



DOCUMENT CHANGE REQUEST

DCR number 1017 Changes required for: General

Date: 2016/11/17

Date sent: 2016/07/28

Originator: Steve Thacker

Organisation: ESCC Executive
Secretariat

Status: IMPLEMENTED

Title: Power Inductors, Moulded, SMD, based on Series SESI

Number: 3201/009

Issue: 12

Other documents affected:

Page:

All

Paragraph:

Total reformat/re-write of ESCC Detail Specification 3201/009 issue 12 as part of the ongoing conversion of legacy ESA/SCC specifications to the ESCC format as well as reflecting changes resulting from the currently in progress conversion of ESCC Generic Specification No. 3201: draft 6 (per DCR1008).

The layout, format and general content of 3201/009 issue 13 is based on other already converted and published ESCC Detail Specifications.

The technical content of ESCC 3201/009 issue 13 remains closely based on the original ESCC 3201/009 issue 12 except as detailed herein.

For details of the proposed contents of ESCC 3201/009 issue 13, see the attached draft Detail Specification that implements all the proposed changes:

3201009 draft 13B for DCR Review.docx

Original wording:

See 3201/009 issue 12

Proposed wording:

Total reformat of this Detail Specification (from the range of various ESCC Detail Specifications, 3201/xxx, under Generic Specification No. 3201) as part of the ongoing conversion to the ESCC format.

See below for summary of changes, also see attached the proposed 3201/009 issue 13 that implements all changes per this DCR.

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

- Exxelia Magnetics (previously Microspire) /France (is willing to support procurement of all Variants & the full specified range of components).

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

1) General

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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 proposed in DCR1008 to be made to the test requirements of the Generic Specification, as per ESCC No. 3201 draft 6.

Specific amendments include:

- Para 4.2.3(a) Deviation on Radiographic inspection is deleted.
- Para 4.2.4 & 4.2.5 (Table 6), Temperature Rise: deviation is added to clarify test is performed at +90 +/-5°C
- Para 4.7.1 & Table 4 are deleted
- Table 5(b), applied load cycling during Operating Life test is no longer applied (replaced by constant IR bias)
- Table 6, Only tests with measurements are now included in this table
- Table 6, Thermal Shock: DC resistance measurement is added
- Table 6, Temperature Rise: DC resistance measurements are added
- Table 6, Low Temperature Storage: is deleted
- Appendix A: is deleted (all deviations are no longer are relevant)

2) Table 1(a), Type Variants:

For all variants, suffix code is added to the type number (i.e. SR, WR or PR as applicable)(for clarification & consistency purposes).

Case description column is added (for clarification purposes).

Terminal finish is amended to be Sn60Pb40 (was SnPb) (for clarification & consistency purposes).

Weight for Variant 06 is amended to be 28g (was 26g; amended at Exxelia request to reflect actual weight).

3) Table 1(a), Range of Components:

Note 1: on inductance test conditions is amended and is also added to Loaded Inductance column header (Load Inductance renamed as Loaded Inductance) (for clarification purposes)

Note 2: Reference to +100°C is removed from Note 2 (as this parameter is measured at +22°C, +110°C and -55°C (not just +110°C))

4) Table 1(b) Maximum Ratings: Add characteristic Peak Current (for consistency purposes).

5) Figure 2:

All drawings are replaced by better quality ones; dimensions remain unchanged except:

Variant 08 Dimension C is redefined with amended max limit 13.7mm (was 17.1mm max) and Dimension I (4mm min) is added (amended at Exxelia request to reflect information useful to users)

Note 1 added (for clarification purposes).

6) Para 4.4.2, alternate copper plating is added (at Exxelia request to reflect actual materials used).

7) Para 4.7.2, Burn-in: the 24+/-2 hours recovery period is amended to be 24 hours minimum (to provide flexibility during testing).

8) Table 2:



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For Inductance, Loaded Inductance and Insulation Resistance, test conditions are included (for clarification purposes).

9) Table 6:

Overload: requirement to test at +90°C is deleted (typographic error from a previous issue)

Moisture Resistance and Operating Life: amend minimum limit for Insulation Resistance to be 1000Mohm (was 100Mohm; amended at Exxelia request to reflect actual limit).

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. 3201 draft 6.

See also change details for justification for specific items above.

Note: the changes per this DCR have been agreed with ESCC qualified Manufacturer Exxelia Magnetics

Attachments:

3201009_draft_13c_for_dcr_review.docx, 3201009_draft_13b_for_dcr_review.docx

Modifications:

Add new item to this DCR as follows:

10) Table 1(a), Range of Components:

2 new values are added to the Range of Components (in new Para 1.4.2) for Variants 04 and 05. See new spec revision Draft 13C as attached, that replaces the previous DCR attachment, for details:

3201009 draft 13C for DCR Review.docx

Approval signature:

Date signed:

2016-11-17