



Optical Reflector



Optotec 1650nm Reflector is based on Fiber Bragg Gratings (FBG) technology to reflect optical signal of 1645nm to 1655nm (optical line monitoring signal). A FBG filter is a type of distributed Bragg reflector

constructed in a short segment of optical fiber that reflects particular wavelengths of light and transmits all others. This is achieved by creating a periodic variation in the refractive index of the fiber core, which generates a wavelength-specific dielectric mirror.

Comparing with the traditional reflector with thin film technology, FBG reflector has the advantage of very high reflectance at the test signal, very low insertion loss at the traffic signal very sharp reflection bandwidth edge, and very long lifetime.

A FBG can therefore be used as a high performances inline optical filter to block certain wavelengths, or as a wavelength-specific reflector.

It pass the communication without disturbing and provide a high reflectance for the monitoring signal at the termination of a passive optical network (xPON).

Packaged in SC/APC bulk-head attenuator style for install easily. Pigtail package style available upon request.

SPECIFICATIONS

Parameter				
Monitoring λ	1645 - 1655 nm	Port Configuration:		1x1
Pass Band wavelength range		nm	1260 - 1360 + 1460 - 1600 + 1600 -1625	
Insertion loss	1260 - 1360nm + 1460 - 1600nm	dB	≤ 1.4	
Insertion loss	1600 - 1625nm	dB	≤ 3.4	
Return loss	1260 - 1360 + 1460 - 1580	dB	> 35	
Return loss	1580 - 1620nm	dB	> 30	
Return loss	1620 - 1625nm	dB	> 20	
Reflect Band wavelength range		nm	1645 - 1655	
Insertion loss		dB	≥ 21	
Return loss		dB	≤ 1.0	

OPTOTEC PN **R**EFERENCE PN 3956031

OPT-REF-A6-S2-S2-F

DESCRIPTION

1650nm Plug-type SC/APC Optical Reflector



www.optotec.it

The information given herein, including drawings illustration and schematics which are intended for illustration purposes only, is believed to be reliable. However, Optotec makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. Optotec' obligations shall only be as set forth in Optotec' Standard Terms and Conditions of Sale for this product and in no case will Optotec be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of Optotec products should make their own evaluation to determine the suitability of each such product for the specific application.