

DETAIL SPECIFICATION

Fixed Tantalum Capacitors With Non-Solid Electrolyte And Porous Anode

EIA-535ABAB

MAY 1987

ELECTRONIC INDUSTRIES ASSOCIATION
ENGINEERING DEPARTMENT



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*Quality Assessment System
for Electronic Components*

IECQ

Detail Specification for use in electronic equipment

Fixed Tantalum Capacitors with Non-Solid Electrolyte and
Porous Anode

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QUALITY ASSESSMENT SYSTEM
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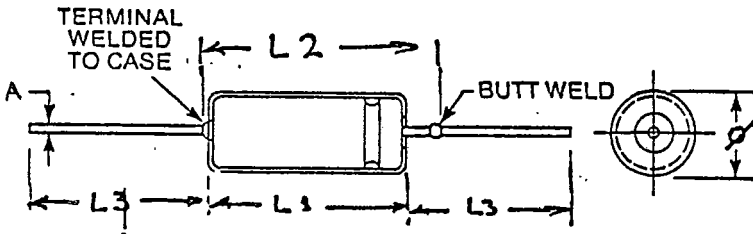
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**FIXED TANTALUM CAPACITORS WITH NON-SOLID
ELECTROLYTE AND POROUS ANODE**

This Standard represents US adoption of International Electrotechnical Commission Quality Assessment Systems (IECQ) Detail Specification QC300202/US0002, January 1984. It is issued as an EIA document to provide a Specification in the National Electronic Components Quality Assessment System (NECQ).

IEC documents referenced in this Detail Specification (e.g. QC 300000) may be obtained from the American National Standards Institute, 1430 Broadway, New York, New York 10018. EIA numbers are assigned to these IEC documents for reference purposes and to facilitate later publication of equivalent EIA documents.



National Standards Organization ELECTRONIC INDUSTRIES ASSOCIATION	Detail Specification Number QC300202/US0002 (EIA-535ABAB)
Generic Specification Number Electronic components of assessed quality in accordance with QC300000 (EIA-5350000)	Blank Detail Specification Number QC300202 (EIA-535AB00)
Outline Drawing (See Table I) (First Angle Projection)  (Other shapes are permitted within the dimensions given)	Product Description Fixed Tantalum Capacitors with Non-Solid Electrolyte and Porous Anode
	Electrical Circuit
	Typical Construction Silver Plated Copper Alloy Case, Axial Lead, Elastomeric Seal, Polarized, Nickel Positive, Copper Negative Leads
	Application/Assessment Level Assessment Level: E Performance Grade: Long Life

Information on the availability of components
qualified to this specification is given in
the Qualified Products List.



Documents

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PART ONE - GENERAL DATA

1. GENERAL DATA

1.1 RECOMMENDED METHODS OF MOUNTING

- a. By the leads in the absence of vibration or shock.
- b. By body clamp and leads if vibration or shock can exist.

1.2 DIMENSIONS

TABLE 1

CASE SIZE REFERENCE	DIMENSIONS (mm)				
	ϕ (Max.)	L1 (Max.)	L2 (Max.)	L3 +,-6.35	A +,-.025
A	5.56	15.45	21.00	38.10	0.64
B	7.92	20.22	25.80	57.15	0.64
C	10.31	23.40	29.00	57.15	0.64
D	10.31	30.91	36.50	57.15	0.64

1.3 RATINGS AND CHARACTERISTICS

Capacitance Range	(see Table II)
Tolerance On Rated Capacitance	+,-5%; +,-10%, +,-20%
Rated Voltage (Ur)	(see Table II)
Upper Category Voltage (Uc)	(see Table II)
Climatic Category	55/125/21
Rated Temperature	+85 C
Variation of Capacitance With Temperature	(see Table II)
Tangent Of Loss Angle	(see Table II)
Leakage Current	(see Table II)
Impedance	(see Table II)
Reverse Voltage	0 (No reversal of voltage permitted)

TABLE II - STANDARD RATINGS

uF	CASE CODE	MAX.*	MAX.	MAX. DCL uA		MAX. CAPACITANCE		
		tan d @20 C	IMP.@ -55 C	@20 C	@ 85 C @125 C	CHANGE FROM 20 C		
						@-55 C	@85 C	@125 C
6.3 VOLTS WVDC @ 85 C (Ur)								
4 VOLTS WVDC @ 125 C (Uc)								
30.0	A	0.091	100	1	2.0	-40	+10.5	+12
68.0	A	0.204	60	1	2.0	-40	+14.0	+16
140.0	B	0.213	40	1	3.0	-40	+14.0	+16
270.0	B	0.818	25	1	6.5	-44	+17.5	+20
330.0	C	0.496	20	2	7.9	-44	+14.0	+16
560.0	C	1.280	25	2	13.0	-64	+17.5	+20
1200.0	F	1.444	20	3	14.0	-80	+25.0	+25
7.5 VOLTS WVDC @ 85 C (Ur)								
5 VOLTS WVDC @ 125 C (Uc)								
25.0	A	0.076	100	1	2.0	-40	+10.5	+12
56.0	A	0.170	59	1	2.0	-40	+14.0	+16
220.0	B	0.664	30	1	7.0	-44	+17.5	+20
430.0	C	0.915	25	2	14.0	-64	+17.5	+20
850.0	F	0.658	22	4	16.0	-80	+25.0	+25
10 VOLTS WVDC @ 85 C (Ur)								
6.3 VOLTS WVDC @ 125 C (Uc)								
20.0	A	0.061	175	1	2.0	-32	+10.5	+12
47.0	A	0.181	100	1	2.0	-36	+14.0	+16
100.0	B	0.152	60	1	4.0	-36	+14.0	+16
180.0	B	0.544	40	1	7.0	-36	+14.0	+16
250.0	C	0.378	30	2	10.0	-40	+14.0	+16
390.0	C	0.876	25	2	16.0	-64	+17.5	+20
750.0	F	0.565	23	4	16.0	-80	+25.0	+25
16 VOLTS WVDC @ 85 C (Ur)								
10 VOLTS WVDC @ 125 C (Uc)								
15.0	A	0.057	155	1	2.0	-24	+10.5	+12
33.0	A	0.125	90	1	2.0	-28	+14.0	+16
70.0	B	0.131	75	1	4.0	-28	+14.0	+16
120.0	B	0.368	50	1	7.0	-28	+17.5	+20
170.0	C	0.254	35	2	10.0	-32	+14.0	+16
270.0	C	0.609	30	2	16.0	-56	+17.5	+20
540.0	F	0.490	23	6	24.0	-80	+25.0	+25

