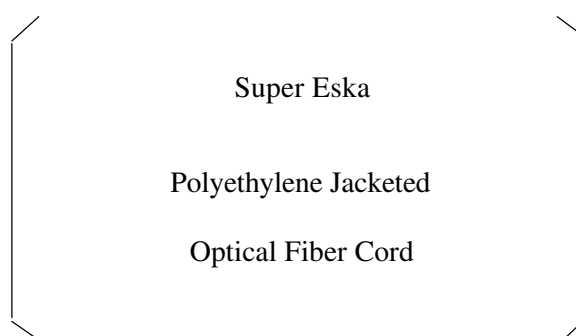


# Specification Sheet

## SH 4001



Super Eska

Polyethylene Jacketed

Optical Fiber Cord

High - Performance Plastic Optical Fiber

**E s k a**<sup>TM</sup>

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## 1.Scope

This specification covers basic requirements for the structure, optical and mechanical performances of SH4001.

## 2.Structure

Table1

SH 4001

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	μm	920	980	1,040
	Cladding Diameter	μm	940	1,000	1,060
Jacket	Material and Color	—	Polyethylene , Black		
	Diameter	mm	2.13	2.20	2.27
	Indication on the Jacket	—	SUPER ESKA ; Blue		
Approximate Weight		g / m	4		

SUPER ESKA ; Blue

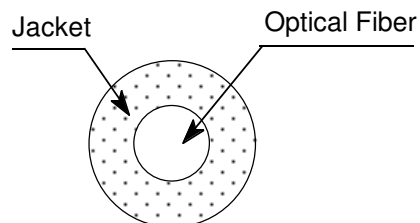
Sectional View

Table2

SH 4001

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
	Operation Temperature in a Moist Atmosphere	No Deterioration in Optical Properties** [ under 95 %RH ]	°C	—	—	+ 60
Optical Properties	Transmission Loss	ϕ50 nm Collimated Light ]	dB/km	—	—	190
	Transmission Loss under 95 %RH	ϕ50 nm Collimated Light ]	dB/km	—	—	210
Mechanical Characteristics	Minimum Bend Radius	Loss Increment =< 0.5 dB [ A Quarter Bend ]	mm	25	—	—
	Repeated Bending Endurance	Loss Increment =< 1 dB [ in Conformity to the JIS C 6861 ]	Times	10,000	—	—
	Tensile Strength	[ Tensile Force at 5Åì Elongation; in Conformity to the JIS C 6861 ]	N	70	—	—
	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 increase shall be within 10 % after 1,000 hours.

\*\* Attenuation increase 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.