

# Specification Sheet

VK-60  
( MAP-5747-2 )

High-Performance Plastic Optical Fiber

E s k a™

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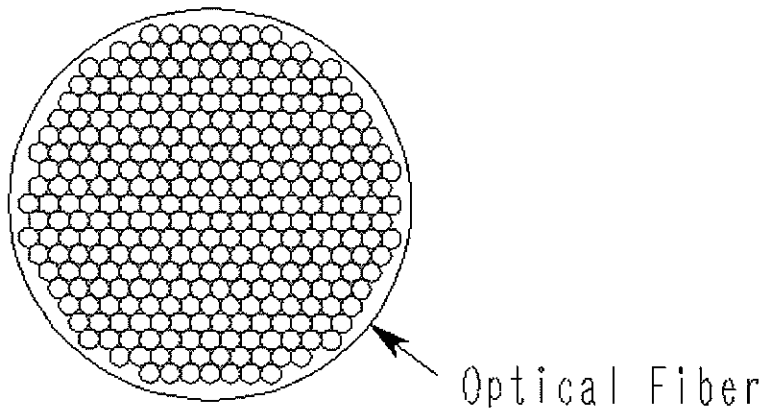
1. Scope  
This specification covers basic requirements for the structure and optical performances of VK-60.
2. Structure

Table 1

VK-60

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	—	16	—
	Number of cores	—	7095		
	Fiber Diameter	μm	1410	1,500	1,590
Approximate Weight		g/m	2.4		

Sectional View



## 3. Performances

Table 2

Item		Acceptance Criterion and/or [ Test Condition ]	VK-60 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	-	-	400
Mechanical Characteristics	Minimum Bend Radius	Loss Increment $\leq 0.5$ dB [ A Quarter Bend ]	mm	1	-	-
	Tensile Strength	Tensile Force at 5% Elongation; in Conformity to the JIS C 6861 ]	N	110	-	-

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

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

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\*\*\* 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