

Component Title:

CAPACITORS, FIXED, CHIPS, BASE METAL ELECTRODE, CERAMIC DIELECTRIC, TYPE II

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Executive Member:

UKSA and ESA

Date: 01/04/2015

ESCC COMPONENT. NO.	VARIANTS	RANGE OF CO	MPONENTS	BASEI	D TEST VEHICLE / S	COMPONE SIMILAR	
3009/041	03	50V		TTP	300904103474KC	08055C474KE2D. 0805 470nF 50V	JR
	03	25V		TTP	300904103105KA	08053C105KE2D. 0805 1uF 25V	JR
	04	25V		TTP	300904104225KA	12063C225KE2D. 1206 2.2uF 25V	JR
110	02	100V	100V		300904102183KE	06031C183KE2D.	JR
	04	100V		TTP	300904104394KE	12061C394KE2D. 1206 390nF 100V	
	05	100V		TTP	300904105684KE	12101C684KE2D. 1210 680nF 100V	
	06	100V		TTP	300904106225KE	18121C225KE2D. 1812 2.2uF 100V	
	06	50V		TTP	300904106475KC	18125C475KE2DJR 1812 4.7uF 50V	
150	s Reference and date:	Hillman's Way Coleraine Northern Ireland, BT5 United Kingdom ZA OLSAVKOU 303 Uherske Hradiste 686 Czech Republic	01		Generic: ESCC 3009 Issue Issue 1 Detail/s: ESCC 3009/ Issue Draft (COL/I	041 ESA/PI-03 is3E)	
PID changes since s None □ Minor* ⊠ Major* □	277.0V8	7., provided in	, le	ssue: 1 re rate: 14/	oL/ESA/PI-02 evC 03/2014 SA Name of Executive Represe COL/ESA/PI-02 1revC 08/04/2015	ntative	ε
Current Manufacturii	ng facilities surveyed by:		R				9
UK	SA and ESA		4-5 March	2014 (Coleraine, l	UK) and 11 June 2014 (Uhers	ké Hradiště, CR)	A S
(Name of Executive AVXUK-AUD-2014 (Report R Satisfactory:	ESA-TECQES-RP-0321		(Date) plain				
Quality and Reliabilit	ty Data						10
Evaluation testing pe	erformed Yes 🛚	No 🗆		Failure analysis available	, DPA, NCCS Yes	⊠ No □	
Evaluation testing pe		Date: 20/05	3/2012	(supply data)			
Report Ref. No.:	22484/09/NL/CP	Date: 30/0:					



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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 13; that the reports and data are available at the ESCC Executive and therefore applies for ESCC qualification status to be given to the component(s) listed herein.

16/4/2015

(Signature of the Executive Coordinator)

Continuation of Boxes above: (Only non-confidential comments)

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[1] Test vehicles. All the lots of capacitors used for qualification testing had previously passed production control and screening to ESCC 3009 Level B requirements

requirements.

[4] ESCC SPECIFICATIONS. In parallel with the development of the Qualification programme of these capacitors, the applicable ESCC Generic specification, No. 3009, has been the object of a complete update led by the ESCC PSWG. The Detail Specification developed specifically for these capacitors, No. 3009/041, has been developed in conformance with the new issue (2) of the Generic and has therefore stayed as an unpublished draft waiting for the publication of the updated Generic. Both specifications, 3009 iss2 and 3009/041 issue1, have been published finally in April 2015.

