

Specifications for Plastic Optical Fiber

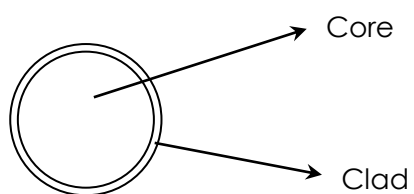
DB-125

Issued on : April 30, 2020

Issued by : Asahi Kasei Corporation

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 | Typ. 115 |
| Fiber Diameter | μm | 125 ± 20 |
| NA | | 0.5 |
| Approx. weight | g/km | 14 |



2, PROPERTIES

| ITEM | UNIT | Specifications | |
|---------------------------------|------|----------------|----|
| Storage Temperature Range | °C | -55 ~ 60 | *1 |
| Application Temperature Range | °C | -55 ~ 60 | *1 |
| Attenuation (23 °C 50%) | dB/m | ≤ 2.0 | *2 |
| Tensile Strength at Break Point | N | ≥ 0.8 | *3 |
| Minimum Bending Radius | mm | 1 | *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, 5-1m 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.