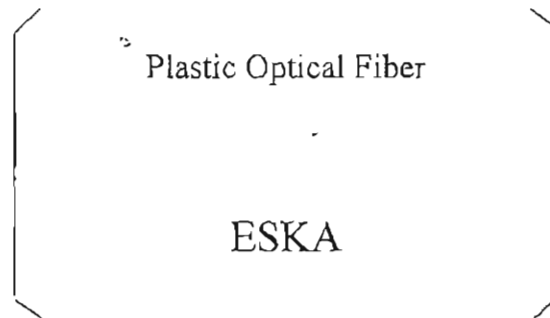


# Specification Sheet

CK - 40



High - Performance Plastic Optical Fiber

E s k a<sup>TM</sup>

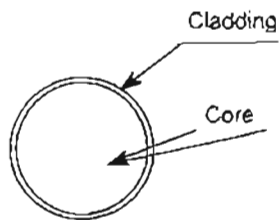
1. Scope

This specification covers basic requirements for the structure, optical and mechanical performances of CK-40.

2. Structure

Item		Specification			
		Unit	Min.	Typ.	Max.
Optical Fiber	Core Material	—	Polymethyl - Methacrylate Resin		
	Cladding Material	—	Fluorinated Polymer		
	Core Refractive Index	—	1.49		
	Numerical Aperture	—	0.5		
	Refractive Index Profile	—	Step Index		
	Core Diameter	μm	920	980	1.040
	Cladding Diameter	μm	940	1,000	1.060
Approximate Weight		g / m	1		

Sectional View



### 3.Performance

Table2

CK - 40

Item	Acceptance Criterion and / or { Test Condition }	Specification				
		Unit	Min.	Typ.	Max.	
Maximum Rating	Storage and Operation Temperature	No Deterioration in Optical Properties*	°C	- 55	—	+ 70
	Operation Temperature under high humidity	No Deterioration in Optical Properties** [ 95 %RH ]	°C	-	—	+ 60
Optical Properties	Transmission Loss	650 nm Collimated Light ] [ Standard condition ] [ 10 m - 1 m cutback ]	dB/km	—	—	200
Mechanical Characteristics	Minimum Bend Radius	Loss Increment $\leq$ 0.5dB [ Quarter bend ]	mm	20	—	—
	Tensile Strength	[ Tensile Force at Yield Point ] [ JIS C 6861 ]	N	65	—	—

All tests are carried out under temperature of 25°C unless otherwise specified.

\* Attenuation change shall be within 10 % after 1,000 hours.

\*\* Attenuation change shall be within 10 % after 1,000 hours, except that due to absorbed water .

The specification is subject to change without notice.  
The information contained herein is presented as a guide for the product selection. Please contact our  
business department for the issue of an official specification sheet.