

# Specifications for Plastic Optical Fiber

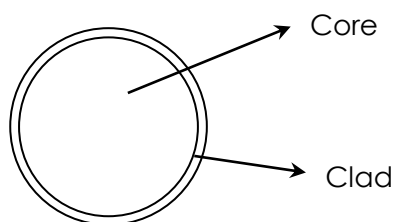
## DB-1000

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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
NA		0.5
Reflective index Profile		Step index
Core Diameter	μm	980 ± 45
Fiber Diameter	μm	1000 ± 45
Approx. weight	g/m	1.1



## 2, PROPERTIES

ITEM	UNIT	Specifications	
Storage Temperature Range	°C	-55 ~ 70	*1
Application Temperature Range	°C	-55 ~ 70	*1
Attenuation (23 °C 50%)	dB/km	≤ 160	*2
Tensile Strength at Break Point	N	≥ 75	*3
Minimum Bending Radius	mm	20	*4

### 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, 52-2m Cut-back Method
- \*3 : Interval between grippers = 100 mm, Tensile Speed = 100mm/min
- \*4 : L = 2m, 90 degree bending at the middle of fiber  
Light Source : LED (Peak Wavelength = 657nm)  
Transmission Rate ≥ 90%

### 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.