

## Overview

As fiber optic networks have developed for longer distances, higher speeds and wavelength-division multiplexing (WDM), fibers have been used in new wavelength ranges, now called "bands," where fiber and transmission equipment can operate more efficiently. Detailed DWDM band wavelength range is shown in the table below.

O-band	1260 – 1360 nm	PON upstream
E-band	1360 – 1460 nm	Water peak band
S-band	1460 – 1530 nm	PON downstream
C-band	1530 – 1565 nm	DWDM band (lowest attenuation)
L-band	1565 – 1625 nm	Expanded DWDM band (low attenuation)
U-band	1625 – 1675 nm	Ultra-long wavelength

Plexstar DWDM Red/Blue C Band filters are used for combining or splitting C band wavelengths. When used as a band combiner, the bands are combined in the filter and delivered to the "common" port. Or, when used as band splitter, the both bands are fed to the "common" port and the split to the "pass" port and the "reflected" port. These filters are only used when a MUX is combined with a DEMUX in a DWDM single fiber system.

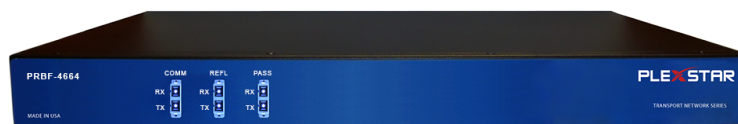
PRBF-2846	Pass: 1545.8 nm and Reflect: 1520 nm
PRBF-4664	Pass: 1520 nm and Reflect: 1545.8 nm

## Features:

- Passive module.
- 100% slope compensation of G.652 fiber in C-band (Typical) Low Polarization Mode.
- Compensates dispersion in standard single-mode optical fiber (G.652).
- Compatible with C-Band DWDM optical channels.
- Protocol transparent data rate up to 40Gbps.
- RoHS compliant.

## Model:

- PRBF-2846, PRBF-4664.



## Specifications

### Power:

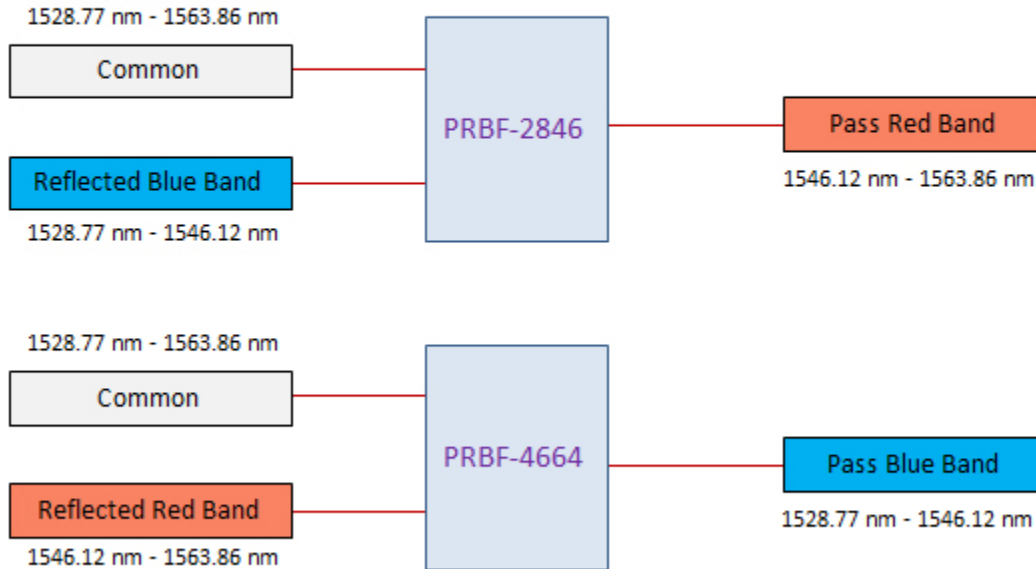
- Passive Module, no power required.

### Physical Dimension:

- Size: 19" X 11" X 1.75" (1U).
- Can be placed inside PAMP-BA, PAMP-PA, PAMP-LA, and PAMP-RA.

### Applications

### Plexstar DWDM Red/Blue Filter Modules (PRBF-2846, PRBF-4664)



### Plexstar DWDM Red/Blue Filter Modules Used in a Single Bidirectional Fiber

