

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Specification for WB series glass beads with 50 Ω impedance for RF connectors

Spécification pour perles en verre de série WB à impédance de 50 Ω pour connecteurs RF



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**SPECIFICATION FOR WB SERIES GLASS BEADS
WITH 50 Ω IMPEDANCE FOR RF CONNECTORS**

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

Draft	Report on voting
46F/597/FDIS	46F/611/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.

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/standardsdev/publications.

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- reconfirmed,
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- replaced by a revised edition, or
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SPECIFICATION FOR WB SERIES GLASS BEADS WITH 50 Ω IMPEDANCE FOR RF CONNECTORS

1 Scope

This document provides the requirements for WB series glass beads with 50 Ω impedance for RF connectors, including, among other, the structure dimensions, IEC type designation, rating and characteristics, and quality assessment.

These glass beads are used for the adaption of coaxial systems to microstrip circuits used extensively in microwave communication systems such as TR modules, power modules, integrated circuits where hermetic seal is required. They can serve as a part of an RF coaxial connector, multi-channel RF connector or hybrid connector, or can be applied directly in various communication module systems as an independent product. They provide a 50 Ω normative impedance with an operating frequency limit up to 65 GHz.

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 61169-1:2013, *Radio frequency connectors – Part 1: Generic specification – General requirements and measuring methods*

IEC 62153-4-7, *Metallic communication cable test methods – Part 4-7: Electromagnetic compatibility (EMC) – Test method for measuring of transfer impedance Z_T and screening attenuation a_S or coupling attenuation a_C of connectors and assemblies up to and above 3 GHz – Triaxial tube in tube method*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
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4 Structure dimensions and IEC type designation

The structure of WB series glass beads is shown in Figure 1 and the dimensions are shown in Table 1.