# ESCC

## APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL

Component Title: Fuses, Surface Mount, Thin Film, 0.14 to 3.5 A, Based on Type MGA-S

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	and the time	Exec	cutive Memb	oer: I	ESTE	С		ĵ	Date: 04/06/2018		284E	
Components (includ	ing series and famili	es) subr	nitted for Ex	tension	of Qu	alification	Approval:					1
ESCC COMPONENT VARIANTS NO.			RANGE	OF COM	IPON	ENTS		BASED TEST VEHICLE / S			COMPONENT SIMILAR	г
4008/001	A	AS PER SPE	ECIFICA	TION		MGA-S TY	PE	VARIANTS 03, 07	7, 11 RE	ST OF VARIAN	TS	
Component N	lanufacturer	2 V	Locatio Verkhofstras			uring Plan	t(s) 3	_	e of original qualificat	tion approv	al:	4
	C	CH-6002 Luc	H-6002 Lucerne WITZERLAND  Date: 01/06/2008  Certificate Ref No. 284									
ESCC Specification							Qua	Qualification Extension Report reference and date:				
Generic: 4008  Detail(s): 4008/0	Issue: 4 01 Issue: 5		No ⊠ Deviation fro No ⊠	Yes m curre Yes	□ nt Spe	15)		SCI	HURTER No. D10-02	25-613 (30/0	05/2018)	
Summary of procure	ement or equivalent t	est resu	ults during co	urrent va	alidity	period in s	upport of this a	applicat	ion (those to ESCC li	isted first)		8
Project Name See sales file attach to the application	Testing Le	vel	L	AT			Date code		Qı	uantity Deliv	vered	
PID changes since	start of qualification			9	Cur	rent PID	Verified by:	- I	ESA Name of Francisco Re			10
None □ Minor* ⊠ Major* □	*Provide details in				Issu	ie:	0109.0044 L 05/06/2018		Name of Excutive Re	Date:	10/07/2018	
Current Manufacturi	ing facilities surveyed	d by:		(Name	e of E	ESA xecutive R	epresentative)		on	19/05/2 (Date		11
Satisfactory:	Yes ⊠		No 🗆		olain		3				ž.	
Report Reference:	_ESCC-SUR-S	SCH-20	16	_								



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Z Maria	Executive Member:	ESTEC			Date:	04/06/2018	284E	Ε
5 "			-77					12
Failure Analysis, DPA, NCCS ava	ilable: Yes	⊠ No		(Supply data)				
Ref. No's and purposes: CA0449, CA	A0538, The NCCS 1E	SCH701 has be	een clos	sed-out.				
The undersigned hereby certifies on behalf that the appropriate documentation has bee (except as stated in box 15;) - that the repo ESA as the responsible Executive Member	en evaluated; - that full rts and data are availa	compliance to ble at the ESC	all ESC	CC requirements is utive and therefor	s evidend e applies	on behalf of		13
Date: 23/07/2018						Suchan Tree	2	
					(Si	gnature of the Executive (	Coordinator)	
Continuation of Boxes above:								14
								*

	III.			
		-		-
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7 400	2	2		_

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	A. S.	Executive Member: ESTEC	Date: 04/06/2018	284E			
Non compliance to ESCC requirements:							
No.:	Specification	Paragraph	Non compliance	9			
Additional	I I tasks required to achieve full cor	I mpliance for ESCC qualification or rationale for a	acceptability of	16			
noncompl	iance:	2	-	10			
	+ *+						
Executive	Manager Disposition			17			
Applicatio Action / R		No 🗆					
			301				
Date:			Signature, ESA Representative	<u> </u>			



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

Executive Member: **ESTEC** 

Tests conducted in compliance with:

ESCC 4008 generic specification; Chart F4 (for ESCC/QPL parts); Or PID-TFD 0109.0044.L (for ESCC/QML parts)

Tests vehicle identification/description:

400800103, 400800107, 400800111	MGA-S 0.262 A, MGA-S 1.05 A, MGA-S 2.8 A

Detail Specification reference:

4008/001

Chart F4	Test	Tick when done	Conditions	Date Code	Tested Qty	No. of Rejects	Comments if not performed. Comments on Rejection
	Resistance to Soldering Heat	$\boxtimes$	ESCC 4008 Para. 8.13	2018	60	0	
	Rapid Change of Temperature	$\boxtimes$	IEC 60068-2-14	2018	60	0	
	Vibration		MIL-STD-202, Test Method 204	-	-	-	Not applicable acc. to 4008/001
	Shock	×	IEC 60068-2-27	2018	60	0	
	Fusion Characterisation Tests		ESCC 4008 Para. 8.5	2018	60	0	
dno	Insulation Resistance	$\boxtimes$	MIL-STD-202, Test Method 302	2018	45	0	
Environmental/Mechanical Subgroup	External Visual Inspection		ESCC Basic Specification No. 20500	2018	60	0	
	Resistance to Soldering Heat	×	ESCC 4008 Para. 8.13	2018	60	0	=
	Damp Heat, Steady State	$\boxtimes$	IEC 60068-2-78	2018	60	0	
	Fusion Characterisation Tests		ESCC 4008 Para. 8.5	2018	60	0	
<u> </u>	Insulation Resistance	×	MIL-STD-202, Test Method 302	2018	45	0	
	External Visual Inspection	×	ESCC Basic Specification No. 20500	2018	60	0	
	Resistance to Soldering Heat	$\boxtimes$	ESCC 4008 Para. 8.13	2018	18	0	
14.10	Thermal Vacuum	×	ESCC 4008 Para. 8.15	2018	18	0	
	External Visual Inspection		ESCC Basic Specification No. 20500	2018	18	0	



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**ESTEC** 

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Chart F4	Test	Tick when done	Conditions	Date Code	Tested Qty	No. of Rejects	Comments if not performed. Comments on Rejection
	Resistance to Soldering Heat	$\boxtimes$	ESCC 4008 Para. 8.13	2018	60	0	
	Operating Life	×	MIL-STD-202, Test Method 108	2018	60	0	
Endurance Subgroup	Fusion Characterisation Tests	×	ESCC 4008 Para. 8.5	2018	60	0	
ance (	Insulation Resistance	$\boxtimes$	MIL-STD-202, Test Method 302	2018	45	0	
Endur	External Visual Inspection	$\boxtimes$	ESCC Basic Specification No. 20500	2018	60	0	
	Permanence of Marking	$\boxtimes$	ESCC Basic Specification No. 24800	2018	60	0	,
Assembly Capability Subgroup	Robustness of Terminations	$\boxtimes$	IEC 60068-2-21	2018	15	0	
	Solderability	$\boxtimes$	ESCC 4008 Para. 8.4	2018	60	0	
	Verification of Overload Operation at DC Rated Voltage (Room Temperature)		ESCC 4008 Para. 8.6	2018	60	0	
pabilit	Insulation Resistance	$\boxtimes$	MIL-STD-202, Test Method 302	2018	60	0	
bly Ca	Resistance to Soldering Heat	$\boxtimes$	ESCC 4008 Para. 8.13	2018	60	0	
Assem	Verification of Overload Operation at DC Rated Voltage (Low Temperature)		ESCC 4008 Para. 8.6	2018	60	0	
	Insulation Resistance	$\boxtimes$	MIL-STD-202, Test Method 302	2018	60	0	
la							
Additional Tests							
A							



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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;
Tommeading	- 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.