



## DOCUMENT CHANGE REQUEST

DCR number 1359 Changes required for: General

Date: 2020/10/20

Date sent: 2020/07/17

Originator: Steve Thacker

Organisation: ESCC Executive  
Secretariat

Status: IMPLEMENTED

Title: Capacitors Leadless Surface Mounted Tantalum Solid Electrolyte, based on type CTC21

Number: 3012/002

Issue: 3

Other documents affected:

Page:

Total reformat/re-write of ESCC Detail Specification 3012/002 issue 3 as part of the ongoing conversion of legacy ESA/SCC specifications to the ESCC format as well as reflecting changes in the recently converted ESCC Generic Specification No. 3012 issue 4.

The layout, format and general content of 3012/002 Draft 4 is based on other converted ESCC Detail Specifications (see attached for proposed 3012/002 Draft 4).

The technical content of ESCC 3012/002 Draft 4 remains closely based on the original ESCC 3012/002 issue 3 except as detailed herein.

Paragraph:

see below

Original wording:

as per current spec

Proposed wording:

Total reformat of this Detail Specification (from the range of various ESCC Detail Specifications, 3012/xxx, for capacitors under Generic Specification No. 3012) as part of the ongoing conversion to the ESCC format.

See below for summary of changes, also see attached the proposed 3012/002 Draft 4.

Note: known support for active procurement against this specification includes the following Manufacturers:

- Firadec (is willing to support procurement of all Variants).

Summary of changes to the current format, layout and content is as follows:

General

Rewording and restructure of various sections and paragraphs of the specification, plus other editorial changes based on the layout and editorial content of other Detail Specifications already converted to ESCC format.

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In addition, editorial and technical amendments resulting from the changes made to the test requirements of the Generic Specification No. 3012.

Specific amendments include:

- Table 1(b):

Ripple Current rating added using values from Table 1(a)

Maximum soldering time for wave soldering is added (5s)

- Figure 1(b) is replaced by an equivalent note.

- Para 4.2,:

Some deviations are no longer required (requirements are moved).

Ripple Current test amended to clarify testing periodicity, sampling (0 fails allowed) & minimum duration. Test requirements added to 'Table 5' (in Para 2.4)

- Para 4.3.2, Weight amended to be the same as for 3012/003 (2g & 3.6g instead of 1.8g & 3.3g)

- Para 4.5,

ESCC component number is amended (due to SCC level B/C being deleted).

Marking items now include ESCC qualified components symbol.

- Table 2: Capacitance change limits are now absolute limits (i.e. based on specified min/max tolerance values) rather than on an actual change from the measurement at room temperature (due serial number traceability being deleted))

Sampling is fixed at 5/0 rather than AQL.

Voltage & Temperature tolerances are added.

- Para. 4.7.1 & Table 4 is deleted (due to SCC level B being deleted)

- Para. 4.7.2, 4.8.4 & Table 5(a) & 5(b) is deleted (as the default condition per the Generic spec apply)

- Table 5 only includes specified electrical measurement requirements as required for the various Chart F4 Qual level tests (tests without electrical measurements are deleted) (editorial change).

- Table 5: Adhesion is renamed as Robustness of Terminations

- Table 5: Surge Voltage tests final measurements are referred to final measurement from Mounting or initial measurement (not from 'Table 2')

- Table 5: Damp Heat Steady State test final measurements are referred to final measurement from Mounting or initial measurement (not only from initial measurement)

- Table 5: Add notes applicable to Operating Life, to explain when the 250h, 1000h & 2000h measurements apply.



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### Justification:

Part of the ongoing conversion of legacy ESA/SCC specifications to the ESCC format. Amendments are made to the format and presentation to be consistent with the various other ESCC Detail Specifications, already converted to ESCC format, as well as ESCC Generic Specification No. 3012 issue 4.

See also change details for justification for specific items above.

### Attachments:

escs\_3012002\_draft\_4b\_in\_review\_per\_dcr.docx

### Modifications:

N/A

### Approval signature:

### Date signed:

2020-10-20