

# WDM COMPONENTS

## WIDEBAND WDM

DiCon's Wideband WDM is designed to multiplex or demultiplex signals in multi-wavelength systems. The component uses a thin film filter mounted between a pair of GRIN lens collimators. DiCon's Wideband WDM is housed in a compact, environmentally stable package that offers superior resistance to humidity and temperature and is suitable for mounting on a printed circuit board or within a module. DiCon stocks a wide selection of filters with passbands.



### FEATURES

- High isolation over a broad wavelength range
- Low insertion loss
- High isolation
- Rugged, environmentally stable package
- Tested to Telcordia GR-1209 and GR-1221

### APPLICATIONS

Wideband WDMs are used to transmit groups of WDM laser channels in DWDM and CWDM transmission systems. Wideband WDMs help to make WDM transmission systems modular, so that additional channel groups can be added to the network over time without service disruption.



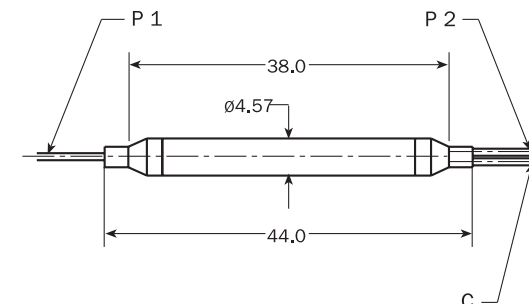
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## SPECIFICATIONS<sup>1</sup>

Insertion loss C - P1	0.6 dB typ., 0.8 dB max.
Insertion loss C - P2	0.5 dB typ., 0.6 dB max.
Isolation C - P2	15 dB typ., 10 dB min.
Directivity	55 dB min.
Back-reflection	-50 dB max.
PDL	0.05 dB typ., 0.1 dB max.
Optical power	300 mW max.
Thermal stability	0.005 dB/°C max.
Fiber type	9/125 Corning SMF-28
Operating temperature	0°C to +65°C
Storage temperature	-40°C to +85°C

1. All specifications referenced without connectors.

## HOUSING DIMENSIONS<sup>1</sup>



Units: mm  
1. Optional 38 or 40 mm housing lengths by request.

## ORDERING INFORMATION

FWC -	□ - □ - □ - □ - □ - □ - □
Transmission Band C - P1 <sup>1, 2</sup>	xxx.x/xxx.x Specify values btw: 1500.0 - 1620.0 nm
Lower Reflection Band C - P2 <sup>1, 2</sup>	xxx.x/xxx.x Specify values btw: 1500.0 - 1620.0 nm
Upper Reflection Band C - P2 <sup>1, 2</sup>	xxx.x/xxx.x Specify values btw: 1500.0 - 1620.0 nm
Isolation C - P1	20 20 dB 25 25 dB 30 30 dB 35 35 dB X Specify
Connector Type	FC FC/SPC FC/APC FC/APC FC/UPC FC/UPC SC SC/SPC SC/APC SC/APC SC/UPC SC/UPC ST ST/SPC ST/UPC ST/UPC LC LC/SPC LC/UPC LC/UPC MU/UPC MU/UPC N None
Fiber Jacket	2 250 micron, 200 kpsi bare fiber 9 900 micron, tight buffer
Pigtail Length	1 1 meter X Specify X meters

1. All wavelengths referenced to vacuum.  
2. Transmission and reflection bands must not overlap.