

INTERNATIONAL STANDARD

**Fixed resistors for use in electronic equipment –
Part 2-10: Blank detail specification: Low-power film resistors with leads for
through-hole assembly on circuit boards (THT), for general electronic
equipment, classification level G**





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INTERNATIONAL ELECTROTECHNICAL COMMISSION

FIXED RESISTORS FOR USE IN ELECTRONIC EQUIPMENT –**Part 2-10: Blank detail specification: Low-power film resistors with leads for through-hole assembly on circuit boards (THT), for general electronic equipment, classification level G**

FOREWORD

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IEC 60115-2-10 has been prepared by IEC technical committee 40: Capacitors and resistors for electronic equipment. It is an International Standard.

This first edition cancels and replaces IEC 60115-2-1:1982. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) it employs the product classification based on application requirements as defined in the generic specification IEC 60115-1:2020;
- b) it permits the specification of additional dimensional requirements concerning the eccentricity of termination wires and the coating extending onto wires;
- c) it provides for a tabulated presentation of resistance ranges in relationship to the temperature coefficient and the tolerance;

- d) it supports solderability testing for both traditional lead-bearing soldering and up-to-date lead-free soldering, as required;
- e) it introduces a test for the specimens' robustness to electrostatic discharge;
- f) it introduces a test for the specimens' resistance to solvents;
- g) it introduces a test for the flammability of the specimens;
- h) it employs consistent stability requirements grouped in stability classes;
- i) it supports the provision of detailed visual acceptance criteria;
- j) it includes the requirement for a visual examination of the primary and proximity packaging;
- k) it provides the correlated test schedules for a qualification approval and for subsequent quality conformance inspections side by side;
- l) it employs quality assessment procedures which meet the requirements of a zero-defect approach, which evades the use of historic AQL levels and the permission of non-conforming specimens in test groups;
- m) it provides for the inclusion of specific visual acceptance criteria, to be applied in addition to those given in Annex B of the sectional specification IEC 60115-2:2023;
- n) it provides for the optional coverage of 0 Ω resistors (jumpers) within the scope of the drafted detail specification;
- o) furthermore, it employs a new document structure, for which a transition guidance is provided in Annex X.

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

| Draft | Report on voting |
|-------------|------------------|
| 40/2944/CDV | 40/3002/RVC |

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 60115 series, published under the general title *Fixed resistors for use in electronic equipment*, 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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