

# Optical Coupler

## Plank Single-mode Single-window Coupler 1x2 and 2x2; Wide band (+/-40nm)

**Plank Optoelectronics Inc.** is a professional developer and manufacturer of fiber optical communication components that deploy high-capacity broadband communications networking with advances in Fiber Optics technologies.

### Features

- Single window wavelength
- Low Insertion loss
- Polarization insensitive
- Variety of coupling ratios
- High directivity
- Environmentally stable and reliable

### Applications

- Telecommunications
- CATV
- Subscriber loop
- Local Area Networks(LAN)
- Test equipment
- Optical fiber sensors



### Specifications

<b>1x2, 2x2, Single mode, Single window Wideband+/-40nm</b>		
Parameters	A Grade	B Grade
Operating Wavelength(nm)	1310 or1550 (±40)	
Excess loss (dB)	0.2	0.2
Uniformity (dB)	≤ 0.6	≤ 1.0
Coupling Ratio (%)	1 : 99 to 50 : 50	
Polarization Stability (dB)	0.10	0.15
Directivity (dB)	>55	
Operation temp.(°C)	-40 to +70*	
Storage temp.(°C)	-50 to +85	
Temp. Coefficient (dB/°C )	<0.002( Max.)	
Dimensions (mm)	Bare fiber: 3.0 (φ) x 54 ( L ) Loose tube: 3.5(φ) x 65 ( L ) PVC: 95(L) x 12(W) x 10(H)	

### Coupling Ratio / Insertion Loss Reference Table

Desired Splitting Ratio	A Grade	B Grade
50 : 50	3.4	3.7
40 : 60	4.4 / 2.5	4.8 / 2.8
30 : 70	5.6 / 1.8	6.1 / 2.0
20 : 80	7.5 / 1.2	8.0 / 1.3
10 : 90	10.8 / 0.6	11.8 / 0.8
5 : 95	14.6 / 0.4	18.5 / 0.5
1 : 99	21.5 / 0.2	22.0 / 0.3

\* Bare fiber: -40 to +70, other package: 0 to +70

\*\* The specifications listed above do not include the effect of connector loss.

\*\* Connector Type: SC,FC,ST,SC/APC,FC/APC,LC,MU are available.

\*\* Specification values for devices with unbalanced split ratios are available upon request.