# ABS Module Fiber Optic PLC Splitter, SingleMode

WIDELY USED IN CATV, FTTX, PON SYSTEM & DATA CENTER INFRASTRUCTURE SOLUTIONS




## Overview

Planar lightwave circuit (PLC) splitter is a type of optical power management device that is fabricated using silica optical waveguide technology to distribute optical signals from Central Office (CO) to multiple premise locations. It features small size, high reliability, wide operating wavelength range and good channel-to-channel uniformity. These are widely used in PON networks to realize optical signal power splitting as a low-cost solution. PLC splitters provide low-cost solution for optical signal distribution, with small form factor and superb reliability. They are designed for FTTx Passive Optical Networks, CWDM, DWDM and optical cable TV System.

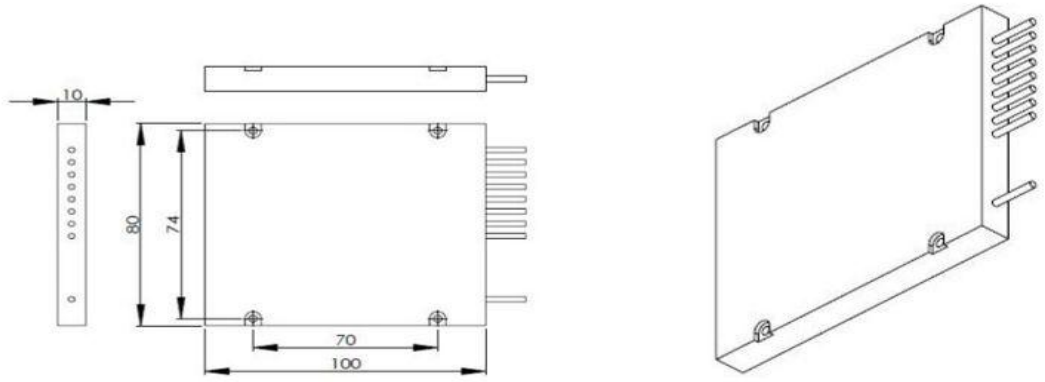
## Features

- Low Insertion Loss
- Low PDL (Polarization Dependent Loss)
- Compact Design, Custom and Rugged Packaging Available
- Good channel-to-channel uniformity
- Wide Operating Wavelength:From 1260nm to 1650nm
- Wide Operating Temperature:From -40℃ to 85℃
- High Reliability and Stability
- Telcorida GR-1209/ 1221 Qualified

## Application

- Optical Signal Distribution
- Lan and CATV System
- FTTX Network Deployment
- Passive Optical Networks (PON)
- DWDM and CWDM Systems

## Mechanical Dimension(mm)




100 x 80 x 10

## Introduction

- 1x2, 1x4, 1x8, 1x16, 1x32, 1x64 splits
- 2x2, 2x4, 2x8, 2x16, 2x32, 2x64 splits
- Fiber jacketing outside boxes 0.9mm, 2mm and up to 3mm
- ABS box type or inside metal box/module cassette type
- SC/UPC, SC/APC, LC/UPC, LC/APC, FC/UPC, FC/APC, ST/UPC connector options or Unconnectorized

## Specification

### Table 1 – 1×N PLC Splitter

| Parameters | 1×2 | 1×4 | 1×8 | 1×16 | 1×32 | 1×64 |
|---|---|---|---|---|---|---|
| Operating Wavelength (nm) | 1260～1650 | | | | | |
| Fiber Type | G657Aor customer specified | | | | | |
| Insertion Loss (dB)(P/S Grade) | 3.8/4.0 | 7.1/7.3 | 10.2/10.5 | 13.5/13.7 | 16.5/16.9 | 20.5/21.0 |
| Loss Uniformity (dB) | 0.4 | 0.6 | 0.8 | 1.2 | 1.5 | 2 |
| Return Loss (dB) (P/S Grade) | 55/50 | 55/50 | 55/50 | 55/50 | 55/50 | 55/50 |
| Polarization Dependent Loss(dB) | 0.2 | 0.2 | 0.2 | 0.25 | 0.3 | 0.35 |
| Directivity (dB) | 55 | 55 | 55 | 55 | 55 | 55 |
| Wavelength Dependent Loss(dB) | 0.3 | 0.3 | 0.3 | 0.5 | 0.5 | 0.5 |
| Temperature Stability (-40～85 ℃)(dB) | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 |
| Operating Temperature (℃) | -40～85 | | | | | |
| Storage Temperature (℃) | -40～85 | | | | | |
| Package | Steel Tube or ABS | | | | | |

**Table 2 – 2×N PLC Splitter**

| Parameters | 2×2 | 2×4 | 2×8 | 2×16 | 2×32 | 2×64 |
|---|---|---|---|---|---|---|
| Operating Wavelength (nm) | 1260～1650 | | | | | |
| Fiber Type | G657Aor customer specified | | | | | |
| Insertion Loss (dB) | 4 | 7.6 | 11 | 14.4 | 17.5 | 21 |
| Loss Uniformity (dB) | 0.6 | 1 | 1.2 | 1.5 | 1.8 | 2.2 |
| Return Loss (dB) (P/S Grade) | 55/50 | 55/50 | 55/50 | 55/50 | 55/50 | 55/50 |
| Polarization Dependent Loss(dB) | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 |
| Directivity (dB) | 55 | 55 | 55 | 55 | 55 | 55 |
| Wavelength Dependent Loss(dB) | 0.3 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 |
| Temperature Stability(-40～85 ℃)(dB) | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 |
| Operating Temperature (℃) | -40～85 | | | | | |
| Storage Temperature (℃) | -40～85 | | | | | |
| Package | Steel Tube or ABS | | | | | |

**Notes:**

Specified without connectors.

Add an additional 0.15dB loss per connector.

TANGPIN TECH provides four appearances of PLC Splitter products to meet the needs of a variety Applications of engineering design. Our products meet or exceed Telcordia GR-1209-CORE and GR-1221-CORE reliability qualification requirement