

# Optical Coupler

## Plank Single-mode Dual-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

- Dual 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

#### 1x2, 2x2, Single mode, Dual window Wideband +/-40nm

Parameters	A Grade	B Grade
Operating Wavelength(nm)	1310 & 1550 (±40)	
Excess loss (dB)	0.2	0.3
Uniformity (dB)	≤ 0.8	≤ 1.2
Coupling Ratio (%)	1 : 99 to 50 : 50	
Polarization Stability (dB)	0.15	0.2
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	3.6	3.9
40 : 60	4.7/2.7	5.0/2.9
30 : 70	6.0/1.9	6.4/2.1
20 : 80	7.9/1.2	8.5/1.4
10 : 90	11.3/0.6	12.7/0.8
5 : 95	15.2/0.4	18.9/0.5
1 : 99	23.5/0.3	24.0/0.4

\*\* 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.