

## **BSI Standards Publication**

Detail Specification: Fixed low power film high stability SMD resistors – Rectangular – Stability classes 0,1; 0,25



### National foreword

This British Standard is the UK implementation of EN 140401-804:2011+A2:2019. It supersedes BS EN 140401-804:2011+A1:2013, which is withdrawn.

The start and finish of text introduced or altered by corrigendum is indicated in the text by tags. Text altered by CENELEC corrigendum October 2011 is indicated in the text by  $AC_1$ . Text altered by CENELEC corrigendum January 2012 is indicated in the text by  $AC_2$   $AC_2$ .

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to CENELEC text carry the number of the CENELEC amendment. For example, text altered by CENELEC amendment A1 is indicated by A1.

The UK participation in its preparation was entrusted to Technical Committee EPL/40X, Capacitors and resistors for electronic equipment.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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### Amendments/corrigenda issued since publication

Date	Text affected
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30 April 2012	Implementation of CENELEC corrigendum January 2012
30 April 2014	Implementation of CENELEC amendment A1:2013
30 June 2019	Implementation of CENELEC amendment A2:2019

### EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 140401-804:2011+A2

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English version

# Detail Specification: Fixed low power film high stability SMD resistors Rectangular Stability classes 0,1; 0,25

Spécification particulière: Résistances fixes à couche de haute stabilité et à faible dissipation CMS - Rectangulaires - Catégories de stabilité 0,1; 0,25

Bauartspezifikation: SMD Schicht-Festwiderstände niedriger Belastbarkeit mit hoher Stabilität -Rechteckig -Stabilitätsklassen 0,1; 0,25

This European Standard was approved by CENELEC on 2011-05-09. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.



European Committee for Electrotechnical Standardization Comité Européen de Normalisation Electrotechnique Europäisches Komitee für Elektrotechnische Normung

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#### **Foreword**

This European Standard was prepared by Technical Committee CENELEC TC 40XB, Resistors.

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 140401-804 on 2011-05-09.

This document supersedes EN 140401-804:2005.

Preceding documents on the subject covered by this specification have been:

- only on resistors without established reliability, now version A:
  - CECC 40 401-010:1995-02;
  - CECC 40 401-010:1997-10.

EN 140401-804:2011 the following significant technical changes with respect to EN 140401-804:2005:

- modification of the title;
- introduction of a test on the resistance to electrostatic discharge in 1.6 and Annex A;
- introduction of description and test methods for lead-free soldering in 1.8, 1.10.3 and Annex A;
- introduction of the code letters for temperature coefficient as given in EN 60062;
- revision of the ordering information in 1.9.4;
- revised information on pulse load capability in 1.10.6;
- revised information on resistance value drift in 1.10.7;
- revised information on current noise in 1.10.9;
- adoption of the IECQ rules of procedure, IEC QC 001002-3;
- revision of the sample quantities and the sequence of tests in Annex A.

Additionally, EN 140401-804:2011 is also an editorial revision of EN 140401-804:2005.

The following dates were fixed:

 latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement

(dop) 2012-05-09

 latest date by which the national standards conflicting with the EN have to be withdrawn

(dow) 2014-05-09

This specification is part of four documents describing fixed resistors for surface mount technology as follows:

EN 60115-1 Fixed resistors for use in electronic equipment – Part 1: Generic specification

(IEC 60115-1, mod.)

EN 140400 Sectional Specification: Fixed low power surface mount (SMD) resistors

EN 140401 Blank Detail Specification: Fixed low power film surface mount (SMD) resistors

EN 140401-804 Detail Specification: Fixed low power film high stability surface mount (SMD) resistors -

Rectangular – Stability classes 0,1; 0,25

### Foreword to amendment A1

This document (EN 140401-804:2011/A1:2013) has been prepared by CLC/TC/40XB "Resistors".

The following dates are fixed:

•	latest date by which this document has to be	(dop)	2014-10-14
	implemented at national level by		
	publication of an identical national		
	standard or by endorsement		
•	latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	2016-10-14

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

### Foreword to amendment A2

This document (EN 140401-804:2011/A2:2019) has been prepared by CLC/TC 40XB "Resistors".

The following dates are fixed:

•	latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2020-03-25
•	latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	2022-03-25

This amendment facilitates the following changes of the standard:

Clarification of a conflict between the dimensions prescribed in the document and real products. Therefore proposes to modify the dimensional provisions of Table 1 by means of a new amendment.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

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