

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:	
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	REFERENCE PN	DESCRIPTION
3956031	OPT-REF-A6-S2-S2-F	1650nm Plug-type SC/APC Optical Reflector