

## Planar Lightwave Circuit Splitter

### 1. Description

Planar lightwave circuit (PLC) splitter is a type of optical power management device that is fabricated using silica optical waveguide technology. It features small size, high reliability, wide operating wavelength range and good channel-to-channel uniformity, and is widely used in PON networks to realize optical signal power splitting. provides whole series of 1xN and 2xN splitter products that are tailored for specific applications. All products meet GR-1209-CORE-2001 and GR-1221-CORE-1999 requirements.

### 2. Features

- ◆ Low Insertion loss
- ◆ Low PDL
- ◆ Compact Design
- ◆ Good channel-to-channel uniformity
- ◆ Wide Operating Wavelength:  
From 1260nm to 1650nm
- ◆ Wide Operating Temperature:  
From -40°C to 85°C
- ◆ High Reliability and Stability

### 3. Applications

- ◆ FTTX Systems
- ◆ PON Networks
- ◆ CATV Links
- ◆ Optical Signal Distribution

### 4. Compliance

- ◆ Telcordia GR-1209-CORE-2001
- ◆ Telcordia GR-1221-CORE-1999
- ◆ RoHS

## 5. Specifications

Table 1 – 1×N PLC Splitter

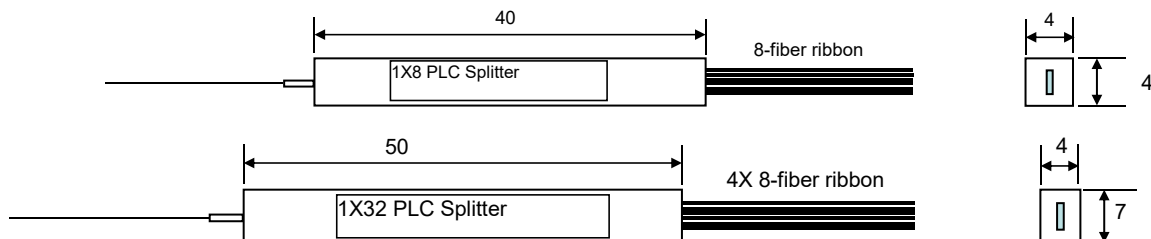
Parameters	1x2	1x4	1x8	1x16	1x32	1x64	1x128
Operating Wavelength (nm)	1260~1650						
Fiber Type	G657A or customer specified						
Insertion Loss (dB) (P/S Grade) Max.	3.8/4.0	7.1/7.3	10.2/10.5	13.5/13.7	16.5/16.9	20.5/21	23.8/24.2
Loss Uniformity (dB) Max.	0.6	0.6	0.8	1.2	1.5	2.0	2.5
Return Loss (dB) Min.	55	55	55	55	55	55	55
Polarization Dependent Loss(dB) Max.	0.2	0.2	0.3	0.3	0.3	0.4	0.5
Directivity (dB) Min.	55	55	55	55	55	55	55
Wavelength Dependent Loss(dB) Max.	0.5	0.5	0.5	0.8	0.8	1.0	1.2
Operating Temperature (°C)	-40~85						
Storage Temperature (°C)	-40~85						
Minitype Dimension (mm) (L×W×H)	40×4×4	40×4×4	40×4×4	60×7×4 Or 50×7×4	60×7×4 Or 50×7×4	60×12×4	NA
Module Dimension (mm) (L×W×H)	100×80×10	100×80×10	100×80×10	120×80×18	120×80×18	140×115×18	NA
Mini-Module Dimension (mm) (L×W×H)	60×7×4	60×7×4	60×7×4	60×12×4	80×20×6	100×40×6	NA

Notes:

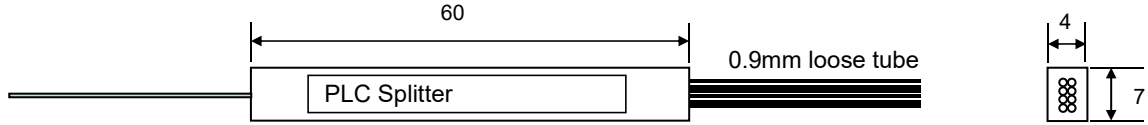
1. Specified without connectors.
2. Add an additional 0.2dB loss per connector.

