



**APPLICATION FOR ESCC QUALIFICATION APPROVAL**

Component Title: Capacitors, Fixed, Self-Healing, Non Inductive, PET Dielectric, Based on Types PM907S and PM948S

Executive Member: CNES

Date: 11/02/2016

Page 1

Appl. No.  
**338**  
6196

Components (including series and families) submitted for Qualification Approval

1

ESCC COMPONENT NO.	VARIANTS	RANGE OF COMPONENTS	BASED ON	TEST VEHICLE / S	COMPONENT SIMILAR
3006025	01 to 08 09 to 16	See Detail Specification	PM907S PM907R1S	PM907S 68µF ±10% 200V PM907R1S 33µF ±10% 170V	
	17 to 24 25 to 32		PM907R2S PM907NS		X X
3006026	01 to 04 05 to 08	See Detail Specification	PM948S PM948NS	PM948S-4 27µF ±10% 63V PM948S-4 10µF ±10% 170V	X

Component Manufacturer EXXELIA Technologies	2	Location of Manufacturing Plant 105, rue du Général Leclerc 67441 MARMOUTIER FRANCE	3	ESCC Specification used for Qualification Generic: 3006 Issue: 2 Detail/s: 748.09.390 and 741.09.390 Issue: C and D	4
--	---	--	---	---	---

Qualification Report Reference and date: Qualification Batch Manufacturing Synthesis, Ref. E4312 – TN 5.1 rev 1.0 Qualification Test Results and Analysis, Ref. E 4312 – TN 6.1 rev 1.0 Date: 01/12/2015	5	PID used for manufacturing Qualification Lot Ref No: PID Type PM907S Type PM948S Issue: A Date: 01/05/2015	6
---	---	---	---

PID changes since start of qualification None <input type="checkbox"/> Minor* <input checked="" type="checkbox"/> Major* <input type="checkbox"/> (* Details not published, provided in confidential annex 2.)	7	Current PID Verified by: CNES Name of Executive Representative Ref No: PID Type PM907S Type PM948S – 749.09.390 Issue: A Date: May 2015	8
---	---	---	---

Current Manufacturing facilities surveyed by: ESA & CNES	01/02/2015	9
---	------------	---

(Name of Executive Responsible) \_\_\_\_\_ (Date) \_\_\_\_\_

CNES/DCT/AQ/CQ-2015/02955, 17/02/2015	Report Reference
Satisfactory: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Explain	

Quality and Reliability Data Evaluation testing performed Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Report Ref. No.: E 413 – TN 4.1 rev 1.1 Ind. A Date: 25/11/2015 Equivalent Data: Certification:	10	Failure analysis, DPA, NCCS available (supply data) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NCCS 2CETE601: see box 13 Ref Nos. and purpose: ESA Analysis Report Number CA 0660, August 2015 ETR N° 10/1263-A, Marché CNES 93614/00 Phase 2, November 2011
---	----	--



APPLICATION FOR ESCC QUALIFICATION APPROVAL

Page 2

Component Title: Capacitors, Fixed, Self-Healing, Non Inductive, PET Dielectric, Based on Types PM907S and PM948S

Appl. No.  
338  
G406

Executive Member: CNES

Date: 11/02/2016

11

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 13; that the reports and data are available at the ESCC Executive and therefore applies for ESCC qualification status to be given to the component(s) listed herein.

Date: 11/02/2016

  
JP. BUSSENOT

(Signature of the Executive Coordinator)

Continuation of Boxes above: (Only non-confidential comments)

12



APPLICATION FOR ESCC QUALIFICATION APPROVAL

Component Title: Capacitors, Fixed, Self-Healing, Non Inductive, PET Dielectric, Based on Types PM907S and PM948S  
Executive Member: CNES Date: 11/02/2016

Page 3

Appl. No.  
338  
-C186

Non compliance to ESCC requirements:

13

No.:	Specification	Paragraph	Non compliance
1.	ESCC 3006	8.1.1	Chart IV was not performed on "components which have successfully passed the tests in Charts II and III for Testing Level 'B'"
2.	ESCC 3006	10.1.1	Delivered Data Documentation Package not compliant with requirements

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

14

NCCS 2CETE601 refers : — NONE , ONLY FORMAL CLOSE-OUT IS PENDING —


Executive Manager Disposition:

15

Application Approval: Yes  No

Action / Remarks:

Date:

  
Signature, ESA Representative



APPLICATION FOR ESCC QUALIFICATION APPROVAL

Component Title: Capacitors, Fixed, Self-Healing, Non Inductive, PET Dielectric, Based on Types PM907S and PM948S

Executive Member: CNES

Date: 11/02/2016

Page 4

Appl. No.  
358  
C196

ANNEX 1: LIST OF TESTS DONE TO SUPPORT QUALIFICATION

16

Tests conducted in compliance with:

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

Tests vehicle identification/description:

PM948S-4 27µF ±10% 63V DC 1521	PM948S-4 10µF ±10% 170V DC 1521
PM907R1S 33µF ±10% 170V DC 1524	PM907S 68µF ±10% 200V DC 1518

