

# ESKA™ OPTOHOME Polyethylene Jacketed Optical Fiber Cord: RH4002-1.5

Manufactured by Mitsubishi Rayon Co., Ltd.

Marketed and sold by Mitsubishi International PolymerTrade Corporation

January 2010

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	980
Cladding Diameter	μm	1,000
Number of Fibers	2	
Jacket Dimension - Minor Axis	mm	1.5
Jacket Dimension – Major Axis	mm	3.0
Approximate Weight	g/m	3.7

Packaging	
Spool Length (m)	500
Net weight on spool (kg)	3.2
Spool Weight (kg)	1.2
Carton Size (mm)	365 X 365 X 160
Carton Weight (kg)	3.8
Master Carton	5 spools
Jacket	
Color and Material	Black, Polyethylene
Indication on Jacket	One of the pair, ...ESKA OPTOHOME MITSUBISHI RAYON...; pink

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.170
		[Operation Temperature]	dB/km	Max.190
	Bandwidth	[launch NA > Fiber NA]	MHz · 50m	Min.40
Mechanical Characteristics	Minimum Bend Radius	Loss increment =< 0.5dB [a quarter bend]***	mm	Min.25
	Repeated Bending Endurance	Loss increment =< 1 dB [in conformity to the JIS C 6861]****	Times	Min.10,000
	Tensile Strength	[Tensile force at 5% Elongation; in conformity to the JIS C 6861]	N	Min.130
	Twisting Endurance	Loss Increment =< 1 dB [sample length: 1m, Tensile Force: 4.9N]	Times	-
	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.

\*\*\* In the direction of the minor axis.

\*\*\*\* Bend Angle +/-90°C, Bend Radius 15mm, Tension 1,000g.

## Applications

RH4002-1.5 is for home networking applications.

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



2 Penn Plaza East, 11th Floor, Newark, NJ 07105

Please visit <http://www.fiberopticpof.com/> to locate a sales representative near you.