## ESKA<sup>™</sup> Polyethylene Jacketed Plastic Optical Fiber Bundle Cord: SH1064

## Manufactured by Mitsubishi Chemical Corporation

Marketed and sold by Mitsubishi International PolymerTrade Corporation

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Structure					
Core Material	Polymethyl Methacrylate Resin (PMMA)				
Cladding Material	Fluorinated Polymer				
Core Refractive Index	1.49				
Refractive Index Profile	Step Index				
Numerical Aperture	0.5				
	Unit	Typical			
Core Diameter	μm	255			
Cladding Diameter	μm	265			
Number of Fibers Bundled	64				
Jacket Diameter	mm	3.25			
Approximate Weight	g/m 8.8				

Packaging				
Spool Length (m)	500			
Net weight on spool (kg)	5.6			
Spool Weight (kg)	1.2			
Carton Size (mm)	365 X 365 X 160			
Carton Weight (kg)	6.2			
Master Carton	5 spools			
Jacket				
Color and Material	Black, Polyethylene			
Indication on Jacket	SUPER ESKA; Blue			

Performance		Criteria for Acceptance and/or [Test Conditions]	Unit	Values
Operation Temperature		No deterioration in optical properties [in a dry atmosphere]*	°C	-55 ~ 70
Operating Temperature in a Moist Atmosphere		No deterioration in optical properties [under 95% RH]**	°C	Max.60
Optical Properties	Transmission Loss [650nm Collimated Light]	[25°C 50% RH]	dB/km	Max.650
		[Operation Temperature]	dB/km	Max.700
Mechanical Character- istics	Minimum Bend Radius	Loss increment =< 0.5dB [a quarter bend]	mm	Min.64
	Repeated Bending Endurance	Loss increment =< 1 dB [in conformity to the JIS C 6861]***	Times	Min.1,000
	Tensile Strength	[Tensile force at 5% Elongation; in conformity to the JIS C 6861]	N	Min.70
	Twisting Endurance	Loss Increment =< 1 dB [sample length: 1m, Tensile Force: 4.9N]	Times	Min.5
	Impact Endurance	Loss Increment =< 1 dB [in Conformity to the JIS C 6861]	N⋅m	-

Notes: Performance tested in conditions under 25°C unless otherwise indicated.

- \* Attenuation increase shall be <10% after 1,000 hours.
- \*\* Attenuation increase shall be <10% after 1,000 hours, except when due to absorbed water.
- \*\*\* Bend Angle +/-90°, Bend Radius 15mm, Tension 500g.

## **Applications**

The SH-Series of single-jacket cables are typically used as data transfer media and sensor media.

The information contained herein is presented as a guide to product selection. It is subject to change without notice, and should not be regarded as a representation, warranty or guarantee with regard to the quality, characteristics or use of this product

