
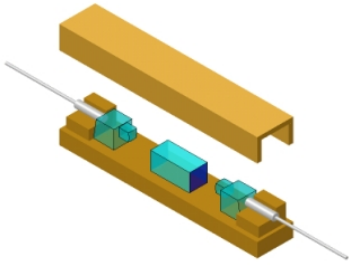


fiber pigtailed fabry-perot etalons

Fiber pigtailed Fabry-Perot etalons consist of a solid or air gap etalon, collimating lenses and input/output fibers. They can be made for different spectral window (UV, VIS, IR) dependent on the specific application. The solid etalon is made of optical quality glass (fused silica, BK7, ...) while air spaced etalons are built on Zerodur frame.

The faces are highly polished in order to achieve very good flatness and parallelism. They are coated with dielectric thin films to assure high finesse and transmission. This device acts as a narrow bandwidth filter with series of transmission peaks uniformly spaced in frequency domain. They are superior to fiber based Fabry-Perot etalons because of the better spectral resolution and constant FSR. Solid etalons can be temperature tuned. In applications where temperature stability is critical, air gap etalon offer better thermal stability. Fabry-Perot Etalons are used in telecom systems as narrow band filters to lock a laser cavity on a fixed frequency. They are also used as a frequency reference according to ITU grid. Due to their superior performances, our Fiber Pigtailed Fabry-Perot Etalon can be used in diverse applications such as optical telecommunication, optical sensing and others.

WEBCODE:		D1654-xxx	
DRAWING			
			
SPECIFICATIONS	SYMBOL	VALUE	
Operation Wavelength	λ_0	1550 nm	
Height	H	17 mm	
Width	W	14 mm	
Length	L	80 mm	
Free Spectral Range	FSR	7.5 GHz - 15 GHz - 50 GHz	
Finesse		4 - 10	
Cavity type		air space with Zerodur spacer	
Insertion Loss	I.L.	< 2.0 dB	
Back-Reflection	B.R.	< - 30 dB	
Fiber Type - input		SMF28	
Fiber Type - Output		SMF-28 - MM050-022	
Fiber Length		1 meter	
Fiber Jacket		900 μ m tight buffer	
Fiber Connector		FC/APC	
Operating Temperature		15 to 45°C	
Storage Temperature		-20 to 85°C	
NOTE		All specifications are customized upon request	