### Mitsubishi International Corporation

# Specification Sheet

CK-60

**ESKA** 

Plastic Optical Fiber

High-Performance Plastic Optical Fiber
E s k a™

## MITSUBISHI RAYON CO.,LTD.

ESKA OPTICAL FIBER DIVISION

6-41 Konan 1-Chome, Minato-ku, Tokyo 108-8506, JAPAN

Phone :+81-3-5495-3060 Facsimile:+81-3-5495-3212

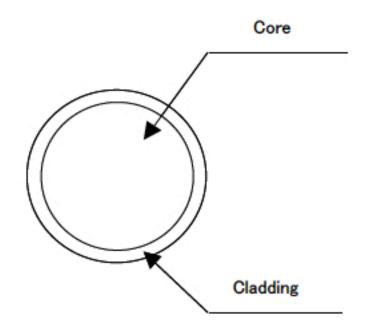
### 1. Scope

The specification covers basic requirements for the structure and optical performances of CK-60.

#### 2. Structure

Table 1				CK-60			
Item		Specification					
		Unit	Min.	Тур.	Max.		
Optical Fiber	Core Material	I	Polymethyl-Methacrylate Resin				
	Cladding Material		Fluorinated Polymer				
	Core Refractive Index		1.49				
	Refractive Index Profile		Step Index				
	Numerical Aperture	-	0.5				
	Core Diameter	μm	1380	1470	1560		
	Cladding Diameter	μm	1410	1500	1590		
Approximate Weight		g/m		2.2			

### Sectional View



#### Performances

Table 2 CK-60

						7.
Item		Acceptance Criterion and/or [ Test Condition ]	Specification			
			Unit	Min.	Тур.	Max.
Maximum Rating	Storage Temperature	No Deterioration in Optical Properties	°C	- 55	1	+70
	Operation Temperature	No Deterioration in Optical Properties* [ in a Dry Atmosphere ]	°C	- 55		+70
		No Deterioration in Optical Properties** [ 95%RH ]	°C		-	+60
Optical Properties	Transmission Loss	[ 650nm Collimated Light ] [ Standard condition ] [ 10m-1m cutback ]	dB/km	\$ <mark>1</mark>	) 	200
Mechanical Characteristics	Minimum Bend Radius	Loss Increment ≦0.5dB [ A Quarter Bend ]	mm	40	-	
	Tensile Strength	[ Tensile Force at Yield Point ] [ JIS C 6861 ]	N	145	d.	

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

<sup>\*</sup> 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.