

Specification Sheet

SK-10

High-Performance Plastic Optical Fiber

E s k a™

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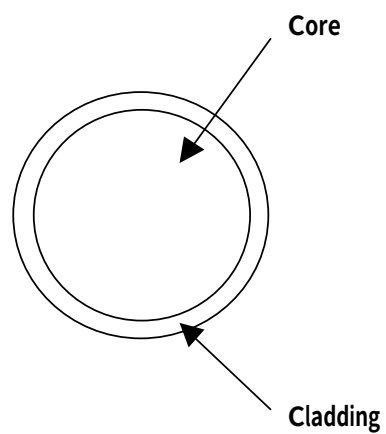
1. Scope

The specification covers basic requirements for the structure, optical and mechanical performances of SK-10

2. Structure

Table 1

		SK-10			
Item		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	217	240	263
	Cladding Diameter	μm	227	250	273
Approximate Weight		g/m	0.1		

Sectional View

3. Performances

Table 2

		SK-10				
Item		Acceptance Criterion and/or [Test Condition]	Specification			
			Unit	Min.	Typ.	Max.
Maximum Rating	Storage and Operation Temperature	No Deterioration in Optical Properties*	°C	−55	—	+70
	Operation Temperature under high humidity	No Deterioration in Optical Properties** [95%RH]	°C	—	—	+60
Optical Properties	Transmission Loss	[650nm Collimated Light] [Standard condition] [10m-1m cutback]	dB/km	—	—	300
Mechanical Characteristics	Minimum Bend Radius	Loss Increment ≤ 0.5 dB [Quarter Bend]	mm	5	—	—
	Tensile Strength	[Tensile Force at Yield Point] [JIS C 6861]	N	3	—	—

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

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

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