

# ESKA™ MEGA Polyethylene-jacketed Optical Fiber Cord: **MHCP-4001**

Manufactured by Mitsubishi Rayon Co., Ltd.

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	
Numerical Aperture	0.3	
Refractive Index Profile	(Step Index)	
	<i>Unit</i>	<i>Typical</i>
Core Diameter	μm	980
Cladding Diameter	μm	1000
Jacket Diameter	mm	2.2 ± 0.07
Fiber Diameter (mm) X # of fibers	1.0 mm X 1	
Approximate Weight (g/m)	5.6	

Packaging	
Spool Length (m)	500
Net weight on spool (kg)	3.9
Spool Weight (kg)	3.8
Carton Size (mm)	470 X 470 X 180
Carton Weight (kg)	7.7
Master Carton	5 spools
Jacket	
Color and Material	Black CPE
Indication on Jacket	ESKAMEGA Pink – UL1581

Performance		Criteria for Acceptance and/or Test Conditions	Unit	Values
Temperature Range		No deterioration in optical properties *	°C	-40 ~ 85
Operating Temperature under Conditions of High Humidity		No deterioration in optical properties [95% RH] **	°C	=<75
Optical Properties	Transmission Loss	650nm collimated light (standard conditions) [10m – 1m cutback]	dB/km	=<160
	Loss under 95% RH			=<180
	Bandwidth	Launch NA=0.3 / Length 50m@650nm	MHZ	200
Mechanical Characteristics	Minimum Bend Radius	Loss increment =< 0.5dB [Quarter bend]	mm	=>25
	Repeated Bending Endurance	Loss increment =< 1 dB [conforms to JIS C 6861]	Times	=>5000
	Tensile Strength	Tensile force at yield point [JIS C 6861]	N	=>70
	Twisting Endurance	Loss increment =< 1 dB [sample length = 1 m, tensile force = 4.9N]	Times	=>5
	Impact Endurance	Loss increment =< 1 dB [conforms to JIS C 6861]	N.m	=>0.4

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

\* Attenuation increase is <10% after 1000 hours

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Applications
The MH-Series of cables are typically used as data transfer media for high bandwidth and network requirements.

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



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