ESKA[™] Polyethylene Buffered and Polyvinylchloride Jacketed Optical Fiber Cord: SHEV4001-5.0

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	μm 1,000			
Buffer Material and Color	Polyethylene, Black				
Buffer Diameter	mm 2.20				
Jacket Diameter	mm 5.00				
Approximate Weight	g/m 27				

Packaging				
Spool Length (m)	500			
Net weight on spool (kg)	16.1			
Spool Weight (kg)	2.0			
Carton Size (mm)	470 X 470 X 180			
Carton Weight (kg)	16.7			
Master Carton	2 spools			
Jacket				
Color and Material	Polyvinylchloride, Black			
Indication on Jacket	None			

Performance		Criteria for Acceptance and/or [Test Conditions]	Unit	Values
Operation Temperature		No deterioration in optical properties [in a Dry Atmosphere]**	°C	-40 ~ 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.190
		[Operation Temperature]	dB/km	Max.210
Mechanical Character- istics	Minimum Bend Radius	Loss increment =< 0.5dB [a quarter bend]	mm	Min.35
	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]	Ν	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	0.4

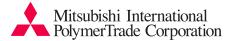
Notes: Performance tested in conditions under 25°C unless otherwise indicated.

- * 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°C, Bend Radius 15mm, Tension 500g.

Applications

SHEV4001-5.0 is typically used as an optical audio cable.

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