

Specification Sheet

VK-40
(MAP-5746-2)

High-Performance Plastic Optical Fiber

Eska™

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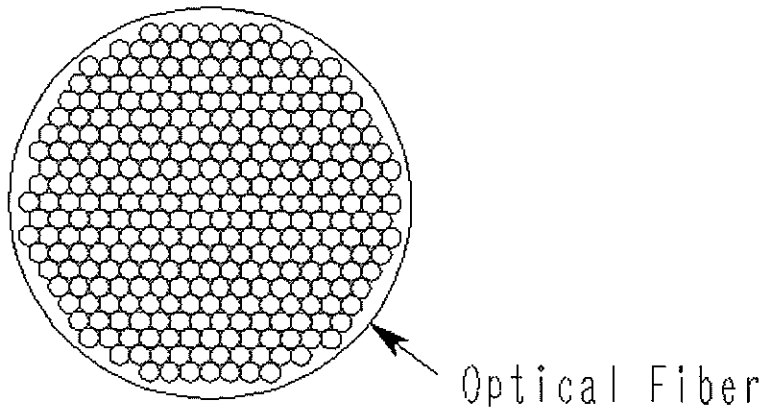
1. Scope
This specification covers basic requirements for the structure and optical performances of VK-40.
2. Structure

Table 1

VK-40

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	—	10	—
	Number of cores	—	7095		
	Fiber Diameter	μm	940	1,000	1,060
Approximate Weight		g/m	1.1		

Sectional View



3. Performances

Table 2

Item		Acceptance Criterion and/or [Test Condition]	VK-40 Specification			
			Unit	Min.	Typ.	Max.
Maximum Rating	Storage Temperature	No Physical Deterioration [in a Dry Atmosphere]	°C	-40	-	+60
	Operation Temperature	No Deterioration in Optical Properties* [in a Dry Atmosphere]	°C	0	-	+60
		No Deterioration in Optical Properties** [under 95%RH condition]	°C	-	-	+50
Optical Properties***	Transmission Loss [650nm Collimated Light]	[25°C 50%RH]	dB/km	-	-	500
Mechanical Characteristics	Minimum Bend Radius	Loss Increment ≤ 0.5 dB [A Quarter Bend]	mm	1	-	-
	Tensile Strength	Tensile Force at 5% Elongation; in Conformity to the JIS C 6861]	N	45	-	-

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 number of dead cores or sick cores is less than or equal 10 pixels.

4. Revision

REVISION No.	DATE	REMARK	DRAWN	APPVD
	Dec,04,2012	new issue	Takenaka	Okita
-1	Aug,14,2013	We deleted the DRAFT.	Takenaka	Okita
-2	Sep,09,2013	Correction	Takenaka	Okita