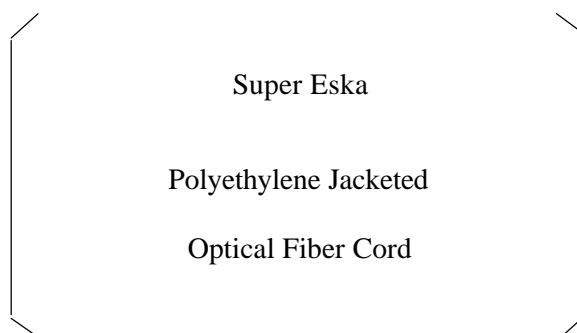


Specification Sheet

SH 4002



Super Eska

Polyethylene Jacketed

Optical Fiber Cord

High - Performance Plastic Optical Fiber

E s k a[™]

MITSUBISHI RAYON CO., LTD.
ESKA OPTICAL FIBER DIVISION

6-41 Kounan 1-Chome, Minato-ku, Tokyo, Japan

Phone : + 81 - 3 - 5495 - 3060

Facsimile : + 81 - 3 - 5495 - 3212

1.Scope

This specification covers basic requirements for the structure, optical and mechanical performances of SH4002.

2.Structure

Item		Specification				
		Unit	Min.	Typ.	Max.	
Optical Fiber	Core Material	—	Polymetyl - Methacrylate Resin			
	Cladding Material	—	Fluorinated Polymer			
	Core Refractive Index	—	1.49			
	Refractive Index Profile	—	Step Index			
	Numerical Aperture	—	0.5			
	Core Diameter	μ m	920	980	1,040	
	Cladding Diameter	μ m	940	1,000	1,060	
Number of Fibers		—	2			
Jacket	Material and Color		—	Polyethylene , Black		
	Dimension	Minor Axis	mm	2.13	2.20	2.27
		Major Axis	mm	4.2	4.3	4.4
	Indication on the Jacket		—	SUPER ESKA ; Blue		
Approximate Weight		g / m	8			

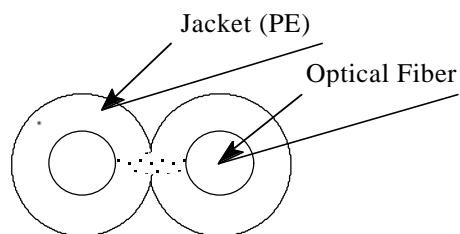
Sectional View

Table2

SH 4002

Item		Acceptance Criterion and / or [Test Condition]	Specification			
			Unit	Min.	Typ.	Max.
Maximum Rating	Storage Temperature	No Physical Deterioration	°C	- 55	—	+ 70
	Operation Temperature	No Deterioration in Optical Properties*	°C	- 55	—	+ 70
	Operation Temperature under 95 %RH	No Deterioration in Optical Properties**	°C	—	—	+ 60
Optical Properties	Transmission Loss	[650 nm Collimated Light]	dB / km	—	—	190
	Transmission Loss under 95 %RH	[650 nm Collimated Light]	dB / km	—	—	210
Mechanical Characteristics	Minimum Bend Radius	Loss Increment =< 0.5 dB [Quarter bend]	mm	25	—	—
	Repeated Bending Endurance	Loss Increment =< 1dB [90° 25 mmR Dead Weight : 500 g]	Times	10,000	—	—
	Tensile Strength	[Tensile Force at 5% Elongation; in Conformity to the JIS C 6861]	N	140	—	—
	Twisting Endurance	Loss Increment =< 1 dB [Sample Length : 1 m Tensile Force : 4.9 N]	Times	5	—	—
	Impact Endurance	Loss Increment =< 1 dB [in Conformity to the JIS C 6861]	N.m	0.4	—	—

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 .

The specification is subject to change without notice.

The information contained herein is presented as a guide for the product selection. Please contact our business department for the issue of an official specification sheet.