
		<b>APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL</b>			Page 1 Appl. No. 252G
Component Title: <b>Capacitors Filters, PI/C/L-types, Feed through, based on types SFC30/35/40/60/100, SFL100, SFP35/40/60/100</b>		Executive Member: CNES		Date: 24/07/2014	
Components (including series and families) submitted for Extension of Qualification Approval: <span style="float: right;">1</span>					
ESCC COMPONENT NO.	VARIANTS	RANGE OF COMPONENTS	BASED ON	TEST VEHICLE / S	COMPONENT SIMILAR
3008 014 3008 020 3008 021 3008 025 3008 026 3008 027 3008 028 3008 029 3008 030 3008 031 3008 032 3008 033	01 to 40 01 to 12 01 to 14 01 to 20 01 to 06 01 to 06 01 to 06 01 to 48 01 to 28 01 to 06 01 to 12 01 to 12	See Box 14	SFP040 SFC030 SFP060  SFP035 SFC060 SFC100  SFP100 SFL100 SFP060  SFC035 SFC040 SFC060	See details in Box 14  X  X  X	<b>Values, Covered by ESCC Specifications</b> <b>3008/014-020-021-025-026-027-028-029-030-031-032-033</b>
Component Manufacturer <b>EUROFARAD</b>		Location of Manufacturing Plant(s) 1, rue des Temps Modernes 77 600 CHANTELOUP en BRIE	Date of original qualification approval: Date: 01/08/1998  Certificate Ref No. 252		
ESCC Specifications used for Maintenance of qualification testing: Generic: 3008 Issue: 2  Detail(s): 3008/025 Issue: 3 3008/029 3008/031		Deviations to LVT testing and Detail Specification used: No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> (supply details in Box 15)  Deviation from current Specifications:  No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> (Supply details)		Qualification Extension Report reference and date: Test Report N° 14/0456, May 2014 Test Report N° 14/0452, May 2014 Test Report N° 14/0451, May 2014	
Summary of procurement or equivalent test results during current validity period in support of this application (those to ESCC listed first) <span style="float: right;">8</span>					
Project Name	Testing Level	LAT	Date code	Quantity Delivered	
Main Customers :	90% Level B	A few LAT3	1207 to 1417	13 724 parts (See appendix, SFCMS35 are not ESCC qualified, EM not included)	
Thalès Alenia Space France					
TESAT Spacecom					
PID changes since start of qualification None <input type="checkbox"/> Minor* <input checked="" type="checkbox"/> Major* <input type="checkbox"/> *Provide details in box:		Current PID Verified by: CNES Name of Executive Representative Ref No: 505.95.390 (generic) & 454.92.390 (SFC030SV) Issue: H & E Date: 23/07/2014 Rev Date: 01/05/2014			
Current Manufacturing facilities surveyed by: CNES on 18/09/2009 <span style="float: right;">11</span>					
(Name of Executive Representative) (Date)					
Satisfactory: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Explain <b>CNES line visit after transfer from Lagny to Chanteloup</b>					
Report Reference: DCT/AQ/CQ 2009-21512, 21/09/2009					

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12

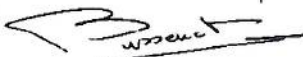
Failure Analysis, DPA, NCCS available:    Yes    ☐    No    ☒    (Supply data)

Ref. No's and purposes:

13

The undersigned hereby certifies on behalf of the ESCC Executive - that the above information is correct; - that the appropriate documentation has been evaluated; - that full compliance to all ESCC requirements is evidence (except as stated in box 15); - that the reports and data are available at the ESCC Executive and therefore applies on behalf of CNES as the responsible Executive Member for ESCC qualification status to be extended to the component(s) listed herein.

Date: 24/07/2014

JP. BUSSENOT  
(Signature of the Executive Coordinator)

14

Continuation of Boxes above:

Component Title : Capacitors Filters, PI-type, C-type, L-type, Feedthrough, Electromagnetic Interference Suppression, Hermetically Sealed & Non-hermetically Sealed, based on types SFC030, SFC035, SFC040, SFC060, SFC100, SFL100, SFP035, SFP040, SFP060, SFP100

Box 1 : Test Vehicles :

3008 025 03B – SFP 035 1041 YR 050 date code 1315  
 3008 029 25B – SFL 100 5001 UV 080 date code 1342  
 3008 031 01B – SFC 035 3223 YR 050 date code 1414

Box 10 : PID  
 Generic PID for Filters 505.95.390 issue H has been updated to reflect organisational changes resulting from the retirement of the previous Chief Inspector in July 2013.  
 Generic PID for Filters is supplemented with sub-PID covering various sub-families :

Domain	PID	Filters types	ESCC Detail Specification
SFC mixed obturation and for soldering	454.92.390 issue E	SFC 030 SV	3008/020
SFC non hermetic (resin obturated)	506.95.390 issue D	SFC 035	3008/031
		SFC 040	3008/032
		SFC 060	3008/033
SFC hermetic (glass obturated)	507.95.390 issue D	SFC 060	3008/026
		SFC 100	3008/027
SFP non hermetic (resin obturated)	457.92.390 issue E	SFP 035	3008/025
		SFP 040	3008/014
		SFP 060	3008/030
SFP hermetic (glass obturated)	463.92.390 issue E	SFP 060	3008/021
		SFP 100	3008/028
SFL hermetic (glass obturated)	462.92.390 issue D	SFL 100	3008/029

PID for SFC030SV products evolved with a minor change, i.e. the connections are cut to the required length at the start of the manufacturing flow rather than just before the tinning step.

**APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL**

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SFC30/35/40/60/100, SFL100, SFP35/40/60/100  
Executive Member: CNES Date: 24/07/2014

Page 3

Appl. No.

252G

Non compliance to ESCC requirements:

15

No.:	Specification	Paragraph	Non compliance
			None

Additional tasks required to achieve full compliance for ESCC qualification or rationale for acceptability of noncompliance:

16

Executive Manager Disposition

17

Application Approval: Yes ☐ No ☐

Action / Remarks:

Date:

Signature, ESA Representative



# APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL

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Executive Member: CNES

Date: 24/07/2014

Page 4

Appl. No.

252G

## ANNEX 1: LIST OF TESTS DONE TO SUPPORT EXTENSION OF QUALIFICATION

18

Tests conducted in compliance with:

- ESCC 3008 generic specification; Chart V (for ESCC/QPL parts);
- Or PID-TFD (for ESCC/QML parts)

Tests vehicle identification/description:

SFP 035 1041 YR 050 date code 1315	SFC 035 3223 YR 050 date code 1414
SFL 100 5001 UV 080 date code 1342	

Detail Specification reference: 3008/025 - 3008/029 - 3008/031

Chart V	Test	Tick when done	Conditions	Date Code	Tested Qty	No. of Rejects	Comments if not performed. Comments on Rejection
Environmental / Mechanical Subgroup (Column 1)	Shock	<input checked="" type="checkbox"/>	IEC 68-2-27	1315 + 1342 + 1414	6 + 6 + 6	0	
	Vibration	<input checked="" type="checkbox"/>	IEC 68-2-6	1315 + 1342 + 1414	6 + 6 + 6	0	
	Seal Test (Hermetic)	<input checked="" type="checkbox"/>	IEC 68-2-17	1342	6	0	Applicable to Hemetic types 3008/029 only
	Damp Heat (Non-Hermetic)	<input checked="" type="checkbox"/>	ESCC 3008, Para. 9.24	1315 + 1414	6 + 6	0	
	Corrosion Test	<input checked="" type="checkbox"/>	IEC 68-2-11	1315 + 1342 + 1414	6 + 6 + 6	0	
Environmental / Mechanical Subgroup (Column 2)	Low Air Pressure	<input checked="" type="checkbox"/>	IEC 68-2-13	1315 + 1342 + 1414	6 + 6 + 6	0	
	Immersion	<input checked="" type="checkbox"/>	ESCC 3008, Para. 9.15	1342	6	0	Not Applicable to ESCC 3008/025 and 3008/031
	Seal Test (Hermetic)	<input checked="" type="checkbox"/>	IEC 68-2-17	1342	6	0	
	Damp Heat (Non-Hermetic)	<input checked="" type="checkbox"/>	ESCC 3008, Para. 9.24	1315 + 1414	6 + 6	0	
Endurance Subgroup	Operating Life	<input checked="" type="checkbox"/>	ESCC 3008, Para. 9.19	1315 + 1342 + 1414	20 + 20 + 20	0	
	Electrical Measurements during Endurance Testing	<input checked="" type="checkbox"/>	ESCC 3008, Para. 9.4.5	1315 + 1342 + 1414	20 + 20 + 20	0	
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC 20500	1315 + 1342 + 1414	20 + 20 + 20	0	
	Seal Test (Hermetic)	<input checked="" type="checkbox"/>	IEC 68-2-17	1342	20	0	
	Damp Heat (Non-Hermetic)	<input checked="" type="checkbox"/>	ESCC 3008, Para. 9.24	1315 + 1414	20 + 20	0	
Electrical Subgroup (Elect. Meas.)	Electrical Measurements at Room Temperature	<input checked="" type="checkbox"/>	ESCC 3008, Para. 9.4.4	1315 + 1342 + 1414	6 + 6 + 6	0	
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC 20500	1315 + 1342 + 1414	6 + 6 + 6	0	



Electrical Subgroup (Ass. / Capab. Tests)	Solderability	<input checked="" type="checkbox"/>	IEC 68-2-20	1315 + 1342 + 1414	4 + 4 + 4	0	
	Permanence of Marking	<input checked="" type="checkbox"/>	ESCC 24800	1315 + 1342 + 1414	4 + 4 + 4	0	
	Robustness of Terminations	<input checked="" type="checkbox"/>	IEC 68-2-21	1315 + 1342 + 1414	4 + 4 + 4	0	

**APPLICATION FOR ESCC QUALIFICATION APPROVAL**Component title: Capacitors Filters, PI/C/L-types, Feed through, based on types  
SFC30/35/40/60/100, SFL100, SFP35/40/60/100

Executive Member: CNES


Date: 24/07/2014

Page 5

Appl. No.

