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

EESTI STANDARDIKESKUS
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NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 140401-804:2011 sisaldab Euroopa standardi EN 140401-804:2011 ingliskeelset teksti.	This Estonian standard EVS-EN 140401-804:2011 consists of the English text of the European standard EN 140401-804:2011.
Standard on kinnitatud Eesti Standardikeskuse 30.06.2011 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 30.06.2011 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 10.06.2011.	Date of Availability of the European standard text 10.06.2011.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

ICS 31.040.10

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 140401-804

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Supersedes EN 140401-804:2005

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.

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CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Ref. No. EN 140401-804:2011 E

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

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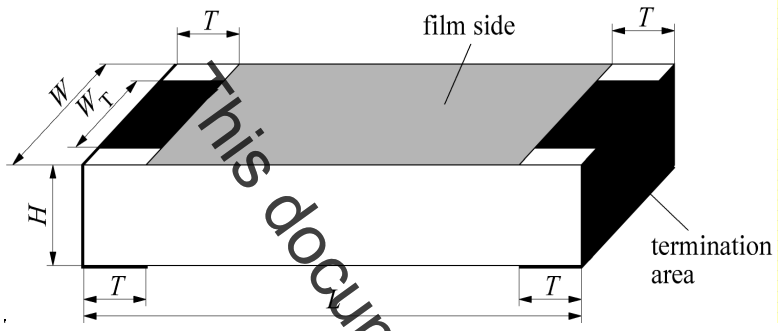
Tables

Specification available from CENELEC Central Secretariat, Avenue Marnix 17, B – 1000 Brussels, Belgium or from the National Committees members of CENELEC	**EN 140401-804**
Electronic components of assessed quality in accordance with: EN 60115-1:201X EN 140400:2003 EN 140401:2009	**Issue 2** (month) 201X
 Other shapes are permitted within the given dimensions. **Figure 1 – Outline and dimensions (see Table 1)**	Fixed low power high stability film chip resistors with rectangular base for surface mounting Style: RR Ceramic substrate with protected, insulated, resistance film and solder terminations, typically thin film Assessment level EZ [a] Version A: with 100-%-test Version E: with failure rate level and 100-%-test Stability classes 0,1 and 0,25
[a] For explanations on assessment level EZ, see 2.1.1.	

1 Characteristics and ratings

Various parameters of this component are precisely specified in this specification. Unspecified parameters may vary from one component to another.

1.1 Dimensions and ratings

Table 1 – Style and dimensions

Style		**Length *L*** mm		**Width *W*** mm		**Height *H*** mm		**Termination *T*** mm		**Mass** [a] mg
metric	inch	min.	max.	min.	max.	min.	max.	min.	max.	max.
RR 1005M	RR 0402	0,95	1,05	0,45	0,55	0,30	0,40	0,05 / 0,1 [b]	0,35	0,8
RR 1608M	RR 0603	1,50	1,70	0,70	0,90	0,35	0,55	0,10	0,50	2,1
RR 2012M	RR 0805	1,90	2,10	1,10	1,40	0,40	0,60	0,15	0,60	6,0
RR 3216M	RR 1206	3,00	3,40	1,45	1,75	0,45	0,65	0,25	0,75	10,0
RR 5025M	RR 2010	4,80	5,20	2,30	2,70	0,35	0,75	0,35	0,85	30,0

[a] For information only.

[b] The first figure indicates the termination width on the film side, the second figure the termination width on the reverse side.
Termination: $W_T \geq 0{,}75 \times W$
Thickness: 0,005 mm to 0,05 mm

Information about manufacturers who have components qualified to this detail specification is available in the approvals section of the website http://www.iecq.org.