

SINGLE WINDOW, SINGLE MODE WIDEBAND TREE/STAR COUPLER (NXM)

SWTC Series

Product Description

Oplink's single window, single mode wideband tree and star couplers are high port count bi-directional products with excellent performance over a wide bandwidth. They have very good uniformity, low excess loss and very low polarization sensitivity. All devices are tested according to industry standard test procedures and are supplied with all pertinent measurement data.

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.

Features

- ◆ Best Uniformity
- ◆ Ultra Low Insertion Loss
- ◆ High Directivity
- ◆ Highly Stable & Reliable

Applications

- ◆ Telecommunications
- ◆ CATV Fiberoptic Links
- ◆ Fiber Amplifier System
- ◆ Fiberoptic Instruments



Performance Specification

SWTC Series (NxM)	Nx4	Nx5	Nx6	Nx8	Nx16	Nx32	Nx40	Unit					
Standard Configuration	N=1,2,4	N=1	N=1,2	N=1,2,8	N=1,2,16	N=1,2	N=1,2						
Grade	P/A	P/A	P/A	P/A	P/A	P/A	P/A						
Operating Wavelength Range	1310 nm		C Band		L Band		C+L Band						
	1270~1350		1528~1565		1570~1650		1528~1610		nm				
Insertion Loss (Max) ^[1]	6.7/7.4	8.3/8.7	9.2/9.6	10.2/11.2	13.5/14.5	17.5/18.5	18.8/20.0	dB					
Uniformity (Max)	0.8/1.0	1.0/1.2	1.2/1.4	1.2/1.8	1.5/2.0	2.5/3.5	2.8/3.5	dB					
Polarization Dependent Loss	<0.3	<0.3	<0.4	<0.5	<0.6	<0.8	<0.8	dB					
Directivity	> 55							dB					
Maximum Power Handling	500							mW					
Operating Temperature	0 to +70							°C					
Storage Temperature	-40 to +85							°C					
Package Dimension ^[2]	Refer packaging choices table												mm
	P1 : 100.0 (L) x 80.0 (w) x 7.0(H)						P3 : 160.0 (L) x 110.0 (w) x 11.0 (H)						
	P2 : 130.0 (L) x 90.0 (w) x 9.0 (H)						P4 : 210.0 (L) x 160.0 (w) x 13.0 (H)						

[1] The maximum IL is under all states of polarization and within the full operating temperature and wavelength ranges specified, does not include contribution from connectors.

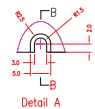
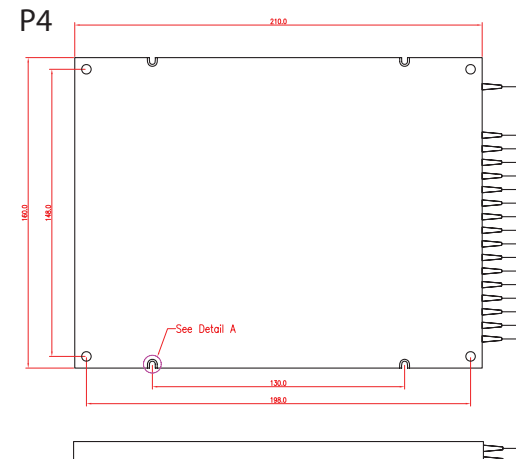
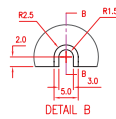
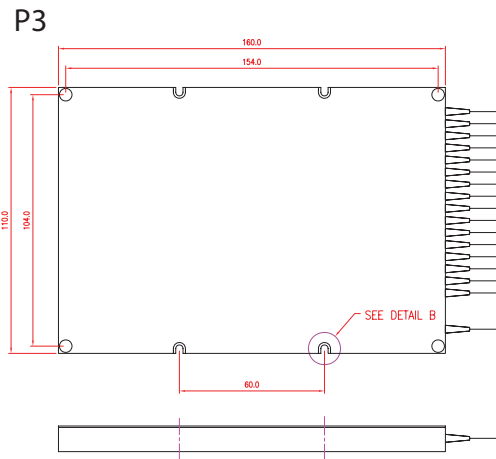
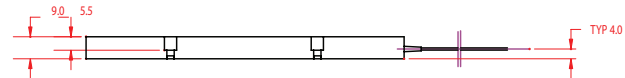
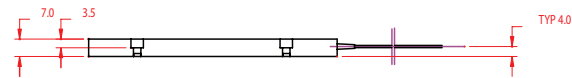
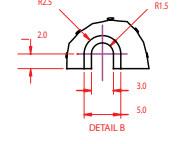
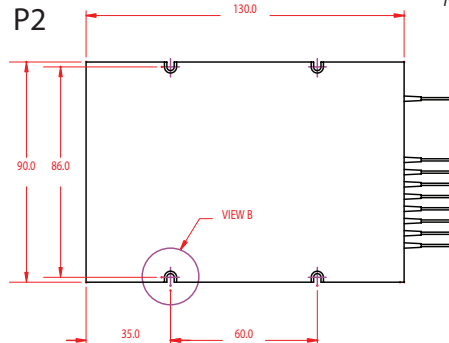
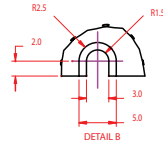
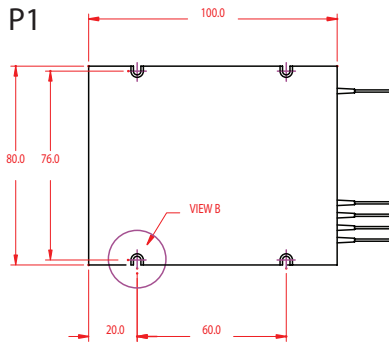
[2] The mechanical tolerance should be +/-0.2 mm on all package dimensions unless otherwise custom specified.

Packaging Choices Table

SWTC (NxM)	Nx4	Nx5	Nx6	1x8	2x8	8x8	1x16	2x16	16x16	1x32	2x32	1x40	2x40
Packaging Choices	P1	P1	P1, P2	P1, P2	P1, P2	P2	P3	P3	P4	P4	P4	P4	P4

Mechanical Drawing / Package Dimensions (dimension in mm)

Note: The fiber holes only for reference.



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.

SWTC

Wavelength 3 = 1310 nm 5 = C band 6 = L band 1 = C+L band	Type 14 = 1x4 15 = 1x5 16 = 1x6 18 = 1x8 1A = 1x16 1B = 1x32 1C = 1x40 24 = 2x4 26 = 2x6 28 = 2x8 2A = 2x16 2B = 2x32 2C = 2x40 44 = 4x4 88 = 8x8 AA = 16x16	Grade P = P grade A = A grade	Package Type [4] 1 = P1 2 = P2 3 = P3 4 = P4	Fiber Length [3] H = 0.5 meter 1 = 1.0 meter 5 = 1.5 meter 2 = 2.0 meter	Connector Type 1 = None 2 = FC/PC 3 = FC/SPC 4 = FC/APC 5 = SC/PC 6 = SC/SPC 7 = SC/APC 8 = ST 9 = LC/UPC A = MU B = LC/APC
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Fiber Type
2 = SMF-28 with 900µm loose tube
3 = SMF-28 with 3mm cable

[3] The tolerance of fiber length is +/-0.1m. 1 meter is standard. The lead time for special fiber length will be longer.
[4] Refer package table for packaging choices