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Binne A		~	and a

Component Title: Capacitors, Leadless Surface Mounted, Tantalum, Solid electrolyte,

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	500	Says and the says and the says are s		ries resistance t	ance based on type TES.			
		Executive Member:	ESA		Date: 11/09/2015	327A		
Components (includ	ing series and families	s) submitted for Extension	on of Qualification	Approval:		L		
ESCC COMPONENT NO.	VARIANTS	RANGE OF CO	RANGE OF COMPONENTS BASED ON			COMPONENT SIMILAR		
3012/004	01 A-G16 02 B-G16 03 C = P17	ESCC 3012/004 Ta		TES	See box 14	All other variants and values.		
	<u> </u>			23 4 24 21	,			
Component M AVX Czech Republic		2 Location of M Dvorakova 328 Lanskroun Czech Republic	lanufacturing Plan	nt(s) <u>3</u>	Date of original qualificat Date: 12/10/20 Certificate Ref No. 3:	(A) 1 (A)		
ESCC Specifications Maintenance of qual Generic 3012 Detail(s): 3012/00	used for ification testing: Issue: 2	Deviations to LVT to used: No ☑ Yes Deviation from current No ☑ Yes	(supply of 15)	details in Box	Package, 15th September	cation, Customer Information		
			2 000000 0- 00 MONOMO			L		
Project Name	Testing Leve			upport of this ap Date code	plication (those to ESCC lis	sted first) antity Delivered		
See box 22								
PID changes since s	lart of qualification	9	Current PID \	Verified by:	ESA	I 10		
None Minor* Major*	*Provide details in bo		Ref No:	1.5	Name of Excutive Rep PID 100/004 issue 4			
Current Manufacturin	g facilities surveyed b	v.*	ESA			23/06/2015		
out on managery	g racinics surveyed b	-	e of Executive Re	epresentative)	on	(Date)		
Satisfactory:	Yes ⊠	A. 0.78.31	plain All corr	rective actions fr	om the audit have been clook place on the 16/09/201	sed out during a		
Report Reference:	AVXLAN-AUD-2	015-1						

Component title: Capacitors, Leadless Surface Mounted, Tantalum, Solid electrolyte,

Low equivalent series resistance based on type TES.

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Failure Analysis, DPA, NCCS available: Yes

No

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 ESA as the responsible Executive Member for ESCC qualification status to be extended to the component(s) listed herein.

Date:

15/10/2015

Shonoda. (Signature of the Executive Coordinator)

SZ

Continuation of Boxes above:

14

Selection of codes was based on:

0

Coverage of different case sizes
Coverage wide range of voltage
Coverage different capacitances and used powders

Selected codes:

A10/10 - 301200401B106KA1800 B3,3/35 - 301200402B335KV1000 C33/20 - 301200403B336KD0300 D100/16 - 301200404K107KC0055 E470/6 - 301200405K477KJ0030

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-			6
_	200	Manual N	

Component title:

Capacitors, Leadless Surface Mounted, Tantalum, Solid electrolyte, Low equivalent series resistance based on type TES.

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Executive Member: ESA

Non compliance	to ESCC requirements:				15
No.:	Specification		Paragraph	Non compliance	
1					
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		The second secon			

1		***************************************			
Additional tasks noncompliance:	required to achieve full com	pliance for ESCC qu	ualification or rationale for acceptab	ility of	16
					2,2
xecutive Manage	ger Disposition				
					17
Application Appr Action / Remarks		• 🗆			
Cuon / Nemark					
				0 0	
				100	
ate:				Size For For For	
				Signature, ESA Representative	

Capacitors, Leadless Surface Mounted, Tantalum, Solid electrolyte, Low equivalent series resistance based on type TES. Component Title:

Date: 11/09/2015 Executive Member: ESA

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

Tests conducted in compliance with:

ESCC 3012 generic specification; Chart V (for ESCC/QPL parts); Or PID-TFD (for ESCC/QML parts)

Tests vehicle identification/description, described in box 14,

G-Allendaria	

Detail Specification reference:

