

Component Title:

Capacitors, Fixed, Surface Mount, D.C Self-Healing, Non-Inductive, Polyterephtalate Dielectric, Based on Type PM948S/94S, PM907S/90S

Appl. No.

Page 1

	100		_	E	xecutive l	Membe	er:	CNES	;			D	ate: 09/10/2024	35	53C
Componer	nts (includ	ling series and	d fami	lies) s	ubmitted t	for Ext	ension	n of Qu	alification	n Approval:					1
COMPO	ESCC OMPONENT VARIANTS NO.				RANGE OF COMPONENTS				BASED ON		TEST VEHICLE / S	COMPO SIMIL			
3006 026		01 to 08			22nF to 47µF - 50V to 630V			V	PM948S/NS			PM948S 2.2µF 400V PM948S 1µF 630V			
3006 024	024 01 to 08				100nF to 47µF - 50V to 400V				PM94S	PM94S/NS		PM94NS 15µF 50V			
3006 025	006 025 01 to 32			82nF to 100µF - 50V to 1250V PM9				PM9078			PM907S 33μF 170V PM907R 33μF 250V				
3006/020	3006/020 01 to 24			220nF t	o 150µ	JF – 50	0V to 6	30V	PM90S			PM90S 100µF 100V			
Com	ponent N	Manufacturer		2	Lo	cation	of Ma	anufact	uring Pla	ant(s)	3				4
Component Manufacturer 2  EXXELIA					105, rue du Général Leclerc 67441 MARMOUTIER FRANCE							Date of original qualification approval: Date: 24/03/2016  Certificate Ref No. 338			
				5							6				7
ESCC Spe Maintenan		s used for lification testin	g:		Deviations to LVT testing and Detail Specification used:					Qualification Extension Report reference and date:					
Generic:	3006	Issue:	4	4	No ⊠ Yes □ (supply details in Box				ox	Test Reports:					
					15)					PM 90 S 100μF+-10% 100V MG312221200449 230242 i.A					
Detail(s):	3006/0			5	Deviation from current Specifications:					17 F22 77 27 (E)	4 NS 2 15µF ±10% 50V MG	31223010030	2 240003		
	3006/02		1	2	No ☐ Yes ☒ (Supply details)					i.A PM 907 R1 S 33µF +-10% 250V MG312221100281					
	3006/02			ō								23032		VIG312221100	1201
												PM 9	07 S 33μF+-10% 170V MG3	12220800023	220723
												PM 9	48 S3 2.2µF +-10% 400V M	G3122207004	75
													31 i.A 48 S4 1µF ±10% 630V MG3	12230100618	230624
												i.A			8
Summary of	of procure	ment or equiv	alent	test re	sults duri	ng cur	rent va	alidity p	period in	support of th	is ap	plication	(those to ESCC listed first)		
	t Name	Test	ing Le	vel		LA	T			Date code		_	Quantity De	livered	
Dashboard ESCC 3006 certificate 3 sales	6 -												40975		
PID change	es since l	ast maintenan	ce of	qualifi	cation		9	Curr	ent PID	Verified by:			G. Quadri, CNES		10
None					Discounting and State Control of the State Control				Name of Excutive Representative						
Minor*	$\boxtimes$							Ref No: 912.18.390							
Major*		*Provide deta	ails in	box:		Issue: E							Date:	22/05/2018	8
		19						Rev	Date:	01/11/2023					
Current Ma	nufacturi	ng facilities su	rveye	d by:					G. Qua	adri, CNES		on	19/12/	/2023	11
							(Name	e of Ex	ecutive F	Representativ	/e)	_	(Da	te)	
Satisfactory	<b>/</b> :	Yes	⊠		No			olain					,		
Report Refe	erence:	2024.000 EXXELIA			Audit Repor	π	-								

# APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL Component title: Capacitors, Fixed, Surface Mount, D.C Self-Healing, Non-Inductive, Polyterephtalate Dielectric, Based on Type PM948S/94S, PM907S/90S Executive Member: CNES Date: 09/10/2024 Failure Analysis, DPA, NCCS available: Yes No (Supply data) NCCS 2CETE403 (closed) Ref. No's and purposes: 2CETE403 (closed): manufacturing and testing of MoQ testing has been delayed due to an increase in production

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: 09/10/2024

L. FONTAINE, CNES

(Signature of the Executive Coordinator)

Continuation of Boxes above:

14

Page 2

Appl. No.

353C

12

13

Box 6.: Some procurement sometimes use specifications agreed with EXXELIA (EFD documents as shown in Annex 1). These documents are similar to ESCC formats and data issued from lots manufactured against these EXXELIA specifications are accepted as relevant to the purpose of maintaining ESCC qualification.



