		APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL			Page 1 Appl. No. 196G
Component Title: Capacitors, Leadless Surface Mounted, Tantalum, Solid Electrolyte, enclosed anode connection, based on type TAJ		Executive Member: ESA		Date: 29/02/2016	
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
3012001	01 - A - Nilo only 02 - B - Nilo only 13 - C - Copper only 14 - D - Cooper only 17 - E - Cooper only	ESCC 3012/001 Table 1(a) 0,1 µF - 220 µF, 4 V up to 50V	TAJ	See box 14	All other variants and values
Component Manufacturer AVX Czech Republic s.r.o.		Location of Manufacturing Plant(s) Dvorakova 328 Lanskroun Czech Republic		Date of original qualification approval: Date: 01/06/1993 Certificate Ref No. 196	
ESCC Specifications used for Maintenance of qualification testing: Generic: 3012 Issue: 2 Detail(s): 3012/001 Issue: 5		Deviations to LVT testing and Detail Specification used: 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: "ESA Extension of Valid Qualification, Customer Information Package", qualification_report_TAJ_2016pdf, 29-February 2016	
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 box 22.					
PID changes since start of qualification None <input checked="" type="checkbox"/> Minor* <input type="checkbox"/> Major* <input type="checkbox"/> *Provide details in box:		Current PID Verified by: ESA Name of Executive Representative Ref No: Ad1) General PID - PID100 + Ad2) Detailed PID for TAJ - PID100/001 Issue: 2 Date: 07/2015 Rev Date:			
Current Manufacturing facilities surveyed by: ESA on 23/06/2015 (Name of Executive Representative) (Date)					
Satisfactory: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Explain All corrective actions from the audit have been closed out during a teleconference which took place on the 16/09/2015.					
Report Reference: AVXLAN-AUD-2015-1					



APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL

Component title: Capacitors, Leadless Surface Mounted, Tantalum, Solid Electrolyte, enclosed anode connection, based on type TAJ

Executive Member: ESA

Date: 29/02/2016

Page 2

Appl. No.

196G

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

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

Date:

(Signature of the Executive Coordinator)

Continuation of Boxes above:

[1]

Test vehicles selected for this extension of qualification:

TAJA105K016ESA – the lowest CV for A case size at 16V, powder group 2
TAJB225K020ESA – the highest CV for B case size at 20V, powder group 2
TAJC476K006ESA – the highest CV for C case size at 6,3V, powder group 2
TAJD475K005ESA - the highest voltage and the highest capacitance, powder group PT3
TAJE336K025ESA - the highest CV for E case size at 25V, powder group PT3

[5]

Specifications. The 3012 was updated up to issue 3 through DCR 963 at the end of 2015. The change is however only editorial by the adoption of MS Word as editing tool for the Master file of the specification.

**APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL**

Component title: Capacitors, Leadless Surface Mounted, Tantalum, Solid Electrolyte, enclosed anode connection, based on type TAJ
Executive Member: ESA Date: 29/02/2016

Page 3

Appl. No.

196G

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:

AVX actually re-conducted full Qualification tests (Chart IV of ESCC 3012), which exceeds the requirements for extension (Chart V LAT1)

Date:

