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**Detail specification: Fixed low power non wire- wound surface mount (SMD) resistors - Cylindrical - Stability classes 0, 05; 0, 1; 0, 25; 0, 5; 1; 2**

Detail specification: Fixed low power non wire-wound surface mount (SMD) resistors - Cylindrical - Stability classes 0,05; 0,1; 0,25; 0,5; 1; 2

Bauartspezifikation: Oberflächenmontierbare nichtdrachtgewickelte Festwiderstände (SMD) niedriger Belastbarkeit - Zylindrisch - Stabilitätsklassen 0,05; 0,1; 0,25; 0,5; 1; 2

**iTeh STANDARD PREVIEW**

Spécification particulière: Résistances fixes non bobines faible dissipation pour montage en surface (CMS) - Cylindriques - Catégories de stabilité 0,05; 0,1; 0,25; 0,5; 1; 2

[SIST EN 140401-803:2003/A1:2004](https://standards.iteh.ai/catalog/standards/sist/55781d13-b87f-4e5f-a5df-616ca0e59918/sist-en-140401-803-2003-a1-2004)

**Ta slovenski standard je istoveten z: EN 140401-803:2002/A1:2003**

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**ICS:**

31.040.10      Fiksni upor      Fixed resistors

**SIST EN 140401-803:2003/A1:2004      en**

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English version

**Detail specification:**  
**Fixed low power non wire-wound surface mount (SMD) resistors -**  
**Cylindrical -**  
**Stability classes 0,05; 0,1; 0,25; 0,5; 1; 2**

Spécification particulière:

Résistances fixes non bobinées  
à faible dissipation pour montage  
en surface (CMS) -

Cylindriques -

Catégories de stabilité 0,05; 0,1; 0,25;  
0,5; 1; 2

Bauartspezifikation:

Oberflächenmontierbare  
nichtdrachtgewickelte Festwiderstände  
(SMD) niedriger Belastbarkeit -

Zylindrisch -

Stabilitätsklassen 0,05; 0,1; 0,25; 0,5; 1; 2

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This amendment A1 modifies the European Standard EN 140401-803:2002; it was approved by CENELEC on 2003-09-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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 amendment exists in two official versions (English, 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Lithuania, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.

## CENELEC

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

**Central Secretariat: rue de Stassart 35, B - 1050 Brussels**

### Foreword

This amendment was prepared by the Technical Committee CENELEC TC 40XB, Resistors.

It combines the text of two draft amendments (prA1 and prAA), which were submitted to the Unique Acceptance Procedure and were approved by CENELEC as amendment A1 to EN 140401-803:2002 on 2003-09-01.

The following dates were fixed:

- latest date by which the amendment has to be implemented  
at national level by publication of an identical  
national standard or by endorsement (dop) 2004-09-01
  - latest date by which the national standards conflicting  
with the amendment have to be withdrawn (dow) 2006-09-01
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SIST EN 140401-803:2003/A1:2004

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**Table 7 – Limits for change of resistance at tests**

**Add** footnote reference “c” to title contents “4.33 Substrate bending test”

**Add** footnote c to the bottom of the table:

- c) Limits do not apply to style RC 2211

**Insert** new paragraph after Figure 10:

**1.9.10 Temperature range extension**

Component manufacturers may specify the suitability of their components for 155 °C maximum temperature. Derating will be linear from 100 % dissipation at 70 °C to 0 % dissipation at 155 °C. Resistance change due to endurance at 155 °C temperature is expected to be twice the specified change at 125 °C.

The applicable advanced dissipation will be higher than the specified rated dissipation. Reference is required to either the same thermal circuit board conditions as used for this specification, or to specified special thermal circuit board conditions. Typical dissipation values at identical thermal conditions are given in Table 10.

Further advanced dissipation levels may be achievable in circuit board environments with improved thermal conditions, i.e. better heat flow capabilities from the component to the environment.

The component manufacturer may provide test data on the component’s performance at the extended temperature level and advanced dissipation level.

The use of an extended temperature range on a component is likely to result in an increased temperature on the component’s solder joints. This may require the selection of a suitable solder material in order to maintain the reliability of the solder joint.

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<https://standards.iteh.ai/catalog/standards/sist/55781d13-b87f-4e5f-a5df-010ca0c39910/sist-en-140401-803-2003-a1-2004>  
**Table 10 - Typical dissipation values at identical thermal conditions**

Style	Rated dissipation P <sub>70</sub> mW	Advanced dissipation P <sub>70</sub> mW
RC 2211M	200	300
RC 3715M	250	400
RC 6123M	400	600

**Annex A (normative)**

In row: 4.33 Substrate bending test; column: Performance requirements, **add** footnote reference “d” to contents “As in Table 7”

**Add** footnote d to the bottom of the table :

- d) Limit of resistance change after 4.33 Substrate bending test for RC 2211:

Resistance range	Limit of resistance change
0,22 Ω to < 10 Ω	1 % R + 0,01 Ω
10 Ω to < 100 Ω	0,25 % R
100 Ω to < 10 kΩ	0,1 % R
10 kΩ to 221 kΩ	0,05 % R
> 221 kΩ to 2,21 MΩ	0,5 % R