

		APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL			Page 1 Appl. No. 251H
Component Title: Capacitors, Fixed, Reconstituted Mica, High Voltage, based on type HT86PS		Executive Member: CNES		Date: 12/04/2016	
Components (including series and families) submitted for Extension of Qualification Approval: 1					
ESCC COMPONENT NO.	VARIANTS	RANGE OF COMPONENTS	BASED ON	TEST VEHICLE / S	COMPONENT SIMILAR
3006 022	01	See box 14	HT86PS	See box 14	Values Covered by ESCC Specification 3006/022
Component Manufacturer EXXELIA Technologies		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. 251	
ESCC Specifications used for Maintenance of qualification testing: Generic: 3006 Issue: 2 Detail(s): 3006/022 Issue: 3		Deviations to LVT testing and Detail Specification used: No ☐ Yes ☒ (supply details in Box 15) Deviation from current Specifications: No ☒ Yes ☐ (Supply details)		Qualification Extension Report reference and date: Test Report 14/0817, September 2014 Test Report 15/0933, December 2015 Test Report 16/0197, March 2016	
Summary of procurement or equivalent test results during current validity period in support of this application (those to ESCC listed first) 8					
Project Name	Testing Level	LAT	Date code	Quantity Delivered	
Main customers :	B C	2 - - -	1437, 1542	10 154 parts	
TESAT SP2009 (*)					
WELLKING					
See Appendix				(*) TESAT specification SP2009 is based on ESCC level B format and is tailored to TESAT needs (voltages ...). It represents more than 80% of space orders.	
PID changes since start of qualification None ☒ Minor* ☐ Major* ☐ *Provide details in box:		Current PID Verified by: CNES Ref No: 423.91.390 Issue: I Rev Date: 04/04/2014		Name of Executive Representative Date: 07/04/2014	
Current Manufacturing facilities surveyed by: CNES on 18/09/2009 11 (Name of Executive Representative) (Date) Satisfactory: Yes ☒ No ☐ Explain: First Ligne Visit after transfer from Lagny site to Chanteloup en Brie Report Reference: DCT/AQ/CQ 2009-21512, 21/09/2009					

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Failure Analysis, DPA, NCCS available: Yes ☐ No ☒ (Supply data) Ref. No's and purposes:		
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: 13/04/2016  JP. BUSSENOT (Signature of the Executive Coordinator)		
Continuation of Boxes above: Range of Components: items No 01 to 194 : 33nF to 2.2µF 1.5kV ±10/20% 15nF to 1.5µF 2.5kV ±10/20% 15nF to 1.0µF 3.5kV ±10/20% 6.8nF to 470nF 5kV ±10/20% 2.2nF to 220nF 7.5kV ±10/20% 1nF to 100nF 10kV ±10/20% 3.3nF to 68nF 12.5kV ±10/20% 1.5nF to 33nF 15kV ±10/20% 680pF to 15nF 20kV ±10/20% Test Vehicles : (1) HT86PS 300602201B102KH 1nF ±10%, 10kV date code 1542 Lot Nr 338.15.03.0343 – Reports 15/0933 (LAT2) and 16/0197 (LAT1 Environmental / Mechanical Subgroups) (2) SP2009-1 (*) HT86PS 472QQ 4.7nF -10% +30%, 14kV date code 1437 Lot Nr 338.13.10.0066 – Report 14/0817 (LAT 2 – Endurance Subgroup 22 parts, Electrical Subgroup 2 + 2 parts) (*) TESAT specification SP2009 is based on ESCC level B format and is tailored to TESAT needs (voltages ...). It represents more than 80% of space orders identified in box 8 and data are therefore useful for maintenance activities.		

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Non compliance to ESCC requirements:		15	
No.:	Specification	Paragraph	Non compliance
	3006	Chart V	The 8 parts submitted to Environmental / Subgroup were selected from the 16 parts previously submitted to Endurance Subgroup.
Additional tasks required to achieve full compliance for ESCC qualification or rationale for acceptability of noncompliance:		16	
In the absence of ESCC stock, it has been agreed to adopt this selection. This was done at manufacturer' risk to keep maintenance schedule. The results remain satisfactory and maintenance can be validated on this basis.			
Executive Manager Disposition		17	
Application Approval: Yes ☒ No ☐			
Action / Remarks:			
Date:  Signature, ESA Representative			



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

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Tests conducted in compliance with:

- ESCC 3006 generic specification; Chart V (for ESCC/QPL parts);
- Or PID-TFD (for ESCC/QML parts)

Tests vehicle identification/description:

300300602201B102KH 1nF ±10%, 10kV date code 1542	SP2009-1 (*) HT86PS 472QQ 4.7nF -10% +30%, 14kV date code 1437

Detail Specification reference: 3006/022

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)	Robustness of Terminations	☒	IEC 68-2-21	1542	4	0	
	Resistance to Soldering Heat	☒	IEC 68-2-20	1542	4	0	
	Climatic Sequence	☒	ESCC 3006, Para. 9.14	1542	4	0	
	Seal Test	☐	IEC 68-2-17				NA
Environmental / Mechanical Subgroup (Column 2)	Rapid Change of Temperature	☒	IEC 68-2-14	1542	4	0	
	Vibration	☒	IEC 68-2-6	1542	4	0	
	Shock or Bump	☒	ESCC 3006, Para. 9.13	1542	4	0	
	Climatic Sequence	☒	ESCC 3006, Para. 9.14	1542	4	0	
	Seal Test	☐	IEC 68-2-17				NA
Endurance Subgroup	Operating Life	☒	ESCC 3006, Para. 9.16	1437 1542	22 16	0 0	
	Electrical Measurements during Endurance Testing	☒	ESCC 3006, Para. 9.6.5	1437 1542	22 16	0 0	
Electrical Subgroup (Electrical Measurements)	High and Low Temperature Stability	☒	ESCC 3006, Para. 9.15	1437 1542	2 6	0 0	
	Electrical Measurements at Room Temperature	☒	ESCC 3006, Para. 9.6.4	1437 1542	2 6	0 0	
	External Visual Inspection	☒	ESCC 20500	1542	6	0	NA to SP2009-1
Electrical Subgroup (Assembly / Capability Tests)	Solderability	☒	IEC 68-2-20	1437 1542	2 4	0 0	
	Permanence of Marking	☒	ESCC 24800	1542	4	0	NA to SP2009-1

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Chart V	Test	Tick when done	Conditions	Date Code	Tested Qty	No. of Rejects	Comments if not performed. Comments on Rejection
Additional Tests	Terminal Strength	☒	IEC 68.2.21	1437	2	0	Methods Ua, Ub, Uc
		☐					
		☐					



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NOTES ON THE COMPLETION OF THE APPLICATION FORM FOR ESCC QUALIFICATION EXTENSION APPROVAL

ENTRIES

Form heading

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.

Box 1

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.

Box 2; 3 and 4

As per QPL entry; otherwise, an explanation of the changes must be supplied.

Box 5

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.

Box 6

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.

Box 7

Must reference the report(s) supplied in support of the application.

Box 8

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.

Box 9

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.

Box 10

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.

Box 11

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.

Box 12

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.

Box 13

Enter only the name of the Executive Member (i.e., CNES, DLR, ESTEC, etc.) and the signature of the responsible Executive Coordinator.

Box 14

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.

Box 15

Fill in Table as requested.

Box 16

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.

Box 17

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.

Box 18

Fill in Table as requested.

Box 19

Confidential Details of PID changes including those of a confidential nature, shall be provided.

Box 20

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'.

Box 21

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.

Box 22

Additional Comments.