

Specification Sheet

CK-40

High-Performance Plastic Optical Fiber

E s k a™

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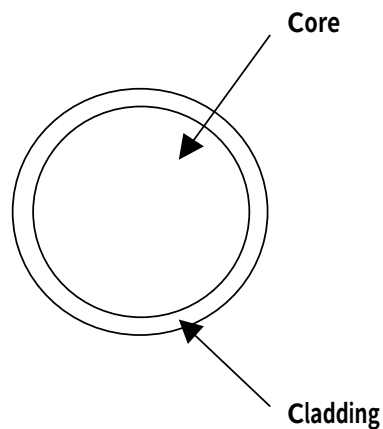
1. Scope

The specification covers basic requirements for the structure and optical performances of CK-40.

2. Structure

Table 1

Item		CK-40			
		Specification			
		Unit	Min.	Typ.	Max.
Optical Fiber 1	Core Material	—	Polymethyl-Methacrylate Resin		
	Cladding Material	—	Fluorinated Polymer		
	Core Refractive Index	—	1.49		
	Refractive Index Profile	—	Step Index		
	Numerical Aperture	—	0.5		
	Core Diameter	μm	920	980	1,040
	Cladding Diameter	μm	940	1,000	1,060
Approximate Weight		g/m	1		

Sectional View

3. Performances

Table 2

CK-40

Item		Acceptance Criterion and/or [Test Condition]	Specification			
			Unit	Min.	Typ.	Max.
Maximum Rating	Storage Temperature	No Physical Deterioration [in a Dry Atmosphere]	°C	−55	—	+70
	Operation Temperature	No Deterioration in Optical Properties * [in a Dry Atmosphere]	°C	−55	—	+70
		No Deterioration in Optical Properties ** [under 95%RH condition]	°C	—	—	+60
Optical Properties	Transmission Loss	[650nm Collimated Light] [Standard condition] [10m-1m cutback]	dB/km	—	—	200
Mechanical Characteristics	Minimum Bend Radius	Loss Increment ≤ 0.5 dB [A Quarter Bend]	mm	25	—	—
	Tensile Strength	Tensile Force at 5% Elongation; in Conformity to the JIS C 6861]	N	65	—	—

All tests are carried out under temperature of 25°C unless otherwise specified.

* Attenuation change shall be within +/- 10% after 1,000 hours.

** Attenuation change shall be within +/- 10% after 1,000 hours, except that due to absorbed water.