

	APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL Component Title: Resistors, Fixed, Chip, Thick Film, based on type CHPHR and CHPFR Executive Member: CNES Date: 07/09/2015	Page 1 Appl. No. 314B			
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
4001/026	01 & 06 02 & 07 03 & 08	All values 50V to 500V	CHPHR0603 CHPHR0805 CHPHR1206	4001026011272F4 40010260133R0G4 4001026023903F6 4001026075102J4 40010260356R2F4	
	04 & 09 05 & 10		CHPHR2010 CHPHR2512	4001026045R62G4 4001026093601J4 4001026057R15G6	
	11 & 16 12 & 17 13 & 18		CHPFR0603 CHPFR0805 CHPFR1206)) See box 14)	
	14 & 19 15 & 20		CHPFR2010 CHPFR2512))	
Component Manufacturer 2 VISHAY SA Division SERNICE		Location of Manufacturing Plant(s) 3 199 Bld de la Madeleine BP 1159 06003 NICE CEDEX 1 - France		Date of original qualification approval: 4 Date: 11/10/2011 Certificate Ref No. 314	
ESCC Specifications used for Maintenance of qualification testing: 5 Generic: 4001 Issue: 3, 4 Detail(s): 4001026 Issue: 5, 6		Deviations to LVT testing and Detail Specification used: 6 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: 7 Report CAZ/15.001, September 2015	
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	
See report CAZ/15.001 and box 22					
PID changes since start of qualification 9 None <input type="checkbox"/> Minor* <input checked="" type="checkbox"/> Major* <input type="checkbox"/> *Provide details in box:		Current PID Verified by: 10 CNES Name of Executive Representative Ref No: PID CHP HR FR Issue: 4 Date: 02/09/2015 Rev Date: 24/08/2015			
Current Manufacturing facilities surveyed by: 11 ESA and CNES on 22/01/2015 (Name of Executive Representative) (Date) Satisfactory: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Explain Report Reference: CNES DCT/AQ/CQ-2015/01664, 23/01/2015					



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Failure Analysis, DPA, NCCS available: Yes ☐ No ☒ (Supply data)

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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.

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Date: 08/09/2015

JP. BUSSENOT

(Signature of the Executive Coordinator)

Continuation of Boxes above:

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Failure Rate Endurance Testing subgroup of Chart F4 performed on 28 test vehicles (8 000 hours completed):

CHPFR0603, 51,1 - 124 - 5,1k - 8,45k - 422k - 1,3M

CHPFR0805, 15 - 560 - 8,2k - 39,2k - 110k - 10M

CHPFR1206, 470 - 860 - 43,2k - 61,9k - 560k - 4,99M

CHPFR2010, 4,99 - 200 - 1,2k - 47k - 800k

CHPFR2512, 2,2 - 6,8 - 1,5k - 18k - 820k

40 or 90 parts for each lot.

Failure Rate Endurance Testing subgroup of Chart F4 performed on 5 test vehicles (4 000 hours completed):

CHPFR0603, 100 - 332k

CHPFR0805, 316

CHPFR1206, -

CHPFR2010, 27k

CHPFR2512, 200k

40, 60 or 90 parts for each lot.

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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

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Tests conducted in compliance with:

- ESCC 4001 generic specification; Chart F4 (for ESCC/QPL parts);
- or PID-TFD (for ESCC/QML parts)

Tests vehicle identification/description:

4001026011272F4 DC 1323	40010260133R0G4 DC 1403
4001026023903F6 DC 1322	4001026045R62G4 DC 1427
40010260356R2F4 DC 1318	4001026093601J4 DC 1427
4001026075102J4 DC 1345	4001026057R15G6 DC 1421

Detail Specification reference: 4001/026

Chart F4	Test	Tick when done	Conditions	Date Code	Tested Qty	N° of Rejects	Comments if not performed. Comments on Rejection
Environmental /Mechanical Subgroup	Mounting	<input checked="" type="checkbox"/>	IEC 60115-1 clause 4.31	All TV	8 x 5	0	
	Rapid Change Of Temperature	<input checked="" type="checkbox"/>	IEC 60068-2-14	All	8 x 5	0	
	Vibration	<input type="checkbox"/>	IEC 60068-2-6				NA
	Climatic test Sequence	<input checked="" type="checkbox"/>	ESCC 4001, Para 8.10	All	8 x 5	0	
	Seal Test	<input type="checkbox"/>	IEC 60068-2-17				NA
	Mounting	<input checked="" type="checkbox"/>	IEC 60115-1 clause 4.31	All	8 x 2	0	
	Robustness of Terminations	<input checked="" type="checkbox"/>	IEC 60068-2-21	All	8 x 2	0	
	Climatic test Sequence	<input checked="" type="checkbox"/>	ESCC 4001, Para 8.10	All	8 x 2	0	
	Seal Test	<input type="checkbox"/>	IEC 60068-2-17				NA
	Resistance to Soldering Heat	<input checked="" type="checkbox"/>	IEC 60068-2-20	All	8 x 2	0	
	Mounting	<input checked="" type="checkbox"/>	IEC 60115-1 clause 4.31	All	8 x 2	0	
	Climatic test Sequence	<input checked="" type="checkbox"/>	ESCC 4001, Para 8.10	All	8 x 2	0	
	Seal Test	<input type="checkbox"/>	IEC 60068-2-17				NA
	Mounting	<input type="checkbox"/>	IEC 60115-1 clause 4.31				NA
	Insulation Resistance	<input checked="" type="checkbox"/>	ESCC 4001, Para 8.3.1.2	All	8 x 5		
	Voltage Proof	<input checked="" type="checkbox"/>	ESCC 4001, Para 8.3.1.3	All	8 x 5		
Endurance Subgroup	Mounting	<input type="checkbox"/>	IEC 60115-1 clause 4.31				Not performed
	Operating Life	<input type="checkbox"/>	ESCC 4001, Para 8.13				Replaced with FR data
	Seal Test	<input type="checkbox"/>	IEC 60068-2-17				
Assembly Capability Subgroup	Solderability	<input checked="" type="checkbox"/>	IEC 60068-2-20	All	8 x 2		
	Permanence of marking	<input type="checkbox"/>	ESCC 24800				NA
Failure Rate Subgroup	Operating Life 8 000 h	<input checked="" type="checkbox"/>	ESCC 4001, Para 8.13	33 lots	23 x 40 3 x 60 7 x 90		11,3 M components.hours
	Seal Test	<input type="checkbox"/>	IEC 60068-2-17				NA
Additional Tests		<input type="checkbox"/>					
		<input type="checkbox"/>					
		<input type="checkbox"/>					

