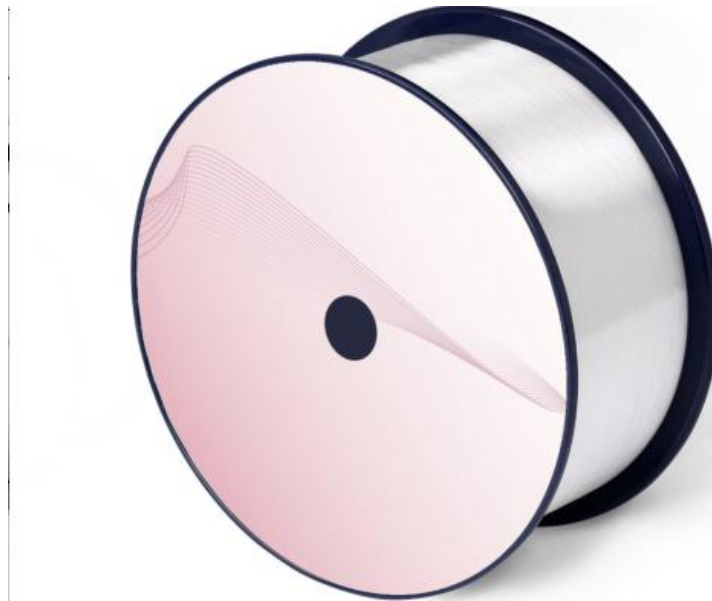


# Communication multimode optical fiber

## (62.5/125um)



### ● Product Description

62.5/125  $\mu$ m graded-index multimode fiber meets or exceeds the ISO/IEC 11801-1 OM1 specification, IEC 60793-2-10 A1-OM1 specification and TIA-492AAAF A1-OM1 specification.

### ● Product features

Excellent geometric consistency、 Low attenuation、 High bandwidth at 850nm and 1300nm wavelengths、 Manufactured using PCVD process、 Extremely precise refractive index profile、 Proprietary double-layer



UV-cured acrylate coating、 Excellent microbend resistance、 Excellent performance for tight-buffered cables、 Stable performance under a variety of environmental conditions

## ● Part Number

IP-MMF-62.5/125

## ● Application area

LAN applications、 Video, audio and data services、 Gigabit Ethernet for laser or LED light sources

## ● Core parameters

Core Diameter	Cladding Diameter	Coating Diameter
62.5±2.5um	125.0±1.0	245±7

## ● General Parameters

Photoelectric parameters:

Characteristics	Conditions	Data	Unit
<b>Geometric properties</b>			
Core diameter	--	62.5±2.5	[μm]
Core non-circularity	--	≤5.0	[%]
Cladding diameter	--	125.0±1.0	[μm]

Cladding non-circularity	--	$\leq 1.0$	[%]
Coating diameter	--	$245 \pm 7$	[ $\mu\text{m}$ ]
Coating/cladding concentricity	--	$\leq 10.0$	[ $\mu\text{m}$ ]
Coating non-circularity	--	$\leq 6.0$	[%]
Core/cladding concentricity	--	$\leq 1.5$	[ $\mu\text{m}$ ]
Fiber length	--	Longest to 17.6	[km/coil]
<b>Optical properties</b>			
Attenuation	850nm	$\leq 2.7$	[dB/km]
	1300nm	$\leq 0.6$	[dB/km]
Full injection bandwidth	850nm	$\geq 200$	[MHz $\cdot$ km]
	1300nm	$\geq 500$	[MHz $\cdot$ km]
Numerical aperture	--	$0.275 \pm$ $0.015$	--
Group refractive index	850nm	1.496	--
	1300nm	1.491	--
Zero dispersion wavelength	--	1320~1365	[nm]
Zero dispersion slope	$1320\text{nm} \leq \lambda_0 \leq$ 1348nm	$\leq 0.11$	[ps/(nm <sup>2</sup> $\cdot$ km) ]
	$1348\text{nm} \leq \lambda_0 \leq$ 1365nm	$\leq 0.001$ (1458- $\lambda$ 0)	[ps/(nm <sup>2</sup> $\cdot$ km) ]



<b>Macrobending loss</b>	--	--	--
<b>100 turns, radius 37.5mm</b>	<b>850nm</b>	<b>≤0.50</b>	<b>[dB]</b>
	<b>1300nm</b>	<b>≤0.50</b>	<b>[dB]</b>
<b>Backscattering characteristics 1300nm</b>			
<b>Steps (average of bidirectional measurements)</b>	--	<b>≤0.10</b>	<b>[dB]</b>
<b>Irregularities and point discontinuities in the length direction</b>	--	<b>≤0.10</b>	<b>[dB]</b>
<b>Attenuation non-uniformity</b>	--	<b>≤0.10</b>	<b>[dB/km]</b>
<b>Environmental Characteristics 850nm and 1300nm</b>			
<b>Temperature cycle additional attenuation</b>	<b>-60°C to 85°C</b>	<b>≤0.10</b>	<b>[dB/km]</b>
<b>Temperature-humidity cycle additional attenuation</b>	<b>-10°C to 85°C, 4% to 98% relative humidity</b>	<b>≤0.10</b>	<b>[dB/km]</b>
<b>Water immersion additional attenuation</b>	<b>23°C, 30 days</b>	<b>≤0.10</b>	<b>[dB/km]</b>
<b>Dry heat additional attenuation</b>	<b>85°C, 30days</b>	<b>≤0.10</b>	<b>[dB/km]</b>
<b>Additional damp heat attenuation</b>	<b>85°C and 85%Relative</b>	<b>≤0.10</b>	<b>[dB/km]</b>

	humidity, 30days		
<b>mechanical features</b>			
<b>Filtering tension</b>	--	$\geq 9.0$	[N]
	--	$\geq 1.0$	[%]
	--	$\geq 100$	[kpsi]
<b>Coating peel strength</b>	Typical average peel strength	1.5	[N]
	Peak force	$\geq 1.3, \leq 8.9$	[N]
<b>Dynamic fatigue parameters (nd, typical value)</b>	--	20	--