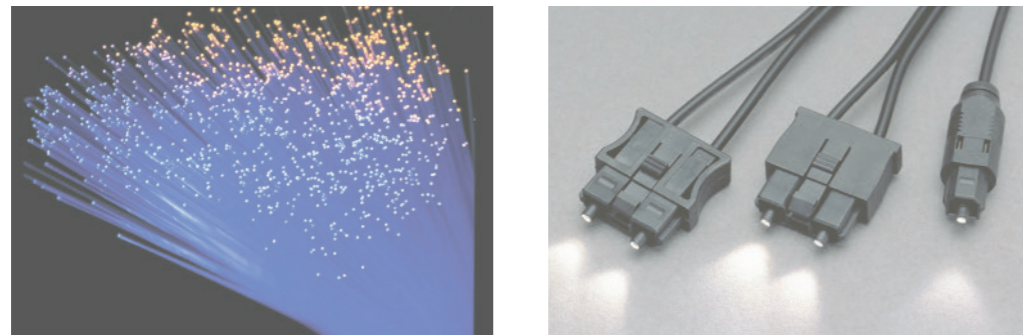


# POF - Polymer Optical Fiber

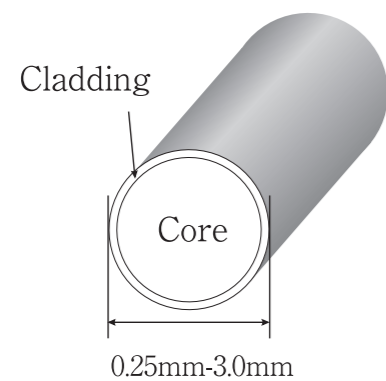
**ESKA** is high performance optical fiber developed and refined by Mitsubishi Chemical since 1975. Polymer optical fiber has a concentric double-layer structure with high-purity polymethyl methacrylate (known as PMMA) core and specially selected transparent fluorine polymer cladding. The cladding has a lower refractive index than that of the core. This special structure efficiently keeps the launched light power.



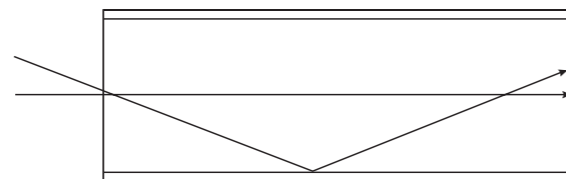
## features

- 1) Low transmission loss in the range of visible light spectrum.
- 2) Large core diameter and wide acceptance angle.
- 3) Excellent durability and reliability.
- 4) Large alignment tolerance for connections.

■ Structure



■ Concept



# Products

	bare fiber	cable & bare fiber	cable	cable	cable
grade	ESKA	SUPER ESKA	ESKA PREMIER	ESKA MEGA	ESKA Hi-Temp
application	Lighting, Illuminations, Signs	Consumer Data, Sensors, Lighting	Industrial Data, Automotive	Digital home appliance	Industrial Data, Sensors
characteristics	various diameter	high quality standard	high reliability, various jacket	low NA, wide bandwidth	Heat resistant
fiber code	CK	SK	not available	not available	not available
cable code	not available	SH	GH	MH	BH
refractive index	1.49	1.49	1.49	1.49	1.49
Numerical Aperture (NA)	0.5	0.5	0.5	0.3	0.58
temperature range	-55°C ~ 70°C	-55°C ~ 70°C	-55°C ~ 85°C	-55°C ~ 85°C	-55°C ~ 105°C
transmission loss *	200dB/km (CK40)	190dB/km (SH4001)	170dB/km (GH4001)	160dB/km (MH4001)	200dB/km (BH4001)
bandwidth **	not specified	not specified	40MHz	200MHz	not specified

\* measured with 650nm collimated light

\*\* measured at 50m