## 6. Mechanical Dimensions (Unit: mm)

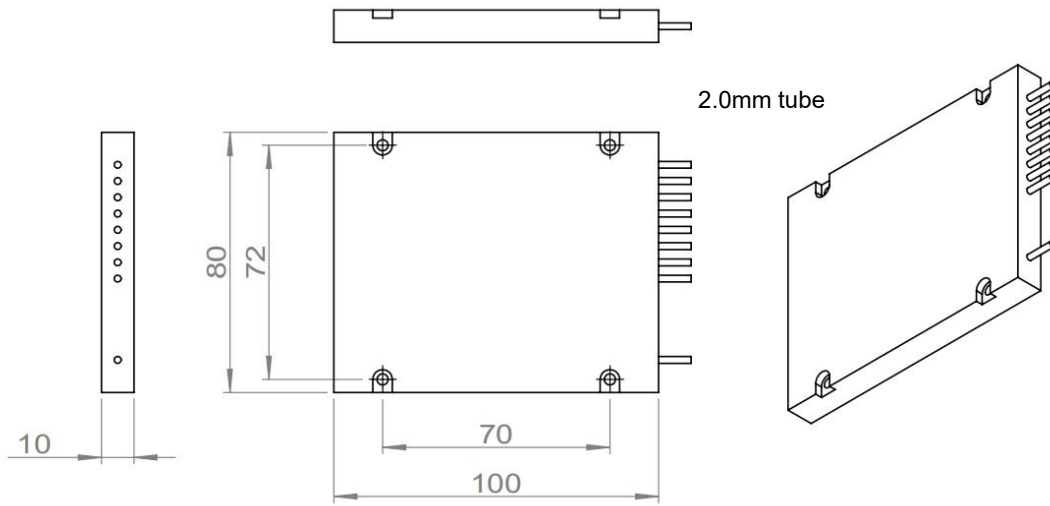
### ◆ PLC Splitter Minitype



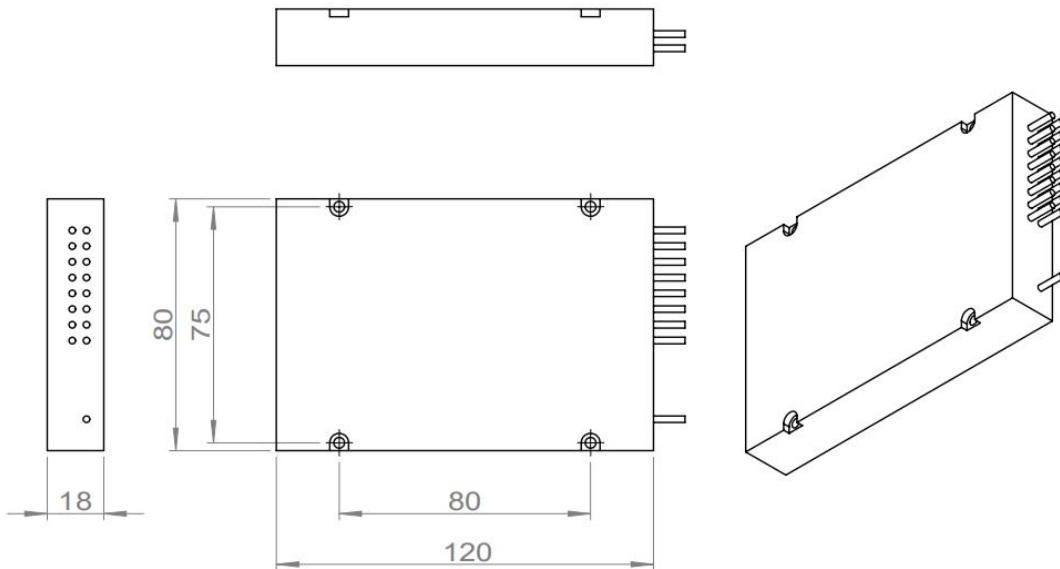
◆ PLC Splitter Mini-Module



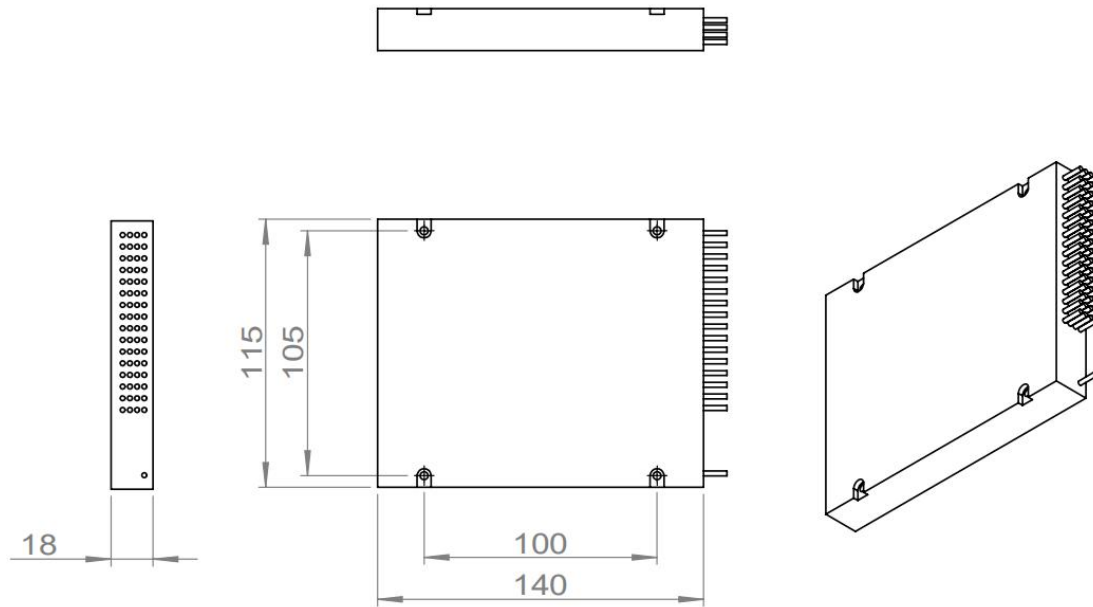
◆ PLC Splitter Module



100X80X10 (mm) 1X8



120X80X18 (mm) 1X16



140X115X18 (mm) 1X64

Notice: The above splitters can be added with different types of connection heads according to customer requirements.