DOCUMENT CHANGE REQUEST

DCR number 732

Changes required for: General

Originator: Steve Thacker

Date: 2015/07/14

Date sent: 2012/06/18

Organisation: ESCC Executive Secretariat

Status: IMPLEMENTED

Title:	Capacitors Fixed Chips Ceramic Dielectric Type I, based on type 0805		
Number:	3009/003	Issue:	5

Other documents affected:

Page:

Total reformat/re-write of ESCC Detail Specification 3009/003 issue 4 as part of the ongoing conversion of legacy ESA/SCC specifications to the ESCC format as well as reflecting changes resulting from the conversion of ESCC Generic Specification No. 3009 issue 1 (per DCR695).

The layout, format and general content of 3009/003 issue 5 is based on other converted ESCC Detail Specifications (see attached for proposed 3009/003 issue 5 Draft A).

The technical content of ESCC 3009/003 issue 5 remains closely based on the original ESCC 3009/003 issue 4 except as detailed herein.

Paragraph:

see below

Original wording:

see original ESCC 3009/003 issue 4

Proposed wording:

Total reformat of this Detail Specification (from the range of various ESCC Detail Specifications, 3009/xxx, for capacitors under Generic Specification No. 3009) as part of the ongoing conversion to the ESCC format.

See below for summary of changes, also see attached the proposed 3009/003 Issue 5 Draft A.

Note: known support for active procurement against this specification includes the following Manufacturers:
- AVX-TPC/France (ESCC Qualified for Variant 01, 03, 06)
- Eurofarad/France (is willing to support procurement).
- Syfer/UK (is willing to support procurement of Variant 01 & 06).

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

1) 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.

In addition, editorial and technical amendments resulting from the changes made to the test requirements of the Generic Specification No. 3009.
Specific amendments include:
- Table 3: Delete Insulation Resistance, and Temperature Coefficient for each capacitance value [Test No. 5(i)] (due to SCC level B being deleted)
- Para. 4.7.1 & Table 4 is deleted (due to SCC level B being deleted)
- Table 6 only includes specified electrical measurement requirements as required for the various Chart F4 Qual level tests (editorial change)
- Table 6: Adhesion is renamed as Robustness of Terminations
- Table 6: add note that the capacitance values recorded during Mounting may be used as initial measurements for other tests (to provide the same flexibility included in 3009 issue 1)

2) Table 1(a), Para 4.4.1, Figure 2, (Para 1.4.2 in issue 5)
All component range and selection options (including Variant, style, capacitance, tolerance, voltage, dimensions, terminal materials, weight) are brought together under a single Para. (editorial changes for clarification purposes)

3) Table 1(a), Table 1(b), Para 4.5.3.3
The range of components including Capacitance and Rated Voltage is expanded to also include the range supported by Syfer:
Note – The Syfer range is as follows:
16V: 1pF to 6.8nF
25V: 1pF to 4.7nF
50V: 1pF to 2.7nF
100V: 1pF to 1.8nF
200V: 1pf to 680pF

4) Figure 3. Functional Diagram is simplified (i.e. symbol ‘C’ is removed)

5) Para 3. Delete added symbol (editorial change: as they are no longer required by ESCC 21300)

6) Para 4.2.2(a). Delete irrelevant deviation.

7) Para 4.4.1
Solder coating definition is simplified to be the industry standard definition: Sn62.
Delete statements, “All the above Variants are suitable for reflow soldering.” and “Variants 06 is the preferred termination

finish for the specified chip size (see Figure 2)”. (remove unnecessary and inappropriate comments; editorial change)

8) Table 2 Note 1: Amend range to be for C 50pF … (to be consistent with the full range covered by the spec: 1pF)

9) Table 3 Temperature Coefficient - Test No. 5(ii) (Para 2.3.2 in issue 5)
The default test conditions per the generic spec now apply. i.e. the +/-30ppm/C limit applies over the full temperature range: -55C to +125C (was only specified for temp range +20C to +125C)
Amend remark to read “... 5 components from each manufacturing lot ...” (instead of “5 parts for each dielectric lot”) (to be consistent with ESCC terminology & the Generic spec).
Amend Note 4 to clarify that TC is not specified for low values Cn 20pF.

10) Table 5 (Para 2.5 in issue 5). Delete test conditions that are already specified in the Generic spec (Temperature & Voltage).

11) Appendix A. Delete appendix A for Vitramon/UK (who longer support ESCC procurement)(Appendix B is renamed as Appendix A, for AVX/TPC (F))

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 the ESCC Generic Specification No. 3009 issue 2.

See also change details for justification for specific items above.

Attachments:

3009003_draft_6c_for_final_review.docx, 3009003_draft_5a_in_review.pdf

Modifications:

Draft 6 c is approved

Approval signature:

Date signed:

2015-07-14