



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!



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# Specification Sheet

SK-10

Super ESKA  
Plastic Optical Fiber

High-Performance Plastic Optical Fiber

E s k a™

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1. Scope

The specification covers basic requirements for the structure, optical and mechanical performances of SK-10

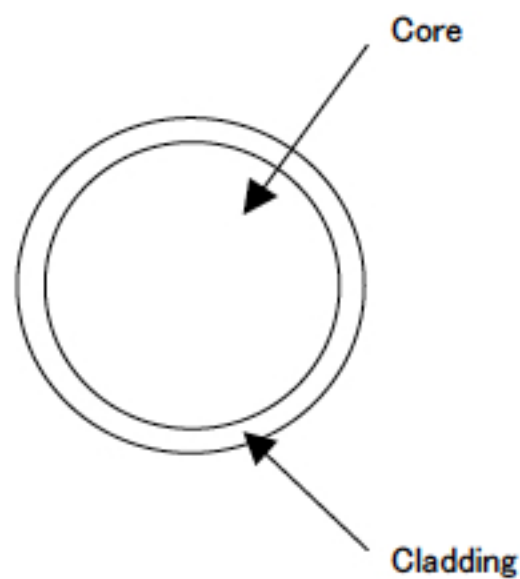
2. Structure

Table 1

|       |
|-------|
| SK-10 |
|-------|

| Item               |                          | Specification |                               |      |      |
|--------------------|--------------------------|---------------|-------------------------------|------|------|
|                    |                          | Unit          | Min.                          | Typ. | Max. |
| Optical Fiber 1    | 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  |
| Approximate Weight |                          | g/m           | 0.06                          |      |      |

Sectional View



## 3. Performances

Table 2

|                               |   | SK-10  |               |      |      |      |
|-------------------------------|---|--|---------------|------|------|------|
| Item                          |   | Acceptance Criterion<br>and/or<br>[ Test Condition ]                       | Specification |      |      |      |
|                               |   |  | Unit          | Min. | Typ. | Max. |
| Maximum<br>Rating             | Storage and<br>Operation<br>Temperature         | No Deterioration<br>in Optical Properties*                                 | °C            | - 55 | -    | +70  |
|                               | Operation<br>Temperature under<br>high humidity | No Deterioration<br>in Optical Properties**<br>[ 95%RH ]                   | °C            | -    | -    | +60  |
| Optical<br>Properties         | Transmission Loss                               | [ 650nm Collimated Light ]<br>[ Standard condition ]<br>[ 10m-1m cutback ] | dB/km         | -    | -    | 300  |
| Mechanical<br>Characteristics | Minimum<br>Bend Radius                          | Loss Increment $\leq 0.5$ dB<br>[ Quarter Bend ]                           | mm            | 5    | -    | -    |
|                               | Tensile Strength                                | [Tensile Force at Yield Point]<br>[JIS C 6861 ]                            | N             | 3    | -    | -    |

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.