IEC 63267-3-81

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Fibre optic interconnecting devices and passive components - Connector optical interfaces for enhanced Macro bend multimode fibre -
Part 3-81: Connector parameters of physically contacting 50 µm core diameter fibres - Non-angled polyphenylene sulphide rectangular ferrules with a single row of 12, 8, 4, or 2 fibres for reference connector applications

Dispositifs d'interconnexion et composants passifs fibroniques - Interfaces optiques des connecteurs pour fibres multimodales améliorées en macrocourbures -
Partie 3-81: Paramètres de connexion des fibres d'un diamètre de cœur de 50 µm en contact physique - Ferrules rectangulaires non inclinées en polysulfure de phénylène avec une seule rangée de 12, 8, 4 ou 2 fibres, pour les applications de connecteurs de référence

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IEC Secretariat
3, rue de Varembé
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
info@iec.ch
www.iec.ch

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IEC 63267-3-81 has been prepared by subcommittee 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics. It is an International Standard.

The text of this International Standard is based on the following documents:

Draft	Report on voting
86B/5037/FDIS	86B/5076/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

A list of all parts in the IEC 63267 series, published under the general title *Fibre optic interconnecting devices and passive components – Connector optical interfaces for enhanced macro bend multimode fibre*, can be found on the IEC website.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

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- reconfirmed,
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1 Scope

This part of the IEC 63267 series defines the dimensional limits of an optical interface for reference connectors with rectangular ferrules necessary to meet specific requirements for fibre-to-fibre interconnection of non-angled polished multimode reference connectors with rectangular ferrules intended to be used for attenuation measurements as defined in IEC 63267-2-2.

Ferrule dimensions and features are contained in the IEC 61754 series of fibre optic interface standards.

One grade of reference connector is defined in this document. The reference connector is terminated to restricted IEC 60793-2-10 A1-OM2b to A1-OM5b fibre at 850 nm band only.

The geometrical dimensions and tolerances of the specified reference connector have been developed primarily to limit the variation in measured attenuation between multiple sets of two reference connectors, and therefore to limit the variation in measured attenuation between randomly chosen reference connectors when mated with connectors in the field or factory.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60793-2-10, *Optical fibres – Part 2-10: Product specifications – Sectional specification for category A1 multimode fibres*

IEC 61300-3-4, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-4: Examinations and measurements – Attenuation*

IEC 61300-3-27, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-27: Examinations and measurements –Measurement method for the hole location of a multiway connector plug*

IEC 61300-3-30, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-30: Examinations and measurements – Endface geometry of rectangular ferrule*

IEC 61754-5:2005, *Fibre optic connector interfaces – Part 5: Type MT connector family*

IEC 61754-7-1:2014, *Fibre optic interconnecting devices and passive components – Fibre optic connector interfaces – Part 7-1: Type MPO connector family – One fibre row*

IEC 61754-18:2001, *Fibre optic connector interfaces – Part 18: Type MT-RJ connector family*

IEC 63267-1, *Fibre optic interconnecting devices and passive components – Fibre optic connector optical interfaces – Part 1: Enhanced macro bend loss multimode 50 µm core diameter fibres – General and guidance*