Component title:

Capacitors, Fixed, Surface Mount, D.C Self-Healing, Non-Inductive, Polyterephtalate Dielectric, Based on Type PM948S/94S, PM907S/90S

Page 3

Appl. No.

		Executive Member:	CNES	Date: 09/10/2024	353C			
Non com	pliance to ESCC requirements:				15			
No.:	Specification		Paragraph	Non compliance				
1			· uragraph	Non-compliance	·			
Additional	I tasks required to achieve full or	ompliance for ESCC and	lification or rationale for acceptability					
noncompl	liance:	omphance for ESCC qua	illication or rationale for acceptability	or	16			
Executive	Manager Disposition				17			
Application Action / Re		No 🗆						
Date:				3.01				

B. Schade: Head of the Product Assurance and Safety Department



Component Title:

Capacitors, Fixed, Surface Mount, D.C Self-Healing, Non-Inductive, Polyterephtalate Dielectric, Based on Type PM948S/94S, PM907S/90S

Executive Member:

CNES

Date: 09/10/2024

Appl. No.

18

Page 4

353C

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

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:

300602008B107KE DC2312 (PM 90 S 100μF+/-	3006002401156KC DC2345 (PM 94 NS 2 15μF ±10%
10% 100V)	50V)
300602505C336KF DC2238 (PM 907 S 33μF+/-	300602515C336KH DC2313 (PM 907 R1 S 33μF +/-10%
10% 170V)	250V)
300602603C225KK DC2251 (PM 948 S3 2.2μF	300602604C105KZ DC2334 (PM 948 S4 1μF ±10%
+/-10% 400V)	630V)

Detail Specification reference:

3006/020 lss. 10, 3006/024 lss.12, 3006/025 lss.8, 3006/026 lss.6, EFD 573.00.390 lss. G

Chart V	Test	Tick when done	Conditions	Date Code	Tested Qty	No. of Rejects	Comments if not performed. Comments on Rejection
Environmental / Mechanical Subgroup 1 (Column 1)	Rapid Change of Temperature	X	IEC 68-2-14	2312 2238 2313 2251 2334	6 3 3 3 3	0	
	Vibration	×	IEC 68-2-6	2312 2238 2313 2251 2334	6 3 3 3 3	0	
	Shock or Bump	X	ESCC 3006, Para. 9.13	2312 2238 2313 2251 2334	6 3 3 3 3	0	
	Climatic Sequence	×	ESCC 3006, Para. 9.14	2312 2238 2313 2251 2334	6 3 3 3 3	0	
	Seal Test		IEC 68-2-17				Not Applicable
Environmental / Mechanical Subgroup 1 (Column 2)	Robustness of Teminations	×	IEC 68-2-21	2312 2238 2313 2251 2334	6 3 3 3 3	0	(*) Replaced with Adhesion as per para 4.2.4 (c) of 3006/026 for variants 01 to 04
	Resistance to Soldering Heat	×	IEC 68-2-20	2312 2238 2313 2251 2334	6 3 3 3 3	0	
	Climatic Sequence		ESCC 3006, Para. 9.14	2312 2238	12 6	0	

				2313 2251 2334	6 6 6		
	Seal Test		IEC 68-2-17				Not Applicable
Endurance Subgroup 2A	Radiographic Inspection	⊠	ESCC 20900	2312 2345 2238 2313 2251 2334	16 16 10 10 10	0	
	Operating Life	⊠	ESCC 3006, Para. 9.16	2312 2345 2238 2313 2251 2334	16 16 10 10 10	0	
Electrical Subgroup 2B	Temperature Coefficient	⊠	ESCC 3006, Para. 8.4.1.5	2312 2345 2238 2313 2251 2334	6 6 3 3 3 3	0	
Capability Subgroup 3	Solderability	×	IEC 68-2-20	2312 2345 2238 2313	6 6 3 3	0	
	Permanence of Marking	×	ESCC 24800	2312 2345 2238 2313	6 6 3 3	0	

Chart V	Test	Tick when done	Conditions	Date Code	Tested Qty	No. of Rejects	Comments if not performed. Comments on Rejection
lac							
Additional Tests							
Ad							



Component title:

Capacitors, Fixed, Surface Mount, D.C Self-Healing, Non-Inductive, Polyterephtalate Dielectric, Based on Type PM948S/94S, PM907S/90S

Executive Member: CNES

Date: 09/10/2024

Appl. No. 353C

Page 8

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

	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.