		APPLICAT	ION FO	R EXTENSION	OF ESCC QU	ALIFIC	ATION APPROVAL	Page	1
E.	SCC	Component Title: Resistors, fixed, surface mount, film, non-hermetically sealed based on type MS1					Appl. I		
	Executive Member: DLR Date: 02/10/2015				256 H				
Components (includi	ng series and familie	s) submitted for Extens	ion of Q	ualification Ap	proval:			38.03.0	1
ESCC COMPONENT NO.	VARIANTS	RANGE OF	СОМР	ONENTS	BASE	D	TEST VEHICLE / S	COMPONE	
4001/022	01	all			MS1 ESA	We to a	4001/ 022-01		ii.
Component N Vishay Electronic Gr		DrFelix-Zandman		acturing Plant(s	5) 3	Date o	of original qualification app	roval:	4
		D-95100 Selb Germany				Date: Certific	Oktober 1999 cate Ref No. 256		
ESCC Specifications	015%	5	W 65	1000000 S00146 80	6		cation Extension Report		7
Detail(s): 4001/022  Summary of procure		Deviation from cur No ⊠ Yes		Supply d	57.000 ST	18.09.	2015 (those to ESCC listed first)	}	8
Project Name Testing Level		el LAT		Date code		Quantity I	Delivered		
www.				······································			1001 (0.00)	10.00 m m m m m m m m m m m m m m m m m m	
PID changes since start of qualification		9	Current PID \ by:	/erified		Joormann		10	
None □  Minor* ⊠  Major* □ *Provide details in box:				Ref No: PID 142210		Name of Excutive Represen 142210 ESA ev. A Date:		28/05/2014	
Wajor 🗆		g. Chapt. 2.2 updated			05/05/2014		Date,	26/03/2014	
Current Manufacturin		by:	me of E	Joormann xecutive Repre		on	1,000.1.0	05/2014 Date)	11
Satisfactory:	Yes ⊠	No 🗆	Explain		ere energialement alternative (ASSA) (S			29 V	

Report Reference:

ESCC Audit Report Vishay 2014.pdf

	APPLICATI	ON FOR EXT	ENSION	OF ESCC QUA	LIFICATIO	N APPROVAL	F	Page 2
ESCC	Component title: Resistors, fixed, surface mount, film, non-hermetically sealed based on type MS1					tically	Appl. No.	
	Executive Member:	DLR			Date:	02/10/2015		256 H
Failure Analysis, DPA, NCCS at Ref. No's and purposes:	/ailable: Yes	□ No	⊠	(Supply data)				12
The undersigned hereby certifies on behi that the appropriate documentation has b (except as stated in box 15;) - that the rep DLR as the responsible Executive Memb	een evaluated; - that fu oorts and data are avail	III compliance to lable at the ES	to all ESI	CC requirements cutive and theref	is evidend ore applies	on behalf of	00	13
Date: 02/10/2015					2/2/2	i A Guide	Joormann	
Date: 02/10/2015					(Si	gnature of the Ex		ator)
								T
Continuation of Boxes above:								14

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## APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL

Component title:

Resistors, fixed, surface mount, film, non-hermetically sealed based on type MS1

Appl. No.

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			DLR	Date: 02/10/2015	256 H
Ion compliance	to ESCC_requirements:				_ 1
No.:	Specification		Paragraph	Non compliance	ce .
			Ve. 10 - 20 - 20 - 20 - 20 - 20 - 20 - 20 -		
ditional tasks	required to achieve full co	mpliance for ESCC q	ualification or rationale for acce	eptability of	
ncompliance:					L
ecutive Mana	ger Disposition				
	ger Disposition oval: Yes □	No 🗆			
plication Appr	oval: Yes 🗆	No 🗆			Ŀ
plication Appr	oval: Yes 🗆	No 🗆			
olication Appr	oval: Yes 🗆	No 🗆			
olication Appr	oval: Yes 🗆	No □			
plication Appr	oval: Yes 🗆	No 🗆			
ecutive Mana plication Appr tion / Remark	oval: Yes 🗆	No 🗆			_1
olication Appr	oval: Yes 🗆	No 🗆		( \ bl	
plication Appr	oval: Yes 🗆	No 🗆		Signature, ESA Representative	L

### APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL

Component Title: Resistors, fixed, surface mount, film, non-hermetically sealed based on type MS1

Executive Member: DLR

Date: 02/10/2015

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

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:

4001022017R15F3	4001022019093F3
4001022018662F3	

Detail Specification reference:

Chart F4	Test	Tick when done	Conditions	Date Code	Tested Qty	N° of Rejects	Comments if not performed. Comments on Rejection
Environ	Mounting	×	IEC 60115-1 clause 4.31	29.06.15	15	0	
	Rapid Change Of Temperature	×	IEC 60068-2-14	01.07.15	15	0	
	Vibration	0	IEC 60068-2-6				NA
	Climatic test Sequence	×	ESCC 4001, Para 8.10	28.07.15	15	0	
	Seal Test		IEC 60068-2-17				NIA
	Mounting	×	IEC 60115-1 clause 4.31	29.06.15	6	0	
	Robustness of Terminations	×	IEC 60068-2-21	29.06.15	6	0	
mental /Mecha nical	Climatic test Sequence	⊠	ESCC 4001, Para 8.10	28.07.15	6	0	
Subgro	Seal Test		IEC 60068-2-17				NA
up	Resistance to Soldering Heat	×	IEC 60068-2-20	30.06.15	6	0	
	Mounting	×	IEC 60115-1 clause 4.31	20.07.15	6	0	
	Climatic test Sequence	×	ESCC 4001, Para 8.10	28.07.15	6	0	
	Seal Test		IEC 60068-2-17				NIA
	Mounting		IEC 60115-1 clause 4.31				man e terlección
	Insulation Resistance		ESCC 4001, Para 8.3.1.2	27.08.15	15	0	
	Voltage Proof		ESCC 4001, Para 8.3.1.3	27.08.15	15	0	
Endura nce Subgro	Mounting	×	IEC 60115-1 clause 4.31	10.06.15	15	0	
	Operating Life	×	ESCC 4001, Para 8.13	02.09.15	15	0	
up	Seal Test		IEC 60068-2-17				MIA
Assem	Solderability		IEC 60068-2-20	30.06.15	6	0	
bly Capabil ity	Permanence of marking	Ø	ESCC 24800	01.07.15	6	0	
Subgro	Operating Life		ESCC 4001, Para 8.13				NIA
	Seal Test	0	IEC 60068-2-17				MA
Addi		0					
tion al		0					
Test		0					



## APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL

Resistors, fixed, surface mount, film, non-hermetically sealed based on type MS1 Component title:

Date: 02/10/2015 Executive Member: DLR

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

î	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; \(\frac{1}{2}\) 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 <b>14</b>	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.