

Multimode Fiber

Application

High power laser transmission, laser medical, spectral analysis, laser welding, lighting, sensing element, energy transmission.

Property

HCS silica, PCS silica, PMMA fiber

Introduction

EGISMOS fiber optic cables can be made in different lengths up to several hundred meters. Different types of connectors, such as SMA905, ST or FC/PC connectors can be applied. Fibers are also available for different light sources like lasers or LEDs and for wide range of wavelengths like Deep UV fibers, UV/VIS fibers and VIS/NIR fibers. Different shielding for higher temperature and more custom solutions with custom optics can be used for many industrial and medical applications



Multimode Fiber Key Features

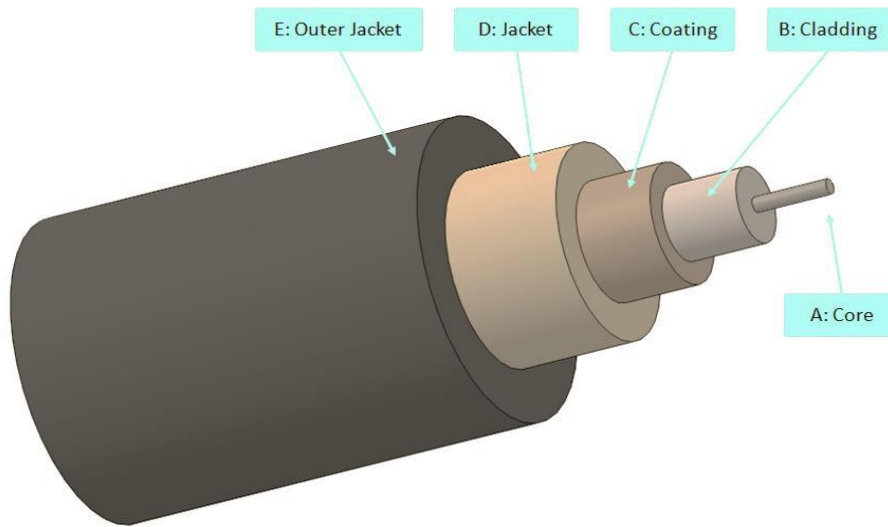
Operating Wavelength $\lambda = 250 \sim 1600$ nm

Core diameter = 200 μ m, 1000 μ m

Material = Silica, PMMA

Specifications [typical @tc=25°C]					
Item	FB02H1MA	FB02S1MA	FB10P1MA	Unit	Condition
Fiber Type	Multimode				
Fiber Core Material	HCS Silica	PCS Silica	PMMA		
Operating Wavelength	250 ~ 1600			nm	
Maximum Attenuation			$\leq 200@570$ nm	dB/km	
Numerical Aperture	0.21~0.24	0.37~0.39	0.5		
Bandwidth				MHz.km	
Group Refractive Index					
Fiber Core Diameter	200 \pm 5		1000 \pm 10	μ m	*1. Can be customized
Core Non-Circularity	≤ 5			%	

Item	FB02H1MA	FB02S1MA	FB10P1MA	Unit	Condition
Core/Cladding Concentricity	≤ 3		≤ 15	um	
Cladding Diameter	230±5		1035±15	um	
Cladding Non-Circularity	≤ 2			%	
Coating Diameter	500±30		1400±50	um	
Cladding/Coating Concentricity	≤ 12		≤ 50	um	
Jacket Diameter	900		1800	um	
Cable Jacket	3			mm	PVC
Fiber Pigtail Length	1			m	can be customized (0.3~15)
Connector	SMA905				can be customized (FC,ST,SC...)
Operating Temp.	-40~+85			°C	
Storage Temp.	-40~+85			°C	
Storage Humidity	0~90			%	
Fiber Bend Radius	$\geq 100D$ (short time) $\geq 300D$ (long time)		$\geq 8D$ $\geq 15D$	mm	D:core diameter
Proof Test	100			kpsi	
Mean Time Before Failure	2000			hr	



- (A) 200 um for FB02H1MA and FB02S1MA, 1000 um for FB10P1MA
- (B) 230 um for FB02H1MA and FB02S1MA, 1035 um for FB10P1MA
- (C) 500 um for FB02H1MA and FB02S1MA, 1400 um for FB10P1MA
- (D) 900 um for FB02H1MA and FB02S1MA, 1800 um for FB10P1MA
- (E) 3 mm

Specifications are subject to change without notice.

