
		APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL			Page 1 Appl. No. 276E Rev1
Component Title: Power Inductors, Moulded, SMD, based on series SESI & CMC		Executive Member: CNES			Date: 19/09/2017
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
3201 009 01B 3201 009 02B 3201 009 03B 3201 009 04B 3201 009 05B	01 to 08 for SESI , and 01 , 03, 05 for CMC	3.3 μ H to 330 μ H 1.5 μ H to 2290 μ H 1.5 μ H to 2290 μ H 6.8 μ H to 330 μ H 1.0 μ H to 1000 μ H	SESI 14 SESI 15 SESI 15 W SESI 18 SESI 9.1	320100901B-3L3M 320100901B-331K 320100902B-1L5N 320100907B-151K 320101003B-600 320101005B-580	All other values in the range
3201 009 06B 3201 009 07B 3201 009 08B		7.0 μ H to 2200 μ H 35 μ H 35 μ H	SESI 22 SESI 32 WR SESI 32 PR		
3201 010 01B 3201 010 03B 3201 010 05B		52 μ H to 4000 μ H 60 μ H to 4900 μ H 60 μ H to 3300 μ H	CMC 15 CMC 18 CMC 22		
Component Manufacturer Microspire		Location of Manufacturing Plant(s) 16, Parc d'activités du Beau Vallon 57 970, Illange (France)		Date of original qualification approval: Date: 01/04/2004 Certificate Ref No. 276	
ESCC Specifications used for Maintenance of qualification testing: Generic: 3201 Issue: 4 Detail(s): 3201009 Issue: 12 3201010 Issue: 4		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: PV n°15-05-29 VOQ 2015 SESI CMC PV n°15-05-29A VOQ 2015 SESI CMC (re-marking batches) Leadframe supplier qualification report AQ176646 09/2017	
Summary of procurement or equivalent test results during current validity period in support of this application (those to ESCC listed first)					
Project Name	Testing Level	LAT	Date code	Quantity Delivered	
CF Livraisons SeSI 2015 .xls					
Cf. Livraisons CMC 2015.xls					
PID changes since start of qualification None <input type="checkbox"/> Minor* <input checked="" type="checkbox"/> Major* <input checked="" type="checkbox"/> *Provide details in box:		Current PID Verified by: CNES Name of Executive Representative Ref No: PID 58 Issue Rev 8 – SESI CMC Issue: 2 Date: 14/09/2017 Rev Date: 14/09/2017			
Current Manufacturing facilities surveyed by: ESA and CNES on 12/07/2017 (Name of Executive Representative) (Date) Satisfactory: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Explain Report Reference: ESCC-AUD-EXM2017-1					

	<p align="center">APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL</p> <p>Component title: Power Inductors, Moulded, SMD, based on series SESI & CMC</p> <p>Executive Member: CNES Date: 19/09/2017</p>	<p>Page 2</p> <p>Appl. No.</p> <p>276E Rev1</p>
<p>Failure Analysis, DPA, NCCS available: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (Supply data)</p> <p>Ref. No's and purposes:</p>		12
<p>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.</p> <p>Date: 19/09/2017</p> <p align="right">  C. DOUCET (Signature of the Executive Coordinator) </p>		13
<p>Continuation of Boxes above:</p> <p>Box 9 :</p> <ol style="list-style-type: none"> 1- New certificates EN9100 and ISO 9001 2- Update VOQ 2015 3- New glue for all size of CMC and SESI (New instruction IN0983) 4- New glue L3021100 5- Update reference documentation. 6- Qualification of new leadframe suppliers 7- Procurement according to the new Generic Specification from September 2017 		14



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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:

Date:


Signature, ESA Representative

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ANNEX 1: LIST OF TESTS DONE TO SUPPORT EXTENSION OF QUALIFICATION										
Tests conducted in compliance with: <ul style="list-style-type: none"> - ESCC 3201 generic specification; Chart V (for ESCC/QPL parts); - Or PID-TFD (for ESCC/QML parts) 										
Tests vehicle identification/description:										
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">320100901B-3L3M</td> <td style="width: 50%;">320100902B-1L5N</td> </tr> <tr> <td>320100901B-331K</td> <td>320100907B-151K</td> </tr> <tr> <td>320101003B-600</td> <td></td> </tr> <tr> <td>320101005B-580</td> <td></td> </tr> </table>			320100901B-3L3M	320100902B-1L5N	320100901B-331K	320100907B-151K	320101003B-600		320101005B-580	
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320100901B-331K	320100907B-151K									
320101003B-600										
320101005B-580										
Detail Specification reference:										

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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
Environmental / Mechanical Subgroup (Column 1)	Shock (Specified Pulse)	<input checked="" type="checkbox"/>	MIL-STD-202	15/14 , 15/15	24	0	
	Vibration	<input checked="" type="checkbox"/>	MIL-STD-202	15/14 , 15/15	24	0	
	Moisture Resistance	<input checked="" type="checkbox"/>	MIL-STD-202	15/14 , 15/15	24	0	
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC 20500	15/14 , 15/15	24	0	
Environmental / Mechanical Subgroup (Column 2)	Thermal Shock	<input checked="" type="checkbox"/>	MIL-STD-202	15/14 , 15/15	24	0	
	Barometric Pressure	<input checked="" type="checkbox"/>	MIL-STD-202	15/14 , 15/15	24	0	
	Temperature Rise	<input checked="" type="checkbox"/>	ESCC 3201, Para. 9.9	15/14 , 15/15	24	0	
	Overload	<input checked="" type="checkbox"/>	ESCC 3201, Para. 9.10	15/14 , 15/15	24	0	
	Electrical Measurements at Room Temperature	<input checked="" type="checkbox"/>	ESCC 3201, Para. 9.3.4	15/14 , 15/15	24	0	
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC 20500	15/14 , 15/15	24	0	
Endurance Subgroup	Operating Life	<input checked="" type="checkbox"/>	ESCC 3201, Para. 9.19.2	15/14 , 15/15	80	0	
	Electrical Measurements during Endurance Testing	<input checked="" type="checkbox"/>	ESCC 3201, Para. 9.3.5	15/14 , 15/15	80	0	
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC 20500	15/14 , 15/15	80	0	
Electrical Subgroup (Electrical Measurements)	Electrical Measurements at High and Low Temperatures	<input checked="" type="checkbox"/>	ESCC 3201, Para. 9.3.3	15/14 , 15/15	24	0	
	Electrical Measurements at Room Temperature	<input checked="" type="checkbox"/>	ESCC 3201, Para. 9.3.4	15/14 , 15/15	24	0	
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC 20500	15/14 , 15/15	24	0	



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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
Electrical Subgroup (Ass. / Capab. Tests)	Solderability	<input checked="" type="checkbox"/>	MIL-STD-202	15/14 , 15/15	16	0	
	Permanence of Marking	<input checked="" type="checkbox"/>	ESCC 24800	15/14 , 15/15	16	0	
	Terminal Strength	<input checked="" type="checkbox"/>	ESCC 3201, Para. 9.12	15/14 , 15/15	16	0	
Additional Tests		<input type="checkbox"/>					
		<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 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.