



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



Specification Sheet

SH-1001-1.0

(MAP-5814)

High-Performance Plastic Optical Fiber

E s k a™

mitsubishi MITSUBISHI RAYON CO.,LTD.

Plastic Molding Material Department

1-1, Marunouchi 1-Chome, Chiyoda-ku, Tokyo 100-8253, Japan

Phone :+81-3-6748-7518

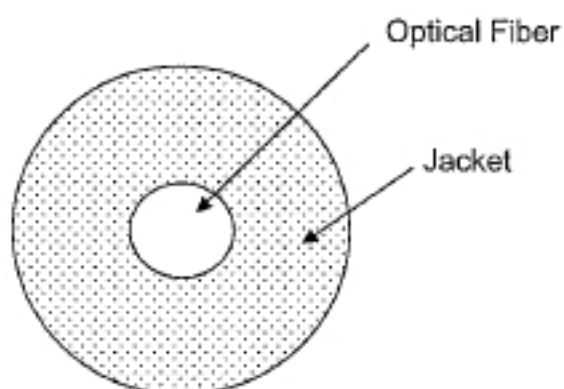
Facsimile:+81-3-3286-1366

1. Scope
This specification covers basic requirements for the structure and optical performances of SH-1001-1.0.
2. Structure

Table 1

Item		SH-1001-1.0			
		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
Jacket	Material	—	Polyethylene		
	Color	—	Black		
	Diameter	mm	0.95	1.00	1.05
Approximate Weight		g/m	0.7		
Indication on the Jacket		—	None		

Sectional View



3. Performances

Table 2

SH-1001-1.0

Item		Acceptance Criterion and/or [Test Condition]	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* [in a Dry Atmosphere]	℃	-55	—	+70
		No Deterioration in Optical Properties** [under 95%RH condition]	℃	—	—	+60
Optical Properties	Transmission Loss [650nm Collimated Light]	[25℃ 50%RH]	dB/km	—	—	400
		[Operation Temperature]	dB/km	—	—	420
Mechanical Characteristics	Minimum Bend Radius	Loss Increment ≤ 0.5 dB [A Quarter Bend]	mm	5	—	—
	Repeated Bending Endurance	Loss Increment ≤ 1 dB [in Conformity to the JIS C 6861]***	Times	—	—	—
	Tensile Strength	Tensile Force at 5% Elongation [in Conformity to the JIS C 6861]	N	4	—	—
	Twisting Endurance	Loss Increment ≤ 1 dB [Sample Length : 1m Tensile Force : 4.9N]	Times	—	—	—
	Impact Endurance	Loss Increment ≤ 1 dB [in Conformity to the JIS C 6861]	N·m	—	—	—

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.

*** Bend Angle +/-90°, Bend Radius 15mm, Tension 500g

4. Revision

REVISION No.	DATE	REMARK	DRAWN	APPVD
	Dec 7, 2011	new issue	Takenaka	Okita