

Specifications for Plastic Optical Fiber

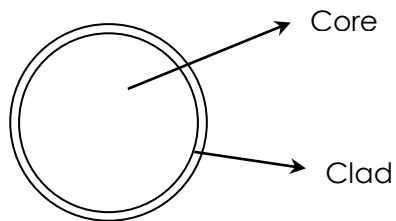
TB-1000

Issued on : April 30, 2020

Issued by : Asahi Kasei Corporation
Plastic Optical Fiber
Marketing & Development Gr

1, STRUCTURE

ITEM	UNIT	Specifications
Core Material		PMMA
Clad Material		Fluorinated Polymer
Core reflective index		1.49
Reflective index Profile		Step index
Core Diameter	μm	970 ± 60
Fiber Diameter	μm	1000 ± 60
NA		0.5
Approx. weight	g/m	1.0



2, PROPERTIES

ITEM	UNIT	Specifications	
Storage Temperature Range	°C	-55 ~ 85	*1
Application Temperature Range	°C	-55 ~ 85	*1
Operating Temperature in a Moist Atmosphere(85% RH)	°C	≤85	*1
Attenuation (23 °C 50%)	dB/km	≤ 150	*2
Attenuation (Operating Temperature)	dB/km	≤ 190	*2
Tensile Strength at Break Point	N	≥ 75	*3

Sample conditions

Temperature: T = 23°C
Humidity: RH = 50%
Storage time: t = 200h

- *1 : After 1000h, Attenuation Increase shall be ≤10% of the specification
*2 : Monochromatic light at 650nm, LNA = 0.15, 20-2m Cut-back Method
*3 : Interval between grippers = 100 mm, Tensile Speed = 100mm/min

3, RoHS certification

The product does not contain RoHS 2 hazardous substances, Cadmium, Lead, Mercury, Chromium (VI), PBB, PBDE, DIBP, DEHP, DBP and BBP intentionally.

4, IEC 61249-2 compliance

The product complies with IEC 61249-2.
Chlorine <900ppm
Bromine <900ppm
Total Bromine + Chlorine <1500ppm