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Specification Sheet

SH 4001

Super Eska

Polyethylene Jacketed

Optical Fiber Cord

High - Performance Plastic Optical Fiber

Eska™

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1.Scope

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

2.Structure

Table1

Item		SH 4001			
		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

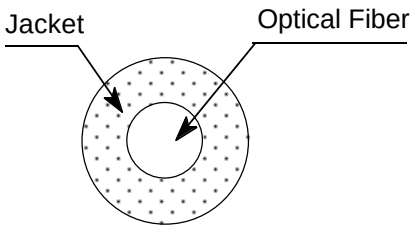

Table2

Item		Acceptance Criterion and / or [Test Condition]	SH 4001 Specification			
			Unit	Min.	Typ.	Max.
Maximum Rating	Storage Temperature	No Physical Deterioration [in a Dry Atmosphere]	ºC	- 55	—	+ 70
	Operation Temperature	No Deterioration in Optical Properties* [in a Dry Atmosphere]	ºC	- 55	—	+ 70
	Operation Temperature in a Moist Atmosphere	No Deterioration in Optical Properties** [under 95 %RH]	ºC	—	—	+ 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 [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 25ºC unless otherwise specified.

* Attenuation increase shall be within 10 % after 1,000 hours.
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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.