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Test methods for structural parameters of optical fibers— Optical characteristics

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> In the event of any doubts arising as to the contents, the original JIS is to be the final authority.

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Foreword

This Japanese Industrial Standard has been revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by Optoelectronic Industry and Technology Development Association (OITDA)/Japanese Standards Association (JSA) with a draft being attached, based on the provision of Article 12, paragraph (1) of the Industrial Standardization Act applied mutatis mutandis pursuant to the provision of Article 16 of the said Act. This edition replaces the previous edition (**JIS C 6825**:2009), which has been technically revised.

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Test methods for structural parameters of optical fibers—Optical characteristics

Introduction

This Japanese Industrial Standard has been prepared based on IEC 60793-1-1:2017, Edition 4, IEC 60793-1-43:2015, Edition 2, IEC 60793-1-44:2011, Edition 2 and IEC 60793-1-45:2017, Edition 2 by incorporating the part corresponding to this Standard without any modifications of the technical contents, but also adding some JIS specification contents (classification of optical fiber, standard atmospheric condition and test method for all plastic multimode optical fiber) that are not given in the said corresponding International Standards.

The dotted underlines indicate changes from the corresponding International Standard. A list of modifications with the explanations is given in Annex JA.

1 Scope

This Standard specifies the test methods for structural parameters related to the optical characteristics of optical fibers or jacketed optical fibers of single-mode optical fibers, silica-based multimode optical fibers, multi-component multimode optical fibers, plastic cladding multimode optical fibers, all plastic multimode optical fibers and intraconnection optical fibers (hereafter generically referred to as optical fibers).

NOTE The International Standards corresponding to this Standard and the symbol of degree of correspondence are as follows.

IEC 60793-1-1:2017 Optical fibres—Part 1-1: Measurement methods and test procedures—General and guidance

IEC 60793-1-43:2015 Optical fibres—Part 1-43: Measurement methods and test procedures—Numerical aperture measurement

IEC 60793-1-44:2011 Optical fibres—Part 1-44: Measurement methods and test procedures—Cut-off wavelength

IEC 60793-1-45:2017 Optical fibres—Part 1-45: Measurement methods and test procedures—Mode field diameter (overall evaluation: MOD)

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standards and **JIS** are IDT (identical), MOD (modified), and NEQ (not equivalent) according to **ISO/IEC Guide 21-1**.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS C 6820 General rules of optical fibers

NOTE Corresponding International Standards: IEC 60793-1-1 Optical fibres— Part 1-1: Measurement methods and test procedures—General and guidance and IEC 60793-2 Optical fibres—Part 2: Product specifications—General