BI-DIRECTIONAL SINGLE CHANNEL INTEGRATED TAP MONITORS

BTMS Series

Product Description

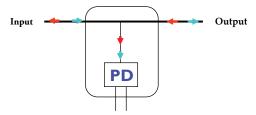
Oplink's Single Channel Bi-directional Integrated Tap Monitor (BTMS) is a hybrid component that integrates a flat spectral response of a thin-film tap with a high sensitivity PIN photodiode for power monitoring applications. The Bi-directional feature allows power monitoring from both input and output ports. BTMS minimizes component assembly costs and module foot-print while increasing module design efficiency by facilitating fiber management.

The BTMS integrates the functionality of an optical coupler and a photodiode while delivering low insertion loss and low dark current with high temperature stability over a wide wavelength range. It is compact and easy to mount on a PCB board for module and network system use. Applications include DWDM channel power monitoring, optical network switching/protection monitoring, re-configurable optical add/drop multiplexers systems.

Oplink can provide customized designs to meet specialized feature applications. Also, Oplink offers modular assemblies that integrate other components to form a full function module or subsystem.



Functional Diagram



Performance Specification

Parameters			Specification		Unit
Operating Wavelength Range			1260~1360	1510~1610	mm
Through	Insertion Loss (@ $\lambda_{op'}$, T _{op'} , All SOP, exclude connector) 2% 10%		≤ 0.4 ≤ 0.6 ≤ 0.9		dB
	Polarization Dependent Loss		≤ 0.1		dB
	Return loss (exclude connector)		≥ 45		dB
Tapped Monitoring	Responsivity (relative to nominal power at input port)	2% 5% 10%	10~23 26~59 52~110	14~25 35~65 70~120	mA/W
	Responsivity Polarization Dependence		≤ 0.1		dB
	Uniformity ^[1]		≤ 0.5		dB
PD	PD Dark Current (@ 70°C, -5V bias)		≤ 10		nA
	Bandwidth (50 ohm, 5V, -3dB)		≥ 0.5		GHz
	Reverse Voltage		≤ 20		V
	Forward Current		≤ 5		mA
Conditions	Input Optical Power	2% 5% 10%	≤ 21 ≤ 16 ≤ 12		dBm
	Operating Temperature Range (<85%RH, Non-condensing)		0 to +70		°C
	Storage Temperature Range (<85%RH, Non-condensing)		-40 to +85		°C
Fiber Type			SMF-28		

Features

- 2-/3-pin Package Easily Mounted on a PCB
- Flat and Broad Operating Wavelength Range
- Low Insertion Loss and PDL
- Low Dark Current
- Various Tap Ratios Available
- High Temperature Stability with Hermetically Sealed Photodiode
- Monitor Optical Signal from One Both Input and Output

Applications

- EDFAs and Raman amplifiers
- Add/Drop and optical protection monitoring
- DWDM/CWDM systems

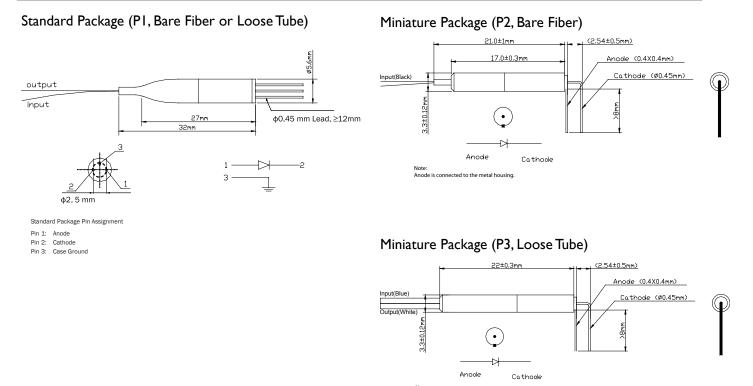


Notes: 1) Excluding connectors.



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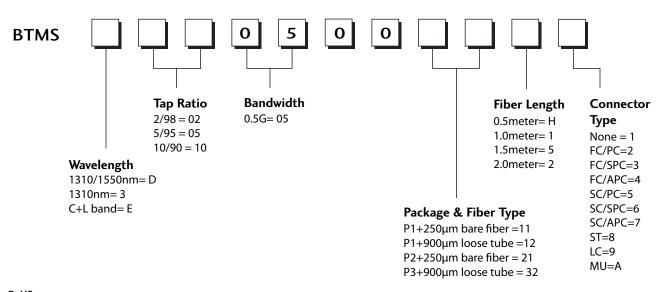
Mechanical Drawing / Package Dimensions (dimension in mm)



Note: Anode is connected to the metal housing.

Ordering Information

Oplink can provide a remarkable range of customized optical solutions. For detail, please contact Oplink's OEM design team or account manager for your requirements and ordering information (510) 933-7200.



RoHS:

1. Add "G" to the end of the above PN for RoHS 6 Requirement.