DOCUMENT CHANGE REQUEST

DCR number 1632	Changes required for: General	Originator: Steve Jeffery
Date: 2024/05/21	Date sent: 2024/01/25	Organisation: ESCC Executive
Status: IMPLEMENTED		

Title:	Capacitor Filters, L-Type, Electromagnetic Interference Suppression, Surface Mount, based on type		
Number:	3008/036	Issue:	4

Other documents affected:

Page:

All.

Paragraph:

Total reformat/re-write of ESCC Detail Specification 3008/036 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. 3008.

The layout, format and general content of 3008/036 issue 5 is based on other converted ESCC Detail Specifications, see the attached draft Detail specification that implements all the proposed changes:
escc3008036iss5 draftA for DCR review.docx

The technical content of ESCC 3008/036 issue 5 remains closely based on the original ESCC 3008/036 issue 4 except as detailed herein.

Original wording:

See 3008/036 issue 4

Proposed wording:

Total reformat of this Detail Specification (one of a range of various ESCC Detail Specifications for capacitor filters under Generic Specification No. 3008) as part of the ongoing conversion to the ESCC format.

See below for summary of changes, also see attached the proposed 3008/036 issue 5.

Note: known support for active procurement against this specification includes the following Manufacturers:
• Exxelia Technologies.

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 including deletion of any redundant paragraphs and information, based on the layout and editorial content of other Detail Specifications already converted to ESCC format.

Specific amendments include:

2) Para 1.2 and Table 1(a), Component Type Variants Tables, and Notes, are revised as follows:
• The table consists of a listing of the available Type Variants by Case Description and Terminal Configuration, with

characteristics (Rated DC Voltage, etc.) defined in new Note 1 as a separate table.
• Note 2 is deleted.

3) Para 1.3 and Table 1(b), Maximum Ratings: The Note regarding the derating of Rated DC Voltage is revised.

4) Para 4.2 Deviations from Generic Specification is revised as follows:
• Paras 4.2.4(c) and 4.2.5(b) are deleted (the deviation “Immersion: Not applicable” is no longer required. The Immersion test has always only been applicable to hermetically sealed components, and therefore the Generic Specification has been changed accordingly).

5) Para 4.3.3, Robustness of Terminations: paragraph is re-worded for clarification purposes.

6) Para 4.6.1 and Table 2 (was “Electrical Measurements at Room Temperature”, now “Room Temperature Electrical Measurements”):
• Notes 1 and 2 of Table 2(b) are re-numbered and re-written as Notes 2, 3 and 4 for clarification purposes. These Notes also take into account various changes from Charts II, III, IV & V to Charts F3 & F4.

7) Para 4.6.2 and Table 3 (was “Electrical Measurements at High and Low Temperatures”, now “High and Low Temperatures Electrical Measurements”):
• Note 1 (which defines the sampling) is amended to “Measurements shall be performed on a sample of 5 components. In the event of any failure a 100% inspection may be performed.”
• The applicable test temperatures for the Characteristics are specified in the new Test Method and Conditions column; Note 4 is therefore deleted.

8) Para 4.7.2 and Table 5(a) (was “Conditions for Burn-in”, now “Burn-in Conditions”), Voltage Characteristic and Conditions: The actual Applied Voltages applicable to each Type Variant are now defined. This will avoid any confusion over “UR at +125°C” (which is a derated voltage and therefore can no longer be “Rated DC Voltage”).

9) Para 4.8.4 and Table 5(b) (was “Conditions for Operating Life Tests”, now “Operating Life Conditions”), Voltage Characteristic and Conditions: The actual Applied Voltages applicable to each Type Variant are now defined. This will avoid any confusion over “UR at +125°C” (which is a derated voltage and therefore can no longer be “Rated DC Voltage”).

10) Table 6 (Measurements and Inspections on Completion of Environmental Tests and at Intermediate Points and on Completion of Endurance Testing) is modified and incorporated into new Para “Intermediate and End-Point Electrical Measurements” (Para 2.7), e.g. the Initial Measurements defined for Operating Life now only consist of “Capacitance”.

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 current issue of ESCC Generic Specification No. 3008.

See also change details above for justification for specific items.

Attachments:

escc3008036iss5_drafta_for_dcr_review.docx

Modifications:

This DCR is considered to be acceptable to all parties with the following modifications:

Para. 1.5, Maximum Ratings: A new Note is added to detail the required voltage derating.

Para. 1.6, PHYSICAL DIMENSIONS AND TERMINAL IDENTIFICATION: The sentence in Note 1 describing Terminal Identification shall be re-written for clarification purposes and the wording of Note 2 shall be modified to take the new Note 1 wording into account.

Para. 2.1.1, Deviations from the Generic Specification: A new deviation accepting discolouration of silver plating shall be added (ref. the similar deviation already in Para. 2.1.1 of 3008/014, /025, /031 & /032).

Para. 2.3 is re-named SOLDERABLITY AND RESISTANCE TO SOLDERING HEAT and applicable conditions defining the size of the soldering iron and the duration shall be added. Temperature shall be amended from +275±5 C to +350 C.

Para. 2.5.2, High and Low Temperatures Electrical Measurements: The specified tolerances shall be changed from (+0 -5) / (+5 -0) to (+0 -3) / (+3 -0) in order to be the same degree of tolerance as already given for Burn-in and Operating Life.

Approval signature:

Date signed:

2024-05-21