Detail Specification reference: 741.09.390 and 748.09.390

Chart IV	Test	Tick when done	Conditions	Date Code	Tested Qty	No. of Rejects	Comments if not performed. Comments on Rejection
Environmental / Mechanical Subgroup 1	Corrosion	<input type="checkbox"/>	IEC 68-2-11				NA
	Seal Test	<input type="checkbox"/>	IEC 68-2-17				NA
Environmental / Mechanical Subgroup II (Column 1)	Robustness of Terminations	<input checked="" type="checkbox"/>	IEC 68-2-21	1518 1521 1524	4 x 6	0	
	Resistance to Soldering Heat	<input checked="" type="checkbox"/>	IEC 68-2-20	1518 1521 1524	4 x 6	0	
	Temperature Coefficient	<input checked="" type="checkbox"/>	ESCC 3006, Para. 9.15	1518 1521 1524	4 x 6	0	
	Climatic Sequence	<input checked="" type="checkbox"/>	ESCC 3006, Para. 9.14	1518 1521 1524	4 x 6	0	
	Seal Test	<input type="checkbox"/>	IEC 68-2-17				NA
Environmental / Mechanical Subgroup II (Column 2)	Solderability	<input checked="" type="checkbox"/>	IEC 68-2-20	1518 1521 1524	4 x 6	0	
	Rapid Change of Temperature	<input checked="" type="checkbox"/>	IEC 68-2-14	1518 1521 1524	4 x 6	0	
	Vibration	<input checked="" type="checkbox"/>	IEC 68-2-6	1518 1521 1524	4 x 6	0	
	Shock or Bump	<input checked="" type="checkbox"/>	ESCC 3006, Para. 9.13	1518 1521 1524	4 x 6	0	
	Climatic Sequence	<input checked="" type="checkbox"/>	ESCC 3006, Para. 9.14	1518 1521 1524	4 x 6	0	
	Seal Test	<input type="checkbox"/>	IEC 68-2-17				NA
Endurance Sub	Operating Life	<input checked="" type="checkbox"/>	ESCC 3006, Para. 9.16	1518 1521 1524	4 x 40	0	

Additional Tests	Electrical Measurements during Endurance Testing	<input checked="" type="checkbox"/>	ESCC 3006, Para. 9.6.5	1518 1521 1524	4 x 40	0	
	Permanence of Marking	<input checked="" type="checkbox"/>	ESCC 24800	1518 1521 1524	4 x 2	0	
	Temperature Coefficient	<input checked="" type="checkbox"/>	ESCC 3006	1518 1521 1524	4 x 6	0	
		<input type="checkbox"/>					
		<input type="checkbox"/>					



APPLICATION FOR ESCC QUALIFICATION APPROVAL

Component Title: Capacitors, Fixed, Self-Healing, Non Inductive, PET Dielectric, Based on Types PM907S and PM948S

Executive Member: CNES

Date: 11/02/2016

Page 6

Appl. No.

C196

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

ENTRIES

- Form Heading** shall indicate:— the title of the component as given in its detail specification or the name of the series or family; — the entering date; — the serial number and the suffix of the form.
- Box 1** shall provide details given in table; in particular there shall be listed - the variants or range of variants; the range of components by using the ESCC code for values tolerances, etc.; the designation given in detail specification as 'based on'; —under Test Vehicle enter either a cross or the specific characteristic capable to identify the component tested; — under component similar enter a cross.
- Box 2 and 3** Manufacturer's name and location of plant where the components were manufactured and tested.
- Box 4** Generic and detail specifications used during qualification program.
- Box 5** Reference to test report(s) submitted in support of application.
- Box 6** Enter details to identify the PID that was applicable at the time the qualification lot was manufactured.
- Box 7** If the PID was evolved after qualification lot manufacture, adequate details of such evolution shall be provided together with reasons for changes. Major changes shall be clearly marked.
- Box 8** The box serves to identify the current PID and the Executive Representative that has verified it together with the date of this occurrence.
- Box 9** This box can be completed only after a physical visit to the plant to confirm that the practices, procedures, materials, 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 10** Details entered shall be sufficient to evidence that an evaluation program according to ESCC Basic Specification No. 22600 has been performed and that the results thereof are summarized in the survey and test reports. If the evaluation program has not been carried out according to established ESCC documents, the applicant Executive Representative shall provide alternative data and declare its assessed degree of satisfactory compliance with the ESCC basic requirements. Reference shall be made to the reports on Destructive Physical Analysis (DPA), Failure Analysis and Non conformance (NCCS) issued during the Evaluation and/or Qualification Phase.
- Box 11** Enter the name of the Executive Coordinator and the signature.
- Box 12** To be used when there is a need to expand any of the boxes from 1 through 10. Identify box affected and reference the Box 12 in the relevant Box. Box 12 can be broken into 12a, 12b, etc. if several Boxes have to be expanded.
- Box 13** Fill table as requested.
- Box 14** Fill in any additional tasks required to achieve full compliance.
- Box 15** All Executive recommendations on the application itself, special conditions or restrictions, modifications of the QPL or ESCC QML entry, letters to the manufacturer, etc. shall be entered clearly in Box 15, signed by the ESA Representative.
- Box 16** Fill in Table as requested.
- Box 17** Confidential details of PID changes shall be provided.
- Box 18** State noncompliance with reference to specification(s) and paragraph(s). To simplify reference in Box 18 each nonconformance shall be sequentially numbered. If relevant state 'None'
- Box 19** Any additional action deemed necessary by the Executive Representative 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 nonconformance.
- Box 20** Additional Comments