Signature, ESA Representative

	<p align="center">APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL</p> <p>Component Title: Capacitors, Leadless Surface Mounted, Tantalum, Solid Electrolyte, enclosed anode connection, based on type TAJ</p> <p>Executive Member: ESA Date: 29/02/2016</p>						<p>Page 4</p> <p>Appl. No. 196G</p>				
<p>ANNEX 1: LIST OF TESTS DONE TO SUPPORT EXTENSION OF QUALIFICATION</p>								<p>18</p>			
<p>Tests conducted in compliance with:</p> <ul style="list-style-type: none"> - ESCC 3012 generic specification; Chart V (for ESCC/QPL parts); - Or PID-TFD (for ESCC/QML parts) <p>Tests vehicle identification/description:</p> <table border="1" data-bbox="204 555 1117 658"> <tr> <td>See box 14 (5 references): 301200101 105CK</td> <td>301200113 476JK 301200114 475TK</td> </tr> <tr> <td>301200102 225DK</td> <td>301200117 336EK</td> </tr> </table>								See box 14 (5 references): 301200101 105CK	301200113 476JK 301200114 475TK	301200102 225DK	301200117 336EK
See box 14 (5 references): 301200101 105CK	301200113 476JK 301200114 475TK										
301200102 225DK	301200117 336EK										
<p>Detail Specification reference: 3012/001</p>											
Chart V	Test	Tick when done	Conditions	Date Code	Tested Qty	No. of Rejects	Comments if not performed. Comments on Rejection				
Environmental / Mechanical Subgroup (Column 1)	Mounting	<input checked="" type="checkbox"/>	IEC 384-1	15xx	12 x5	0					
	Adhesion	<input checked="" type="checkbox"/>	ESCC 3012, Para. 9.10	15xx	12 x5	0					
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC 20500	15xx	12 x5	0					
	Permanence of Marking	<input checked="" type="checkbox"/>	ESCC 24800	15xx	12 x5	0					
	Climatic Sequence	<input checked="" type="checkbox"/>	ESCC 3012, Para. 9.13	15xx	12 x5	0					
Environmental / Mechanical Subgroup (Column 2)	Mounting	<input checked="" type="checkbox"/>	IEC 384-1	15xx	12 x5	0					
	Rapid Change of Temperature	<input checked="" type="checkbox"/>	IEC 68-2-14	15xx	12 x5	0					
	Vibration	<input checked="" type="checkbox"/>	IEC 68-2-6	15xx	12 x5	0					
	Shock or Bump	<input checked="" type="checkbox"/>	IEC 68-2-27 or IEC 68-2-29	15xx	12 x5	0					
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC 20500	15xx	12 x5	0					
	Permanence of Marking	<input checked="" type="checkbox"/>	ESCC 24800	15xx	12 x5	0					
	Climatic Sequence	<input checked="" type="checkbox"/>	ESCC 3012, Para. 9.13	15xx	12 x5	0					
Endurance Subgroup	Mounting	<input checked="" type="checkbox"/>	IEC 384-1	15xx	36 x5	0					
	Operating Life at T ₁ °C	<input checked="" type="checkbox"/>	ESCC 3012, Para. 9.17.2, T ₁ =85C	15xx	36 x5	0					
	Electrical Measurements during Endurance Testing	<input checked="" type="checkbox"/>	ESCC 3012, Para. 9.4.5	15xx	36 x5	0					



APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL

Component title: Capacitors, Leadless Surface Mounted, Tantalum, Solid Electrolyte, enclosed anode connection, based on type TAJ

Executive Member: ESA

Date: 29/02/2016

Page 5

Appl. No.

196G

Chart V	Test	Tick when done	Conditions	Date Code	Tested Qty	No. of Rejects	Comments if not performed. Comments on Rejection
Electrical Subgroup (Electrical Measurements)	High and Low Temperature Stability	<input checked="" type="checkbox"/>	ESCC 3012, Para. 9.14	15xx	12 x5	0	
	Electrical Measurements at Room Temperature	<input checked="" type="checkbox"/>	ESCC 3012, Para. 9.4.4	15xx	125 x5	0	
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC 20500	15xx	125 x5	0	
Electrical Subgroup (Ass. / Capab. Tests)	Surge Voltage	<input checked="" type="checkbox"/>	ESCC 3012, Para. 9.15	15xx	12 x5	1	
	Solderability	<input checked="" type="checkbox"/>	IEC 68-2-20	15xx	12 x5	0	
Additional Tests	Operating Life at 125C	<input checked="" type="checkbox"/>	ESCC 3012, Para. 9.17.2	15xx	24 x5	0	Performed as part of chart IV
	Damp Heat Steady State	<input checked="" type="checkbox"/>	ESCC 3012, Para. 9.16	15xx	12 x5	0	Performed as part of chart IV
		<input type="checkbox"/>					



APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL

Page 7

Component title: Capacitors, Leadless Surface Mounted, Tantalum, Solid Electrolyte, enclosed anode connection, based on type TAJ

Appl. No.

Executive Member: ESA

Date: 29/02/2016

196G

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.