

**Mitsubishi International Corporation**

# Specification Sheet

**CK-10**

Plastic Optical Fiber

ESKA

High-Performance Plastic Optical Fiber

E s k a™

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1. Scope

The specification covers basic requirements for the structure and optical performances of CK-10.

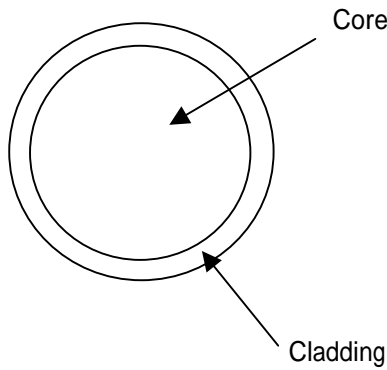
2. Structure

Table 1

CK-10
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Item		Specification			
		Unit	Min.	Typ.	Max.
Optical Fiber	Core Material	-	Polymethyl-Methacrylate Resin		
	Cladding Material	-	Fluorinated Polymer		
	Core Refractive Index	-	1.49		
	Refractive Index Profile	-	Step Index		
	Numerical Aperture	-	0.5		
	Core Diameter	μm	217	240	263
	Cladding Diameter	μm	227	250	273
Approximate Weight		g/m	0.06		

Sectional View



## 3. Performances

Table 2

Item		Acceptance Criterion and/or [ Test Condition ]	CK-10 Specification			
			Unit	Min.	Typ.	Max.
Maximum Rating	Storage Temperature	No Physical Deterioration [ in a Dry Atmosphere ]		- 55	-	+ 70
	Operation Temperature	No Deterioration in Optical Properties*		- 55	-	+ 70
		No Deterioration in Optical Properties** [ 95%RH ]		-	-	+ 60
Optical Properties	Transmission Loss	[ 650nm Collimated Light ] [ Standard condition ] [ 10m-1m cutback ]	dB/km	-	-	350
Mechanical Characteristics	Minimum Bend Radius	Loss Increment 0.5dB [ A Quarter Bend ]	mm	5	-	-
	Tensile Strength	[ Tensile Force at Yield Point ] [ JIS C 6861 ]	N	3	-	-

All tests are carried out under temperature of 25 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.