252G

Chart V	Test	Tick when done	Conditions	Date Code	Tested Qty	No. of Rejects	Comments if not performed. Comments on Rejection
Additional Tests		<input type="checkbox"/>					
		<input type="checkbox"/>					
		<input type="checkbox"/>					

	<p align="center"><b>APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL</b></p> <p>Component title: Capacitors Filters, PI/C/L-types, Feed through, based on types SFC30/35/40/60/100, SFL100, SFP35/40/60/100</p> <p>Executive Member: CNES Date: 24/07/2014</p>	<p align="center">Page 7</p> <p align="center">Appl. No. 252G</p>
<p align="center"><b>NOTES ON THE COMPLETION OF THE APPLICATION FORM FOR ESCC QUALIFICATION EXTENSION APPROVAL</b></p>		
<p><b>ENTRIES</b></p>		
Form heading	<p>shall indicate: - the title of the component as given in its detail specification or the name of the series, family; - the Executive Member; - the entering date; - the certificate number and its sequential suffix.</p>	
Box 1	<p>shall provide details given in the table; in particular there shall be listed: - the variants or range of variants; - the range of components (the ESCC code is recommended to indicate the values or values range, the tolerance, the voltage, etc); the designation given in the detail specification as 'base on'; - under Test Vehicle enter either an ESCC code or the specific characteristic capable of identifying the component tested (e.g., voltage of coil for a relay); - under component similar enter a cross if relevant.</p>	
Box 2; 3 and 4	<p>As per QPL entry; otherwise, an explanation of the changes must be supplied.</p>	
Box 5	<p>Will show the ESCC Generic and Detail specifications, including issue number and revision letter, current at the time the tests reported were performed. If the specifications are different from those current on the date of the application, see Box 6.</p>	
Box 6	<p>Will show the deviations from the Generic and Detail Specifications listed in Box 5, in particular deviations from testing. In case of deviations this must be listed in Box 15. In case the referenced specification in Box 5 have currently a different issue and/or revision indicate also whether the test data deviates or not from such current documents.</p>	
Box 7	<p>Must reference the report(s) supplied in support of the application.</p>	
Box 8	<p>Should provide the details of procurement to the full ESCC System, documentation of all of which should already have been delivered to the ESCC Executive under the terms of the relevant Generic Specification. An appropriate table has been drawn in this box.</p>	
Box 9	<p>If the PID evolved after the Original Qualification or after the last Extension of Qualification, adequate details of such evolution shall be provided together with the reasons for the changes. Major changes shall be clearly marked.</p>	
Box 10	<p>Identify the current PID issue status, date and actual date of verification. The date of verification of the current PID should be arranged as close as possible to the required date of extension.</p>	
Box 11	<p>This box can be completed only after a physical visit to the plant to confirm that no unexplained changes occurred and that the practices, procedures, material, etc. used in manufacturing the components are as described in the PID. This survey shall be carried out in accordance with the requirements of ESCC Basic Specification No. 20200 and its findings shall be recorded.</p>	
Box 12	<p>Provide details of, or reference to, any Destructive Physical Analysis (DPA) and Failure Analysis reports as well as any Nonconformance(s) (NCCS) occurred during the qualification validity period, stating if established corrective action have produced satisfactory results.</p>	
Box 13	<p>Enter only the name of the Executive Member (i.e., CNES, DLR, ESTEC, etc.) and the signature of the responsible Executive Coordinator.</p>	
Box 14	<p>To be used when there is a need to expand any of the boxes from 1 through 12. Identify box affected and reference the Box 14 in the relevant Box. Box 14 can be broken into 14a, 14b, etc. if several boxes have to be expanded.</p>	
Box 15	<p>Fill in Table as requested.</p>	
Box 16	<p>Any additional action deemed necessary by the Executive Member to bring the submitted data to a standard likely to be accepted by the ESCC Executive should be listed herein or the reason(s) to accept the noncompliance.</p>	
Box 17	<p>All Executive Manager recommendations on the application itself, special conditions or restrictions, modifications of the QPL or QML entry, letters to the manufacturer, etc. shall be entered clearly in Box 19, signed by the representative for ESA, and dated.</p>	
Box 18	<p>Fill in Table as requested.</p>	
Box 19	<p>Confidential Details of PID changes including those of a confidential nature, shall be provided.</p>	
Box 20	<p>State noncompliance with reference to specification(s) and paragraph(s). To simplify reference in Box 16 each nonconformance shall be sequentially numbered. If relevant state 'None'.</p>	
Box 21	<p>Any additional action deemed necessary by the Executive Member to bring the submitted data to a standard likely to be accepted by the ESCC Executive should be listed herein or the reason(s) to accept the noncompliance.</p>	
Box 22	<p>Additional Comments.</p>	