
		<b>APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL</b>			Page 1
		Component Title: RESISTOR, FIXED, SURFACE MOUNT, THIN FILM, NON-HERMETICALLY SEALED BASED ON TYPE MS1 Executive Member: German Space Agency at DLR      Date: 10/10/2024			Appl. No. 256N
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
4001/022	01	Click here to enter text.	MS1	4001022013R32F3	
	01	Click here to enter text.	MS1	4001022011623F3	
	01	Click here to enter text.	MS1	4001022014753B2	
Component Manufacturer		Location of Manufacturing Plant(s)		Date of original qualification approval:	
Vishay Electronics, Division Draloric GmbH		Dr.-Felix-Zandman-Platz 1 95100 Selb, Germany		Date: 01/10/1999	
				Certificate Ref No. 256	
ESCC Specifications used for Maintenance of qualification testing:		Deviations to LVT testing and Detail Specification used:		Qualification Extension Report reference and date:	
Generic: 4001	Issue: 6	No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> (supply details in Box 15)		Report - Periodic Tests	
Detail(s): 4001/022	Issue: 5	Deviation from current Specifications:		Certificate of Qualification No. 256 M	
		No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> (Supply details)		Report No. 256M/24/024	
				11.09.2024	
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 Appendix: Confidential: Orders 01/09/2023 - 01/08/2024					
PID changes since start of qualification		Current PID Verified by: Burak Gökgöz, German Space Agency at DLR			10
None <input type="checkbox"/>		Name of Executive Representative			
Minor* <input checked="" type="checkbox"/>		Ref No: PID 142210 ESA			
Major* <input type="checkbox"/>	*Provide details in box:	Issue: 7	Date: 27/11/2024		
	See Appendix 2, Box 19	Rev Date: 10/10/2024			
Current Manufacturing facilities surveyed by:		Burak Gökgöz, German Space Agency at DLR		on 11/09/2024	
		(Name of Executive Representative)		(Date)	
Satisfactory:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Explain		
Report Reference:	VIS-AUD-DLR-SEP-2024 Issue 1 (Date: 07.10.2024)				

	<p style="text-align: center;"><b>APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL</b></p> <p>Component title: RESISTOR, FIXED, SURFACE MOUNT, THIN FILM, NON-HERMETICALLY SEALED BASED ON TYPE MS1</p> <p>Executive Member: German Space Agency at DLR      Date: 10/10/2024</p>	<p>Page 2</p> <p>Appl. No. 256N</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 .....DLR..... as the responsible Executive Member for ESCC qualification status to be extended to the component(s) listed herein.</p> <p>Date:      27/11/2024      <b>Burak Gökgöz</b></p> <div style="font-size: small; margin-left: 150px;">       Digital signiert von Burak Gökgöz        DN: PostalCode=51147, CN=Deutsches Zentrum fuer Luft- und Raumfahrt e. V. (DLR), STREET=Linder Höhe, 51147Köln-Weiden, C=DE, CN=Burak Gökgöz: E:burak.goe@post@dlr.de        Grund: Ich bin der Verfasser dieses Dokuments        *Titel: Burak        Datum: 2024.11.27 11:48:55+01'00'        Foxit PDF Reader Version: 2024.2.2     </div> <p style="text-align: right; margin-right: 50px;">i.A. Burak Gökgöz, DLR (Signature of the Executive Coordinator)</p>		13
<p>Continuation of Boxes above:</p>		14



APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL

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Executive Member: German Space Agency at DLR Date: 10/10/2024

Page 3  
Appl. No.  
256N

Non compliance to ESCC requirements:

15

No.:	Specification	Paragraph	Non compliance

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

16

Executive Manager Disposition

17

Application Approval: Yes  No

Action / Remarks:

Date:

  
B. Schade: Head of the Quality Department



APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL

Component Title: RESISTOR, FIXED, SURFACE MOUNT, THIN FILM, NON-HERMETICALLY SEALED BASED ON TYPE MS1

Executive Member: German Space Agency at DLR

Date: 10/10/2024

Page 4

Appl. No.

256N

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

18

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:

4001022013R32F3, 4001022013R32F3, 4001022013R32F3	DC2420, DC2402, DC2420
Click here to enter text.	

Detail Specification reference: ESCC 4001-022, Issue 5

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 type="checkbox"/>	IEC 60115-1 clause 4.31		N/A		
	Rapid Change Of Temperature	<input type="checkbox"/>	IEC 60068-2-14		N/A		
	Vibration	<input type="checkbox"/>	IEC 60068-2-6		N/A		
	Climatic test Sequence	<input type="checkbox"/>	ESCC 4001, Para 8.10		N/A		
	Seal Test	<input type="checkbox"/>	IEC 60068-2-17		N/A		
	Mounting	<input checked="" type="checkbox"/>	IEC 60115-1 clause 4.31	2420	2x3	0	
	Robustness of Terminations	<input checked="" type="checkbox"/>	IEC 60068-2-21	2420	2x3	0	
	Climatic test Sequence	<input checked="" type="checkbox"/>	ESCC 4001, Para 8.10	2420	2x3	0	
	Seal Test	<input type="checkbox"/>	IEC 60068-2-17		N/A		
	Resistance to Soldering Heat	<input checked="" type="checkbox"/>	IEC 60068-2-20	2420	2x3	0	
	Mounting	<input checked="" type="checkbox"/>	IEC 60115-1 clause 4.31	2420	2x3	0	
	Climatic test Sequence	<input checked="" type="checkbox"/>	ESCC 4001, Para 8.10		2x3	0	
	Seal Test	<input type="checkbox"/>	IEC 60068-2-17		N/A		
	Mounting	<input type="checkbox"/>	IEC 60115-1 clause 4.31		N/A		
	Insulation Resistance	<input checked="" type="checkbox"/>	ESCC 4001, Para 8.3.1.2	2420	2x3	0	
Voltage Proof	<input checked="" type="checkbox"/>	ESCC 4001, Para 8.3.1.3	2420	2x3	0		
Endurance Subgroup	Mounting	<input checked="" type="checkbox"/>	IEC 60115-1 clause 4.31	2420	5x3	0	
	Operating Life	<input checked="" type="checkbox"/>	ESCC 4001, Para 8.13	2420	5x3	0	
	Seal Test	<input type="checkbox"/>	IEC 60068-2-17		N/A		
Assembly Capability Subgroup	Solderability	<input checked="" type="checkbox"/>	IEC 60068-2-20	2420	2x3	0	
	Permanence of marking	<input checked="" type="checkbox"/>	ESCC 24800	2420	2x3	0	
	Operating Life	<input type="checkbox"/>	ESCC 4001, Para 8.13		N/A		Failure Rate Endurance Testing (8000h) not requested
	Seal Test	<input type="checkbox"/>	IEC 60068-2-17		N/A		
Additional Tests		<input type="checkbox"/>					
		<input type="checkbox"/>					
		<input type="checkbox"/>					

Remark: Tested Quantity of 15 pieces refers to 3 different R-values (low, medium high) = 3 test lots with 5 pieces tested per test lot.  
 Tested Quantity of 6 pieces refers to 3 different R-values (low, medium high) = 3 test lots with 2 pieces tested per test lot.



APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL

Page 6

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Appl. No.

Executive Member: German Space Agency at DLR Date: 10/10/2024

256N

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.