and power monitoring functions
- Corning SMF-28 or polarization maintaining fiber

APPLICATIONS

Tap/Detectors with Corning SMF-28 fiber are designed for power monitoring in protection switches, line cards, fiber amplifiers, and OADMs. Tap/Detectors with polarization maintaining fiber are designed for power monitoring of signal or pump laser sources that use PM fiber pigtailed.



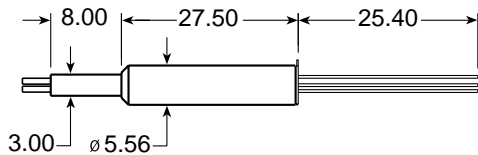
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SPECIFICATIONS^{1,2}

Optical insertion loss	2%	0.6 dB max.
	5%	0.8 dB max.
	10%	1.0 dB max.
Saturation optical power	2%	14 dBm max.
	5%	10 dBm max.
	10%	7 dBm max.
Extinction ratio ²	18 dB min.	
Wavelength flatness	0.1 dB	
Back-reflection	-45 dB max.	
PDL	0.05 dB typ., 0.1 dB max.	
PMD	0.1 ps max.	
Photodiode dark current	1 nA max. at T = 23°C and 5V bias	
	15 nA max. at T = 70°C and 5V bias	
Photodiode shunt resistance	10 Mohms min.	
Photodiode capacitance	8 pF max. at -5V bias	
Photodiode tap responsivity	2%	0.01 - 0.04 A/W
	5%	0.04 - 0.06 A/W
	10%	0.08 - 0.12 A/W
Photodiode bias voltage	-14V min., -2V max.	
Photodiode linearity	+/- 15%	
Photodiode frequency bandwidth	1500 MHz max.	
Operating temperature	-0°C to +65°C	
Storage temperature	-40°C to +85°C	
Soldering temperature	+350°C max.	
Soldering time	3 sec max.	

1. All specifications referenced without connectors.
2. For Corning PM 1300 fiber type only.

HOUSING DIMENSIONS¹



Units: mm

1. Optional 13 mm PIN length by request.

ORDERING INFORMATION

TD -	-	-	-	-	-	-	-
Tap Ratio							
2	2%						
5	5%						
10	10%						
Fiber Type							
2	Corning SMF-28, 250 um						
9	Corning SMF-28, 900 um						
PM	Corning PM 1300, 400 um						
Wavelength Range							
14	1410 - 1490 nm						
15	1530 - 1560 nm						
16	1570 - 1610 nm						
15/16	1530 - 1610 nm ¹						
Connector Type							
FC	FC/SPC						
FC/APC	FC/APC						
FC/UPC	FC/UPC						
SC	SC/SPC						
SC/APC	SC/APC						
SC/UPC	SC/UPC						
ST	ST/SPC						
ST/UPC	ST/UPC						
LC	LC/SPC						
LC/UPC	LC/UPC						
MU/UPC	MU/UPC						
N	None						
Connector Key Orientation							
S	Slow axis						
F	Fast axis						
N	Not applicable ²						
Pigtail Length							
1	1 meter						
X	Specify X meters						

1. Corning SMF-28 only

2. Specify "N" for all options except Corning PM 1300 fiber with FC connectors