3012/004

Chart IV	Test	Tick when done	Conditions	Date Code	Tested Qty	No. of Rejects	Comments if not performed. Comments on Rejection
Adhesion (Column 1) External Visual Inspection Permanence of Marking Climatic Sequence	Ø	IEC 384-1	A, B, D case size 1115, C case size 1015, E case size 1315	12x5	0		
	Adhesion		ESCC 3012, Para. 9.10	A, B, D case size 1115, C case size 1015, E case size 1315	12×5	0	
	Visual	⊠	ESCC 20500	A, B, D case size 1115, C case size 1015, E case size 1315	12x5	0	
		×	ESCC 24800	A, B, D case size 1115, C case size 1015, E case size 1315	12x5	0	
		×	ESCC 3012, Para, 9.13	A, B, D case size 1115, C case size 1015, E case size 1315	12x5	0	
Environmental / Mechanical Subgroup (Column 2)	Mounting	×	IEC 384-1	A, B, D case size 1115, C case size 1015, E case size 1315	12x5	0	

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Endui	Electrical Measurements during Endurance Testing	⊠	ESCC 3012, Para. 9.4.5	case size 1315 A, B, D case size 1115, C case size 1015, E case size 1315	36x5	0	
Endurance Subgroup	Operating Life at 85 °C	⊠	ESCC 3012, Para. 9.17.2	A, B, D case size 1115, C case size 1015, E	36x5	0	
Q.	Mounting	Ø	IEC 384-1	A, B, D case size 1115, C case size 1015, E case size 1315	36x5	0	
	Climatic Sequence	Ø	ESCC 3012, Para. 9.13	A, B, D case size 1115, C case size 1015, E case size 1315	12x5	0	
	Permanence of Marking	⊠	ESCC 24800	A, B, D case size 1115, C case size 1015, E case size 1315	12x5	0	
	External Visual Inspection		ESCC 20500	A, B, D case size 1115, C case size 1015, E case size 1315	12x5	o	
	Shock or Bump		IEC 68-2-27 or IEC 68-2-29	A, B, D case size 1115, C case size 1015, E case size 1315	12x5	0	
	Vibration	Ø	IEC 68-2-6	A, B, D case size 1115, C case size 1015, E case size 1315	12x5	0	
	Rapid Change of Temperature	×	IEC 68-2-14	A, B, D case size 1115, C case size 1015, E case size 1315	12x5	o	



Component title:

Capacitors, Leadless Surface Mounted, Tantalum, Solid electrolyte, Low equivalent series resistance based on type TES.

Executive Member: ESA

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Chart IV	Test	Tick when done	Conditions	Date Code	Tested Qty	No. of Rejects	Comments if not performed Comments on Rejection
Temperatu Stability Stability Electrical Measurement at Room Temperature at Room Tem	High and Low Temperature Stability	×	ESCC 3012, Para. 9.14	A. B. D case size 1115, C case size 1015, E case size 1315	12x5	0	
	Electrical Measurements at Room Temperature	⊠	ESCC 3012, Para. 9.4.4	A, B, D case size 1115, C case size 1015, E case size 1315	12x5	0	
		⊠	ESCC 20500	A, B, D case size 1115, C case size 1015, E case size 1315	12x5	0	
Electrical Subgroup (Ass. / Capab. Tests)	Surge Voltage	⊠	ESCC 3012, Para. 9.15	A, B, D case size 1115, C case size 1015, E case size 1315	12x5	o	
	Solderability	⊠	IEC 68-2-20	A, B, D case size 1115, C case size 1015, E case size 1315	12x5	0	
Additional Tests	Operating Life at 125°C	8	ESCC 3012, Para 9.17.2	A, B, D case size 1115, C case size 1015, E case size 1315	24x5	0	Performed as part of chart IV,
	Damp Heat Steady State	⊠	ESCC 3012, Para 9.16	A, B, D case size 1115, C case size 1015, E case size 1315	12x5	0	Performed as part of chart IV.
				Weller To W		1711/20/20	



Box 22

Additional Comments.

APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL

Capacitors, Leadless Surface Mounted, Tantalum, Solid electrolyte, Low equivalent series resistance based on type TES. Component title:

Executive Member: ESA Date: 11/09/2015

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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, stc. if several boxes have to be expanded.
3ox 15	Fill in Table as requested.
30x 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.
30x 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.
Sox 18	Fill in Table as requested.
Sox 19	Confidential Details of PID changes including those of a confidential nature, shall be provided.
ox 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',
ox 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.