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Non compliance to ESC	C requirements:				13
No.:	Specification		Paragraph	Non compliance	
dditional tasks required	to achieve full or	ompliance for ESCC qualifi	ication or rationale for acceptabilit	v of	T
oncompliance:		Table 1 To a programme of the contraction . I have become	The Control of the State of the	•	14
xecutive Manager Disp	osition				15
Application Approval:	Yes □	No 🗆			0
ction / Remarks:					
				1	
				Von	
Date:				Signature, ESA Representative	-
				Signature, ESA Representative	



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ANNEX 1: LIST OF TESTS DONE TO SUPPORT QUALIFICATION

Tests conducted in compliance with:

ESCC 3009 generic specification; Chart IV (for ESCC/QPL parts);
Or PID-TFD (for ESCC/QML parts)

Tests vehicle identification/description:

08055C474KE2DJR, 1436A, lot# E692140	12061C394KE2DJR, 1441A, lot# E658840
08053C105KE2DJR, 1429A, lot# E631401	12101C684KE2DJR, 1442A, lot# E775480
12063C225KE2DJR, 1437A, lot# E556600	18121C225KE2DJR, 1442A, lot# E787710
06031C183KE2DJR, 1442A, lot# E658931	18125C475KE2DJR, 1438A, lot# E781604

Detail Specification reference:

Chart IV	Test	Tick when done	Conditions	Date Code	Tested Qty	No. of Rejects	Comments if not performed. Comments on Rejection
	Mounting	×	IEC 60384-1	as below			
Environmental / Mechanical Subgroup (I)	Adhesion	×	ESCC 3009, Para. 9.5	1436A 1429A 1437A 1442A 1441A 1442A 1442A 1438A	12 12 12 12 12 12 12 12	0	
	Visual Inspection	×	ESCC 3009, Para. 9.1	1436A 1429A 1437A 1442A 1441A 1442A 1442A 1438A	12 12 12 12 12 12 12 12	0	
	Climatic Test Sequence	×	ESCC 3009, Para. 9.8	1436A 1429A 1437A 1442A 1441A 1442A 1442A 1438A	12 12 12 12 12 12 12 12	0	
g.	Mounting	⊠	IEC 60384-1	as below			
Environmental / Mechanical Subgroup (II)	Rapid Change of Temperature	×	IEC 68-2-14	1436A 1429A 1437A 1442A 1441A 1442A 1442A 1438A	24 24 24 24 24 24 24 24	0	



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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
Environmental / Mechanical Subgroup (II)	Visual Inspection	⊠	ESCC 3009, Para. 9.1	1436A 1429A 1437A 1442A 1441A 1442A 1442A 1438A	24 24 24 24 24 24 24 24 24	0	
	Climatic Test Sequence	Ø	ESCC 3009, Para. 9.8	1436A 1429A 1437A 1442A 1441A 1442A 1442A 1438A	24 24 24 24 24 24 24 24 24	0	
hanical	Mounting	⊠	IEC 60384-1	as below	-	-	
Environmental / Mechanical Subgroup (III)	Damp Heat, Steady State, no bias	⊠	IEC 68-2-3	1436A 1429A 1437A 1442A 1441A 1442A 1442A 1442A	20 20 20 20 20 20 20 20 20	0	1344h
	Mounting	×	IEC 60384-1	as below	3	-	
bgroup (iV)	Operating Life 2000h	×	ESCC 3009, Para. 9.10	1436A 1429A 1437A 1442A 1441A 1442A 1442A 1448A	40 40 40 40 40 40 40	0	
Endurance Subgroup (IV)	Electrical Measurements during Endurance Testing	×	ESCC 3009, Para. 9.4.5	1436A 1429A 1437A 1442A 1441A 1442A 1442A 1438A	40 40 40 40 40 40 40 40	0	
	Permanence of Marking		ESCC 24800				N/A – parts have no marking
	Mounting	⊠	IEC 60384-1	as below		-	
(V) dn	Temperature Coefficient (Type I)		ESCC 3009, Para. 9.11				N/A (type II)
Electrical Subgroup (V)	Temperature Characteristic (Type II)	×	ESCC 3009, Para. 9.12	1436A 1429A 1437A 1442A 1442A 1442A 1442A 1438A	12 12 12 12 12 12 12 12 12	0	
Ass. / Capab. Subgroup (Vi)	Solderability	⊠	IEC 68-2-20	1436A 1429A 1437A 1442A 1441A 1442A 1442A 1438A	12 12 12 12 12 12 12 12 12	0	



