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**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

YD/T 2554.1-2013

Plastic optical fiber connector - Part 1: Type LC

塑料光纤活动连接器 第1部分：LC型

(English Translation)

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Table of Contents

Foreword...	3
1 Scope...	4
2 Normative References...	4
3 Terms and Definitions...	4
4 Technical Requirements...	5
4.1 Classification...	5
4.2 Interface diagrams and mating dimension...	6
4.3 Materials...	16
4.4 Standard Connector...	16
4.5 Optical Performance of Type-LC Connector...	16
4.6 Working Temperature of Type-LC Connector...	17
4.7 Environmental Protection Conformance...	17
5 Measurement and Testing...	17
5.1 Appearance Inspection...	17
5.2 Appearance Dimensions...	17
5.3 Measurement and Testing Conditions...	17
5.4 Measurement of Insertion Loss...	18
5.5 Testing...	19
6 Procedure of Quality Assessment...	21
6.1 General...	21
6.2 Qualification Approval Procedure...	21
6.3 Quality Conformity Inspection...	23
7 Inspection...	26
7.1 Classification of Inspection...	26
7.2 Exit-factory Inspection...	26
7.3 Type Inspection...	26
8 Marking, Packaging, Transport and Storage...	27
8.1 Marking...	27
8.2 Packaging...	27
8.3 Transport...	27
8.4 Storage...	27

Foreword

"Plastic Optical Fiber Connector" is currently divided into the following parts.

- Part 1. Type LC;
- Part 2. Type SC;
- Part 3. Type FC.

This Part is Part 1 of "Plastic Optical Fiber Connector".

This Part was drafted according to the rules given in GB/T 1.1-2009.

This Part was prepared by reference to IEC 61754-20-2012 "Fibre Optic Connector Interfaces - Part 20. Type LC Connector Family".

1 Scope

This Part specifies the terms and definitions, technical requirements, measurement and test methods, quality assessment procedure, inspection rules and marking, packaging, transport and storage for the Type LC family of plastic optical fiber connectors.

This Part is applicable to the Type LC plastic optical fiber connectors (hereinafter referred to as "Type-LC connector").

2 Normative References

The following documents are indispensable for the application of this document. For the dated references, only the edition cited applies. For the undated references, the latest edition of the referenced document (including any amendments) applies.

GB/T 2828.1-2003 Sampling Procedures for Inspection by Attributes - Part 1.

Sampling Schemes Indexed by Acceptance Quality Limit
(AQL) for Lot-by-lot Inspection

YD/T 1272.1-2003 Optical Fiber Connector - Part 1. Type LC

YD/T 1272.3-2005 Optical Fiber Connector - Part 3. Type SC

YD/T 1447-20xx Plastic Optical Fiber for Communication

SJ/T 11363-2006 Requirements for Concentration Limits for Certain Hazardous

Substances in Electronic Information Products

SJ/T 11364-2006 Marking for Control of Pollution Caused by Electronic

Information Products

SJ/T 11365-2006 Testing Methods for Hazardous Substances in Electronic

Information Products

3 Terms and Definitions

For the purposes of this document, the terms and definitions defined in YD/T 1272.1-2003 AND the following one apply.

3.1

Type LC plastic optical fiber connector

Type LC connector that is made from plastic optical fiber for communication.

4.1.1 Plug interface

It may be divided into four types of interfaces according to the optical fiber cores and plug-pin outer diameter.

- a) phi1.250 plug-pin single-core plastic optical fiber plug interface;
- b) phi1.250 plug-pin dual-core plastic optical fiber plug interface;
- c) phi1.950 plug-pin single-core plastic optical fiber plug interface;
- d) phi1.950 plug-pin dual-core plastic optical fiber plug interface.

4.1.2 Adaptor interface

It may be divided into 8 types of interfaces according to the optical fiber cores and application.

- a) phi1.250 sheath single-core plastic optical fiber connector adapter;
- b) phi1.250 sheath single-core plastic optical fiber connector active-device receptacle interface;
- c) phi1.250 sheath dual-core plastic optical fiber connector adapter;
- d) phi1.250 sheath dual-core plastic optical fiber connector active-device receptacle interface;

- e) phi1.950 sheath single-core plastic optical fiber connector adapter;
- f) phi1.950 sheath single-core plastic optical fiber connector active-device receptacle interface;
- g) phi1.950 sheath dual-core plastic optical fiber connector adapter;
- h) phi1.950 sheath dual-core plastic optical fiber connector active-device receptacle interface.

Table 4 Mating dimensions of Single-core and Dual-core Active-device Receptacle Interfaces

Mark Unit Minimum Maximum Notes

Aa,b mm - - Inner diameter of alignment-device, see Table 5

B mm 9.9 10.0

C mm 4.5 -

D mm 3.4 3.5

E mm 2.6 2.7

F mm 0.2 0.3 Radius of curvature

G mm 4.0 4.1

H1c mm 4.60 4.75

H2c mm 4.60 4.75

I mm 2.87 2.97 Diameter

J mm 2.29 Basic dimension

Kd mm 6.25 Basic dimension

Lc ° - 0.2

M mm 1.0 1.1

N mm 0.5 0.6

O mm - 1.3

P ° 15 Typical value

AO mm 11.0 12.8

AP mm 14.5 14.7

AQ mm 2.2 2.4 Diameter