
ICS 31.060.40; 31.060.50

English Version

**Fixed capacitors for use in electronic equipment - Part 24:
Sectional specification - Fixed tantalum electrolytic surface
mount capacitors with conductive polymer solid electrolyte
(IEC 60384-24:2015/COR1:2016)**

Condensateurs fixes utilisés dans les équipements
électroniques - Partie 24: Spécification intermédiaire -
Condensateurs fixes électrolytiques au tantale pour
montage en surface à électrolyte solide en polymère
conducteur
(IEC 60384-24:2015/COR1:2016)

Festkondensatoren zur Verwendung in Geräten der
Elektronik -Teil 24: Rahmenspezifikation -
Oberflächenmontierbare Tantal-Elektrolyt-Kondensatoren
mit leitfähigem Polymerfestkörper-Elektrolyten
(IEC 60384-24:2015/COR1:2016)

This corrigendum becomes effective on 20 January 2017 for incorporation in the English language version of the EN.



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

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Endorsement notice

The text of the corrigendum IEC 60384-24:2015/COR1:2016 was approved by CENELEC as EN 60384-24:2015/AC:2017-01 without any modification.

INTERNATIONAL ELECTROTECHNICAL COMMISSION
 COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

IEC 60384-24
 Edition 2.0 2015-07

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**FIXED CAPACITORS FOR USE IN ELECTRONIC
 EQUIPMENT**

**CONDENSATEURS FIXES UTILISÉS DANS LES
 EQUIPEMENTS ELECTRONIQUES**

**Part 24: Sectional specification – Fixed tantalum
 electrolytic surface mount capacitors with
 conductive polymer solid electrolyte**

**Partie 24: Spécification intermédiaire –
 Condensateurs fixes électrolytiques au tantale
 pour montage en surface à électrolyte solide en
 polymère conducteur**

CORRIGENDUM 1

Corrections to the French version appear after the English text.

Les corrections à la version française sont données après le texte anglais.

Table 3 – Sampling plan for qualification approval, assessment level EZ

Replace with the following new Table 3:

| Group no. | Test | Subclause | Number of specimens <i>n</i> ^d | Permissible number of non-conforming items <i>c</i> |
|----------------|--------------------------------------------|-----------|----------------------------------------------|--------------------------------------------------------|
| 0 | High surge current ^c | 4.18 | 120+12 ^f | 0 |
| | Visual examination | 4.4 | | |
| | Dimensions | 4.4 | | |
| | Leakage current | 4.5.1 | | |
| | Capacitance | 4.5.2 | | |
| | Tangent of loss angle | 4.5.3 | | |
| | Equivalent series resistance ^c | 4.5.4 | | |
| | Spare specimens | | | |
| 1A | Resistance to soldering heat | 4.6 | 12 | 0 |
| | Component solvent resistance ^c | 4.16 | | |
| 1B | Solderability | 4.7 | 12 | 0 |
| | Solvent resistance of marking ^c | 4.17 | | |
| 2 | Substrate bending test ^e | 4.9 | 12 | 0 |
| 3 ^a | Mounting | 4.3 | 84 | 0 ^b |
| | Visual examination | 4.4.2 | | |

| | | | | | |
|--|-----|---------------------------------------------|-------|----|---|
| | | Leakage current | 4.5.1 | | |
| | | Capacitance | 4.5.2 | | |
| | | Tangent of loss angle | 4.5.3 | | |
| | | Equivalent series resistance ^c | 4.5.4 | | |
| | 3.1 | Shear test | 4.8 | 12 | 0 |
| | | Rapid change of temperature | 4.10 | | |
| | | Climatic sequence | 4.11 | | |
| | 3.2 | Damp heat, steady state | 4.12 | 12 | 0 |
| | 3.3 | Characteristics at high and low temperature | 4.13 | 12 | 0 |
| | | Surge voltage | 4.14 | | |
| | 3.4 | Endurance | 4.15 | 36 | 0 |
| | 3.5 | Storage at high temperature | 4.19 | 12 | 0 |

a The values of these inspections serve as initial inspections for the tests of Group 3.

b The capacitors found non-conforming after mounting shall not be taken into account when calculating the non-conforming items for the following tests. They shall be replaced by spare capacitors.

c If required.

d For case size/voltage combinations, see 3.4.2.

e Not applicable to capacitors, which shall be mounted on alumina substrates only, according to their detail specification.

f Spare specimens.

Table 4 – Test schedule for qualification approval

Replace the row concerning GROUP 3 with the following new row:

| | | | | |
|-------------------------------------------|---|-------------|-------------|-------------------------------------------------|
| GROUP 3 | D | | See Table 3 | |
| 4.3 Mounting | | See 4.3.3 | | |
| 4.3.2 Initial inspections | | | | |
| Capacitance | | See 4.5.2.2 | | |
| 4.3.4 Final inspections | | | | |
| Visual examination | | See 4.4.2 | | No visible damage |
| Leakage current | | See 4.5.1.2 | | See detail specification |
| Capacitance | | See 4.5.2.2 | | $ \Delta C/C < 8\%$ of value measured in 4.3.2 |
| Tangent of loss angle | | See 4.5.3.2 | | See detail specification |
| Equivalent series resistance ^e | | See 4.5.4.2 | | See detail specification |

4.3 Mounting

Replace with this new subclause 4.3:

4.3 Mounting

4.3.1 General

See IEC 60384-1:2008, 4.33, with the details in 4.3.2, 4.3.3 and 4.3.4.

4.3.2 Initial inspections

See Table 4.

4.3.3 Test conditions

The test method shall be the reflow method and reflow temperature profile specified in the detail specification.

4.3.4 Final inspections and requirements

See Table 4.