

Specification Sheet

SK-15
(MAP-5942)

High-Performance Plastic Optical Fiber

Eska™

MITSUBISHI RAYON CO.,LTD.

ESKA OPTICAL FIBER DIVISION

1-1, Marunouchi 1-Chome, Chiyoda-ku, Tokyo 100-8253, Japan

Phone :+81-3-6748-7521

Facsimile:+81-3-3286-1384

1. Scope

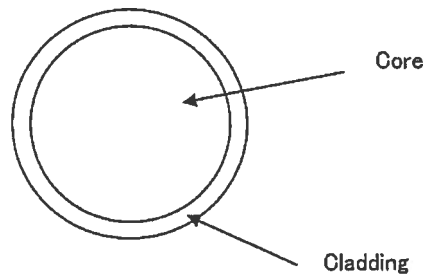
The specification covers basic requirements for the structure, optical and mechanical performances of SK-15

2. Structure

Table 1

		SK-15			
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	342	365	388
	Cladding Diameter	μm	352	375	398
Approximate Weight		g/m	0.1		

Sectional View



3. Performances

Table 2

Item		Acceptance Criterion and/or [Test Condition]	SK-15			
			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	10	-	-
	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.

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

4. Revision

REVISION No.	DATE	REMARK	DRAWN	APPVD
	Aug-16-2012	new issue	Takenaka	Okita