

Industrial Fiber Optics

# Specification Sheet

SH1064

Super Eska

Polyethylene Jacketed

Optical Fiber Bundle Cord

High-Performance Plastic Optical Fiber

E s k a™

**MITSUBISHI RAYON CO.,LTD.**

ESKA OPTICAL FIBER DIVISION

6-41 Konan 1-Chome,Minato-ku,Tokyo,JAPAN

Phone :+81-3-5495-3060

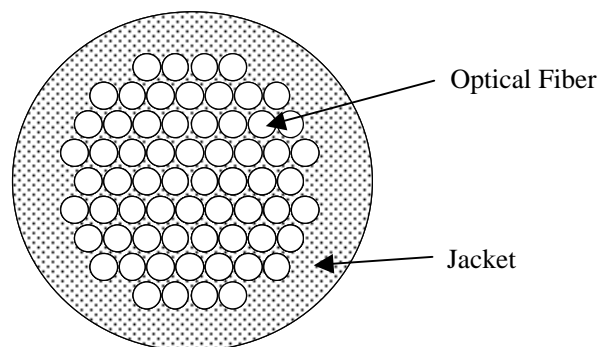
Facsimile :+81-3-5495-3212

1. Scope  
This specification covers basic requirements for the structure and optical performances of SH1064.
2. Structure

Table 1

Item		SH1064			
		Specification			
		Unit	Min.	Typ.	Max.
Optical Fiber	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	231	255	279
	Cladding Diameter	μm	241	265	289
Number of Fibers		-	64		
Jacket	Material	-	Polyethylene		
	Color	-	Black		
	Diameter	mm	3.18	3.25	3.32
Approximate Weight		g/m	8.8		
Indication on the Jacket		-	····· SUPER ESKA ····· ;Blue		

Sectional View



## 3. Performances

Table 2

Item		Acceptance Criterion and/or [ Test Condition ]	SH1064 Specification			
			Unit	Min.	Typ.	Max.
Maximum Rating	Storage Temperature	No Physical Deterioration [ in a Dry Atmosphere ]		-55	-	+70
	Operation Temperature	No Deterioration in Optical Properties * [ in a Dry Atmosphere ]		-55	-	+70
		No Deterioration in Optical Properties ** [ under 95%RH condition ]		-	-	+60
Optical Properties	Transmission Loss [ 650nm Collimated Light ]	[ 25 50%RH ]	dB/km	-	-	650
		[ Operation Temperature ]	dB/km	-	-	700
Mechanical Characteristics	Minimum Bend Radius	Loss Increment 0.5dB [ A Quarter Bend ]	mm	5	-	-
	Repeated Bending Endurance	Loss Increment 1dB [ in Conformity to the JIS C 6861 ]***	Times	10000	-	-
	Tensile Strength	Tensile Force at 5% Elongation; in Conformity to the JIS C 6861 ]	N	70	-	-
	Twisting Endurance	Loss Increment 1dB [ Sample Length : 1m Tensile Force : 4.9N ]	Times	5	-	-
	Impact Endurance	Loss Increment 1dB [ in Conformity to the JIS C 6861 ]	N·m	-	-	-

All tests are carried out under temperature of 25 unless otherwise specified.

\* Attenuation change shall be within +/- 10% after 1,000 hours.

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\*\*\* Bend Angle +/-90 ° ,Bend Radius 15mm,Tension 500g