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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
	Mounting	×	IEC 60384-1	as below	-		
Group 1 Additional Tests	Additional RCT	⊠	ESCC 3009 iss2: Para 8.9	1436A 1429A 1437A 1442A 1441A 1442A 1442A 1442A	20 20 20 20 20 20 20 20 20 20	0	
	Steady state humidity, low voltage	×	ESCC 3009 iss2: Para 8.2	1436A 1429A 1437A 1442A 1441A 1442A 1442A 1438A	20 20 20 20 20 20 20 20 20	0	Low voltage, 1000h
	Mounting	×	IEC 60384-1	as below	-	-	
Group 2B Additional Tests	Temperature characteristic	×	ESCC 3009 iss2: Para 8.12	1436A 1429A 1437A 1442A 1441A 1442A 1442A 1438A	66666666	0	
	Robustness of termination	⊠	ESCC 3009 iss2: Para 8.7	1436A 1429A 1437A 1442A 1441A 1442A 1442A 1438A	66666666	0	



Box 20

Additional Comments

APPLICATION FOR ESCC QUALIFICATION APPROVAL

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

ENTRIES	
Form Heading	shall indicate;— the title of the component as given in its detail specification or the name of the series or family; — the entering date; — the serial number and the suffix of the form.
Box 1	shall provide details given in table; in particular there shall be listed - the variants or range of variants; the range of components by using the ESCC code for values tolerances, etc.; the designation given in detail specification as 'based on';under Test Vehicle enter either a cross or the specific characteristic capable to identify the component tested; under component similar enter a cross.
Box 2 and 3	Manufacturer's name and location of plant where the components were manufactured and tested.
Box 4	Generic and detail specifications used during qualification program.
Box 5	Reference to test report(s) submitted in support of application.
Box 6	Enter details to identify the PID that was applicable at the time the qualification lot was manufactured.
Box 7	If the PID was evolved after qualification lot manufacture, adequate details of such evolution shall be provided together with reasons for changes. Major changes shall be clearly marked.
Box 8	The box serves to identify the current PID and the Executive Representative that has verified it together with the date of this occurrence.
Box 9	This box can be completed only after a physical visit to the plant to confirm that the practices, procedures, materials, 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 10	Details entered shall be sufficient to evidence that an evaluation program according to ESCC Basic Specification No. 22600 has been performed and that the results thereof are summarized in the survey and test reports. If the evaluation program has not been carried out according to established ESCC documents, the applicant Executive Representative shall provide alternative data and declare its assessed degree of satisfactory compliance with the ESCC basic requirements. Reference shall be made to the reports on Destructive Physical Analysis (DPA), Failure Analysis and Non conformance (NCCS) issued during the Evaluation and/or Qualification Phase.
Box 11	Enter the name of the Executive Coordinator and the signature.
Box 12	To be used when there is a need to expand any of the boxes from 1 through 10. Identify box affected and reference the Box 12 in the relevant Box. Box 12 can be broken into 12a, 12b, etc. if several Boxes have to be expanded.
Box 13	Fill table as requested.
Box 14	Fill in any additional tasks required to achieve full compliance.
Box 15	All Executive recommendations on the application itself, special conditions or restrictions, modifications of the QPL or ESCC QML entry, letters to the manufacturer, etc. shall be entered clearly in Box 15, signed by the ESA Representative.
Box 16	Fill in Table as requested.
Box 17	Confidential details of PID changes shall be provided.
Box 18	State noncompliance with reference to specification(s) and paragraph(s). To simplify reference in Box 18 each nonconformance shall be sequentially numbered. If relevant state 'None'
Box 19	Any additional action deemed necessary by the Executive Representative 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 nonconformance.