DOCUMENT CHANGE REQUEST

DCR number 1443	Changes required for: General	Originator: Steve Thacker
Date: 2023/11/30	Date sent: 2021/07/15	Organisation: ESCC Executive Secretariat
Status: IMPLEMENTED		

Title:	RF Coaxial Adaptors and Connecting Pieces, Type SMA 2.9, 50 Ohms		
Number:	3402/023	Issue:	7

Other documents affected:

Page:

Total reformat/re-write of ESCC Detail Specification 3402/023 issue 7 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 3402/023 Draft 8 is based on other converted ESCC Detail Specifications (see attached for proposed 3402/023 Draft 8).

The technical content of ESCC 3402/023 Draft 8 remains closely based on the original ESCC 3402/023 issue 7 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, 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 3402/023 Draft 8.

Note: known support for active procurement against this specification includes the following Manufacturers:
• Radiall (on ESCCQPL)
• Rosenberger (on ESCCQPL)

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

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Specification No. 3402.

Specific amendments include:

• Table 1(b):
Dielectric Withstanding Voltage at ambient pressure rating is removed as it is already covered by the Voltage Proof test in Table 2.
Dielectric Withstanding Voltage at low pressure rating is deleted (as the requirements have been deleted in the Generic spec)
Rated Operating Voltage is amended to be 350V (was 50% of Vdw) based on Manufacturers data sheet value.

• Figures 2(a) and 3: are amended based on Manufacturers data sheet values.
• Para. 4.4.1 is amended; not relevant items are deleted.
• Para 4.5.1, 4.5.2: ESCC component number is amended: ESCC qualified components symbol is added; Testing level is deleted (SCC level B/C being deleted)
• Para 4.5.3: The plating/material marking (i.e. 3) and Fixed Configuration identifier number (i.e. 01) are deleted.
• 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).
Test conditions for contact resistance measurements are added (based on same conditions for the ESCC SMA series e.g. per 3402/003)

• Figure 2(b) (now Para 3):
All variants:
RF leakage, Minimum cable retention force/torque, Rapid change of temperature - peak value, Maximum leakage (panel sealed connectors), solderability, soldering proof, cables used are deleted (= redundant information; the requirements have 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.

See also change details for justification for specific items above.

Attachments:
escc3402023iss8_draft_8a_in_review.docx
Modifications:
Table 1(a), Para 4.4, Table 6, Figure 2(b) & new Para 2.3(e): new Variant 07 with requirements is added for Hermetic Glass Seal (as was referenced in 3402/021 & 3402/022 (Radiall type R280760000)). Table 1(b), Figure 2(b): Note 1 (& in new Para 3): The original power handling figure is replaced (as provided by Radiall). The order of the categories I, II, III are reversed, and a new note is added that "ESCC Multipactor Tool v1.0" was used to construct the curves. Figure 2(a) & 3 are replaced by reference to MIL-STD-348 series SMK (in new Para. 1.6.1). Para 4.3.6: number/rate of cycles is amended to be as specified in ESCC3402 (i.e. 500Qual/100LAT is deleted). Table 6: note on measurement details for VSWR is added. In new Para 3, see attached for details including, as applicable: amend dimension details Amend characteristic values Add note on RF leakage Add Appendices to permit Manufacturers to still mark the current testing level and material option codes as a Manufacturer Code.
Approval signature:

Date signed:
2023-11-30