

ESKA™ High-performance Plastic Optical Fiber: SK-30

Manufactured by Mitsubishi Rayon Co., Ltd.

Marketed and sold by Mitsubishi International Corporation

May, 2001

Structure		
Core Material	Polymethyl-Methacrylate Resin (PMMA)	
Cladding Material	Fluorinated Polymer	
Core Refractive Index	1.49	
Numerical Aperture	0.5	
Refractive Index Profile	(Step Index)	
Attenuation (db/m)	0.15	
Approximate Weight (g/m)	0.6	
	Unit	Typical
Core Diameter	μm	735
Overall Diameter	μm	750
Fiber Diameter Tolerance	+/- 6%	

Packaging	
Spool Length (m)	2,700
N weight on spool (kg)	1.5
Spool Weight (kg)	0.7
Carton Size	286 X 286 X 130
Carton G Weight (kg)	2.5
Fiber Code	SK30
Cable Code	SH3001
Master Carton	10 Spools

Applications: Sensing

SK grade fibers are typically used for sensing temperatures, speed, liquidity levels and positioning. In addition, medical and general illumination are popular applications

Performance		Criteria for Acceptance and/or Test Conditions	Unit	Values
Temperature Range		No deterioration in optical properties *	°C	-55 -- 70
Operating Temperature Under Conditions of High Humidity		No deterioration in optical properties [95% RH] **	°C	=<60
Optical Properties	Transmission Loss	650nm collimated light (standard conditions) [10m – 1m cutback]	dB/km	=<150
Mechanical Characteristics	Minimum Bend Radius	Loss increment =< 0.5dB [Quarter bend]	mm	=>15
	Tensile Strength	Tensile force at yield point [JIS C 6861]	N	=>35

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

* Attenuation change <10% after 1000 hours

** Attenuation change <10% after 1000 hours, except when due to absorbed water

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



Mitsubishi International Corporation

655 Third Avenue New York, NY 10017

Please visit www.fiberoptic-plastic.com to locate a sales representative near you