



DOCUMENT CHANGE REQUEST

DCR number 1444 Changes required for: General

Date: 2023/11/30

Date sent: 2021/07/15

Originator: Steve Jeffery

Organisation: ESCC Executive

Status: IMPLEMENTED

Title: RF Coaxial Connectors, Type SMP, 50Ohm (male contact)

Number: 3402/024

Issue:

1

Other documents affected:

Page:

Total reformat/re-write of ESCC Detail Specification 3402/024 Issue 1 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. 3402 Issue 5.

The layout, format and general content of 3402/024 Draft 2A is based on other converted ESCC Detail Specifications (see attached for proposed 3402/024 Draft 2A).

The technical content of ESCC 3402/024 Draft 2A remains closely based on the original ESCC 3402/024 Issue 1 except as detailed herein.

Paragraph:

All.

Original wording:

As per ESCC 3402/024 Issue 1.

Proposed wording:

Total reformat of this Detail Specification (from the range of various ESCC Detail Specifications, 3402/xxx, for RF connectors under Generic Specification No. 3402) as part of the ongoing conversion to the ESCC format.

See below for summary of changes, also see attached the proposed 3402/024 Draft 2A.

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

- Rosenberger (ESCCQPL listed)

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.

In addition, editorial and technical amendments resulting from the changes made to the test requirements of the Generic Specification No. 3402.

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Specific amendments include:

- Type Variants Table: Table is simplified, with all specific component details/characteristics moved to Para. 2.4 Room Temperature Electrical Measurements & Para. 3 Component Type Variants - Detail Requirements; Description corrected for Variants 23, 24, 25.
- Figure 2(a) replaced by direct references within MIL-STD-348.
- Para. 4.2 is updated (Coupling Proof Torque is not applicable being the only required deviation due to the content of the converted Generic)
- Para. 4.3.4: deleted (as the requirements have been deleted in the Generic spec).
- Para. 4.3.5, Mating and Unmating Forces: Para. is deleted and the non-performance of this test is now included in the Environmental and Mechanical Tests Para.
- Para. 4.3.7: deleted (as the requirements have been deleted in the Generic spec).
- Para. 4.3.8: deleted (as Contact Engagement and Separation Forces only applies to connectors with female contact).
- Paras. 4.5.1, 4.5.2: ESCC component number is amended: ESCC qualified components symbol is added; Testing level is deleted (due to SCC level B/C being deleted)
- Table 2: Specific test limits are added (was a Note referring back to Table 1(a))
- Table 2, Voltage Proof Leakage Current: test point details are added.
- Table 6 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 6: Contact Resistance test conditions are added.
- Figure 2(b):
Variants 18, 19, 20, 21, 22, 23, 24, 25: titles are amended.
All variants (note - information was included in Table 1(a) Component Type Variants and Range of Components):
RF leakage, Corona level, Minimum cable retention force/torque are deleted (as the requirements have been deleted in the Generic spec).
Maxi leakage (panel sealed connectors) is deleted (= redundant information)
Soldering Proof is deleted (as the test has been deleted in the Generic spec).

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. 3402 Issue 5.



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See also change details for justification for specific items above.

Attachments:

esc3402024_iss_2_draft_a_for_review.docx

Modifications:

Table 1(a):

obsolete variant 06 is deleted.

Variant 30 description is corrected.

New Variant 36 added (also in new Para 3.1).

Para. 4.3.6: number of mating/unmating cycles is amended.

Table 6: note on measurement details for VSWR is added.

In new Para 3, see attached for details including, as applicable:

add note for smooth bore type on VSWR & IL values

Amend characteristic values

Add Appendix for Rosenberger:

To permit Manufacturer to still mark the current testing level code as a Manufacturer Code.

Add deviation on temperature cycling for PCB and Thru-hole connectors.

Approval signature:

Date signed:

2023-11-30