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Specification Sheet

SK-80

High-Performance Plastic Optical Fiber

E s k a™

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1. Scope

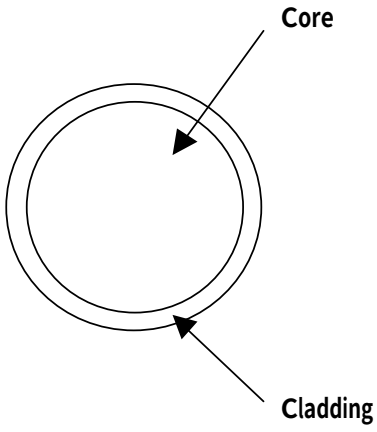
The specification covers basic requirements for the structure, optical and mechanical performances of SK-80

2. Structure

Table 1

Item		SK-80 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	1,840	1,960	2,080
	Cladding Diameter	μm	1,880	2,000	2,120
Approximate Weight		g/m	4		

Sectional View



3. Performances

Table 2

Item		Acceptance Criterion and/or [Test Condition]	SK-80 Specification			
			Unit	Min.	Typ.	Max.
Maximum Rating	Storage and Operation Temperature	No Deterioration in Optical Properties*	℃	−55	−	+70
	Operation Temperature under high humidity	No Deterioration in Optical Properties** [95%RH]	℃	−	−	+60
Optical Properties	Transmission Loss	[650nm Collimated Light] [Standard condition] [10m-1m cutback]	dB/km	−	−	150
Mechanical Characteristics	Minimum Bend Radius	Loss Increment ≦0.5dB [Quarter Bend]	mm	40	−	−
	Tensile Strength	[Tensile Force at Yield Point] [JIS C 6861]	N	260	−	−

All tests are carried out under temperature of 25℃ 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.