

		APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL			Page 1
		Component Title: Capacitors, Fixed, Reconstituted Mica, High Voltage, based on type HT86PS		Appl. No. 251G	
Executive Member: CNES		Date: 07/04/2014			
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 EUROFARAD 2		Location of Manufacturing Plant(s) 3		Date of original qualification approval: 4	
		1, rue des Temps Modernes 77 600 CHANTELOUP en BRIE		Date: 01/08/1998	
				Certificate Ref No. 251	
ESCC Specifications used for Maintenance of qualification testing: 5		Deviations to LVT testing and Detail Specification used: 6		Qualification Extension Report reference and date: 7	
Generic: 3006 Issue: 2		No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> (supply details in Box 15)		Test Report 12/1246, December 2012	
Detail(s): 3006/022 Issue: 3		Deviation from current Specifications: No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> (Supply details)		Test Report 13/0493, June 2013	
				Test Report 14/0249, March 2014	
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	2	1245	6 708 parts	
	C	- 2 3 -	1229, 1231 1324, 1325		
TESAT SP2009 (*)					
THALES ALENIA SPACE ETCA					
				(*) 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 9		Current PID Verified by: 10		CNES	
None <input type="checkbox"/>		Ref No: 423.91.390		Name of Executive Representative	
Minor* <input checked="" type="checkbox"/>		Issue: I		Date: 07/04/2014	
Major* <input type="checkbox"/>		Rev Date: 04/04/2014			
*Provide details in box:					
Current Manufacturing facilities surveyed by: 11					
		CNES		on 18/09/2009	
		(Name of Executive Representative)		(Date)	
Satisfactory: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Explain <u>Fist Ligne Visit after transfer from Lagny site to Chanteloup en Brie</u>					
Report Reference: <u>DCT/AQ/CQ 2009-21512, 21/09/2009</u>					



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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: 07/04/2014

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 3006022102MJ 1nF ±20%, 12kV date code 1325 Lot Nr 338.13.03.0090 – Report 14/0249

(2) SP2009-1 (*) HT86PS 332QR 3.3nF -10% +30%, 12kV date code 1245 Lot Nr 338.12.05.0114A (equivalent to 12.5 kV ESCC item 143) – Reports 12/1246 and 13/0493

(*) 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. Note that SP2009 refers to Chart IV instead of Chart V with quite close content



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Non compliance to ESCC requirements:

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No.:	Specification	Paragraph	Non compliance

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

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Executive Manager Disposition

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Application Approval: Yes No

Action / Remarks:

* ADDITIONAL ESCC LINE SURVEYS WERE DONE IN 2010 AND 2011:
- TEC-QTC/2010-OP-AV-01 (2010)
- QCS/LB/110203 (2011)

Date:

7/5/2014

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:

SP 2009-1 332QR 3,3nF -10% +30% 12kV dc 1245	Lot 338.12.05.0114A
ESCC3006.022-102MJ 1nF ±20% 12,5 kV dc 1325	Lot 338.13.03.0090

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	<input checked="" type="checkbox"/>	IEC 68-2-21	1245 1325	2 4	0 0	SP2009: Tests Ua + Ub + Uc
	Resistance to Soldering Heat	<input checked="" type="checkbox"/>	IEC 68-2-20	1325	4	0	NA to SP2009-1
	Climatic Sequence	<input checked="" type="checkbox"/>	ESCC 3006, Para. 9.14	1325	4	0	NA to SP2009-1
	Seal Test	<input type="checkbox"/>	IEC 68-2-17				NA (ESCC 3006/022)
Environmental / Mechanical Subgroup (Column 2)	Rapid Change of Temperature	<input checked="" type="checkbox"/>	IEC 68-2-14	1245 1325	8 4	0 0	
	Vibration	<input checked="" type="checkbox"/>	IEC 68-2-6	1245 1325	8 4	0 0	
	Shock or Bump	<input checked="" type="checkbox"/>	ESCC 3006, Para. 9.13	1325	4	0	NA to SP2009-1
	Climatic Sequence	<input checked="" type="checkbox"/>	ESCC 3006, Para. 9.14	1325	4	0	NA to SP2009-1
	Seal Test	<input type="checkbox"/>	IEC 68-2-17				NA (ESCC 3006/022)
Endurance Subgroup	Operating Life	<input checked="" type="checkbox"/>	ESCC 3006, Para. 9.16	1245 1325	22 16	0 0	
	Electrical Measurements during Endurance Testing	<input checked="" type="checkbox"/>	ESCC 3006, Para. 9.6.5	1245 1325	22 16	0 0	
Electrical Subgroup (Electrical Measurements)	High and Low Temperature Stability	<input checked="" type="checkbox"/>	ESCC 3006, Para. 9.15	1245 1325	2 6	0 6	N/A. Table 6 3006/022
	Electrical Measurements at Room Temperature	<input checked="" type="checkbox"/>	ESCC 3006, Para. 9.6.4	1245 1325	2 6	0 0	
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC 20500	1325	6	0	NA to SP2009-1
Electrical Subgroup (Assembly / Capability Tests)	Solderability	<input checked="" type="checkbox"/>	IEC 68-2-20	1245 1325	2 4	0 0	
	Permanence of Marking	<input checked="" type="checkbox"/>	ESCC 24800	1325	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	Moisture Resistance	<input checked="" type="checkbox"/>	MIL-STD-202 m. 106	1245	8	0	20 cycles
		<input type="checkbox"/>					
		<input type="checkbox"/>					



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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 volt age, 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.