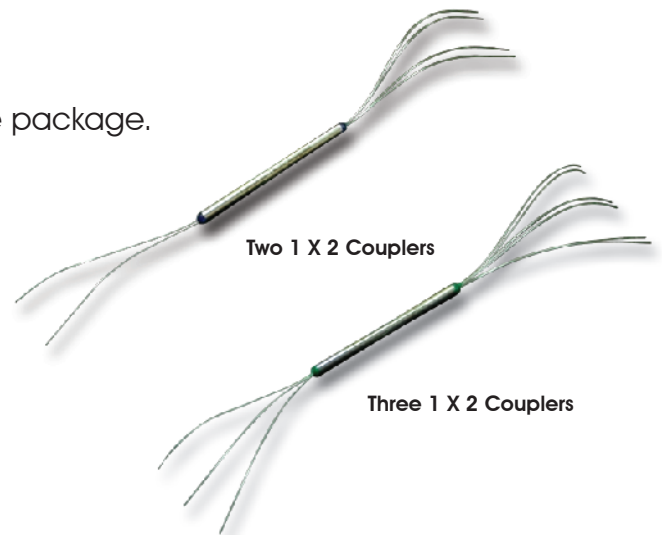


## 2-in-1 & 3-in-1 couplers

Any combination of two or three couplers in one package.

### Description

The 2-in-1 and 3-in-1 coupler houses any combination of two or three FBT couplers in one small space-saving package. Systems designers can utilize these couplers to reduce the footprint of their designs.



### Features

- Space saving
- Low excess loss
- Low insertion loss
- Excellent uniformity
- Environmentally stable and reliable
- Can be manufactured according to customer specifications
- Compliant to Telcordia GR-1221

### Applications

- Passive Optical Network (PON)
- Optical amplifiers (e.g. EDFA)
- Cable TV
- Optical communication systems
- Optical sensing equipment
- Measuring instruments and equipment

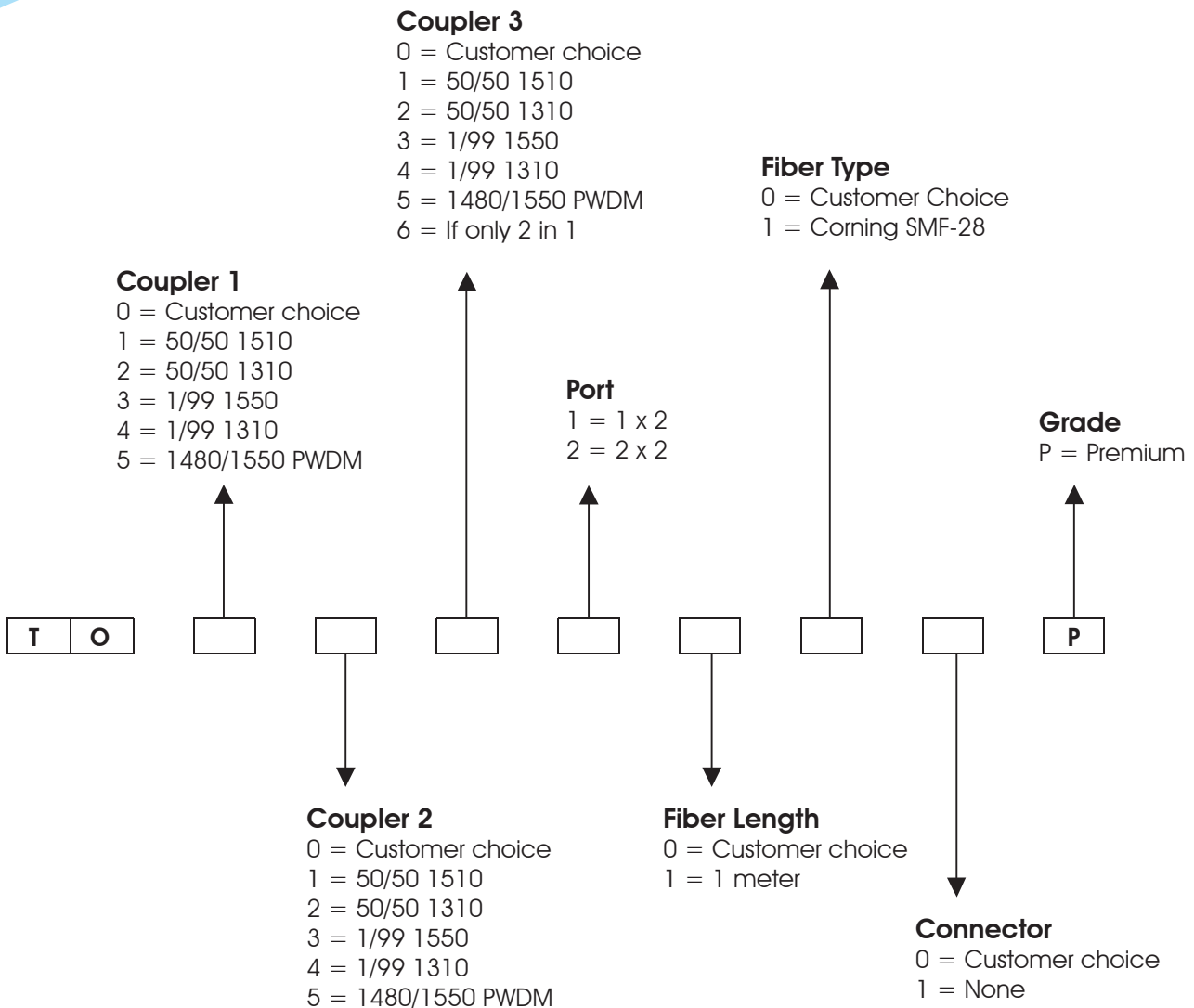
## Specifications for typical 2-in-1 & 3-in-1 Couplers / WDM

Item		Unit	Tap Coupler		1480/1550 PWDM
Grade			Premium	Premium	Premium
Coupling Ratio			50/50	1/99	-
Center Wavelength		nm	1310 or 1550		1480/1550
Wavelength Bandwidth		nm	± 10		± 5
Insertion Loss*	Max.	dB	3.6	22.0 / 0.3	0.5
Excess Loss*	Max.	dB	0.1		-
Isolation	Min.	dB	-		14
Uniformity	Max.	dB	1.0		-
Polarization Dependent Loss	Max.	dB	0.15		0.3
Directivity	Min.	dB	50		50
Temperature Coefficient	Max.	dB / °C	0.002		0.003
Operating Temperature Range**		°C	-40 TO +85		-40 to +85
Storage Temperature Range**		°C	-50 TO +85		-50 to +85
Package Dimensions		mm	3.0(OD) X 52(L)		3.0(OD) x 52(L)

\* without Connector

\*\* -20 to +70°C for 2.4 mm cable

## 2-in-1 & 3-in-1 Coupler Ordering Info



### Coupling Ratio / Insertion Loss Conversion Table for 2-in-1 & 3-in-1 couplers

Splitting Ratio	Insertion Loss (dB)
	Premium
40 / 60	4.8 / 2.8
30 / 70	6.1 / 2.0
20 / 80	8.0 / 1.3
10 / 90	12.0 / 0.8
5 / 95	18.4 / 0.5
1 / 99	22.0 / 0.3

Remark: Excess Loss for SFC, WIC and WFC shall be < 0.1 dB for Premium grade

#### Note:

1.  Warranty from manufacturing defect for a one year period.
2.  Available for OEM orders.
3.  Photronix Technologies reserves the right to make changes to the product described herein without notice.