

ESKA™ OPTOHOME Poly-Vinyl-Chloride Jacketed Optical Fiber Cord: RHVV4002-CMR

Manufactured by Mitsubishi Chemical Corporation
Marketed and sold by Mitsubishi International PolymerTrade Corporation

March 2011

Structure			Packaging	
Core Material	Polymethyl Methacrylate Resin (PMMA)		Spool Length (m)	500
Cladding Material	Fluorinated Polymer		Net weight on spool (kg)	6.6
Core Refractive Index	1.49		Spool Weight (kg)	1.2
Refractive Index Profile	Step Index		Carton Size (mm)	365 X 365 X 160
Numerical Aperture	0.5		Carton Weight (kg)	7.2
	Unit	Typical	Master Carton	5 spools
Core Diameter	μm	980	Outer Sheath	
Cladding Diameter	μm	1,000	Color and Material	White, Poly-Vinyl-Chloride
Number of Fibers	2		Indication on Outer Sheath	Green; (UL)E336876 MITSUBISHI RAYON ESKA OPTOHOME TYPE OFNR FT4
Jacket Color and Material	Black, Poly-Vinyl-Chloride		Fire Rating	Riser OFNR FT4
Outer Sheath Dimension - Minor Axis	mm	2.2		
Outer Sheath Dimension - Major Axis	mm	4.4		
Approximate Weight	g/m	11		

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.5,000
	Tensile Strength	[Tensile force at 5% Elongation; in conformity to the JIS C 6861]	N	Min.140
	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

RHVV4002-CMR is for home networking applications with fire retardancy requirement.

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