

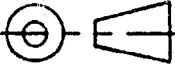
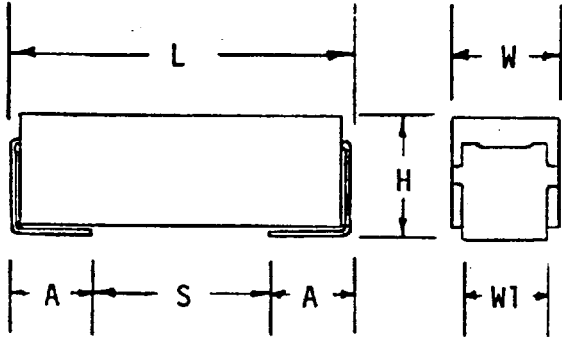
BRITISH STANDARDS INSTITUTION 2, PARK STREET, LONDON, W1A 2BS	 BS CECC 30801 - 004 ISSUE 1 DATE August 1984 Number of pages 16
Specification available from:- As shown in PD 9002, CECC00200 and STANDARD TELEPHONES AND CABLES plc STC COMPONENTS (CAPACITORS) BRIXHAM ROAD, PAIGNTON, DEVON TQ4 7BE	
ELECTRONIC COMPONENTS OF ASSESSED QUALITY DETAIL SPECIFICATION IN ACCORDANCE WITH BS CECC 30000 1975 BS CECC 30800 1976	MANUFACTURER'S TYPE NUMBER TAQ SEE PD 9002 AND CECC 00200 For ordering information see Clause 6.0
Outline and dimensions Third angle projection   Mould flash not to exceed 0.2mm. Other shapes are permitted within the dimensions given. Marking information: See Clause 5.0	
	TANTALUM CHIP CAPACITOR POLAR SOLID ELECTROLYTE METALLISED TERMINATIONS STYLE 1 Complies with the minimum requirements of TABLES 2 & 3 of BS CECC 30800 Issue 1

TABLE 1 DIMENSIONS RELATED TO CASE SIZE

Case Size	L Max	W Max	H Max	W1 +/-0.3	A +/- 0.3	S Min
B	4.7	2.0	2.2	1.0	1.15	1.4
D	5.1	2.8	2.6	1.9	1.35	1.3
E	6.2	2.8	2.6	1.9	1.35	2.4
F	6.6	4.0	2.7	3.1	1.35	2.7
G	8.0	3.4	3.9	2.6	1.65	3.5
H	8.3	4.2	3.9	3.5	1.65	3.8
J	8.3	4.5	5.0	3.5	1.65	3.8

NOTES: Mould flash allowance not included in W dimension in Table 1.

W1 dimension applies to the termination width for the A Dimension only.

Information on availability of components qualified to this detail specification are given in the Qualified Products Lists PD 9002 and CECC 00200.

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2.0 METHOD OF MOUNTING

2.1 Methods of mounting the units for normal use include:-

- a) Reflow soldering by direct heat using solder paste or solder preforms.
- b) Vapour Phase reflow soldering using solder paste or solder preforms.
- c) Wave soldering.

Limiting factors are:-

- 1) Temperature : Temperature should not exceed 260°C.
- 2) Duration : Time duration should not exceed 10 seconds at maximum temperature.

Nominal temperature and duration : 230°C for 10 seconds.

2.2 For Qualification Testing the mounting method detailed in the Sectional Specification BS CECC 30800 Clause 4.8 applies.

3.0 RATING AND CHARACTERISTICS

Style	Style 1 - Encapsulated
Capacitance range	See Table 2A
Tolerance on Rated Capacitance - standard	+/- 10%, +/- 20%.
Rated Voltage	See Table 2A
Category Voltage	See Table 2A
Climatic Category	-55/125/56
Rated Temperature	85°C
Category Temperature	125°C
Variation of Capacitance with Temperature	See Table 3
Leakage Current	See Table 3
Impedance at 100kHz	See Table 2B
Tangent of Loss Angle	≤ 0.06 for $U_R \geq 10V$ ≤ 0.08 for $U_R < 10V$

TABLE 2A CAPACITANCE AND VOLTAGE RELATED TO CASE SIZE

CAPACITANCE μF	U_R	6.3	10	16	20	25	35
	U_C	4.0	6.3	10	12.6	16	23
CASE SIZE							
0.1							B
0.15							B
0.22							B
0.33							B
0.47							B
0.68						B	
1.0					B		D
1.5				B		D	E
2.2			B		D	E	F
3.3		B		D	E		F
4.7			D	E		F	G
6.8		D	E		F	G	H
10		E		F		G	J
15			F		G	H	
22		F		G	H	J	
33			G	H	J		
47		G	H	J			
68		H	J				
100		J					

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TABLE 2B IMPEDANCE (100kHz)

Capacitance OR uFV	Impedance in Ohms - Max.
C ≤ 0.68 uF	Not Applicable
CU < 40uFV	Not Applicable
CU ≥ 40uFV	15
CU ≥ 75uFV	8
CU ≥ 360uFV	3

TABLE 3 CHARACTERISTICS AT HIGH AND LOW TEMPERATURE

U _R (V)	C _R (uF)	Maximum Values									
		Capacitance Change (%)			Tan Delta				Leakage Current (uA)		
		-55°C	+85°C	+125°C	+20°C	-55°C	+85°C	+125°C	+20°C (1)	+85°C (1)	+125°C (1) (2)
6.3	3.3 to 100	-12%	+10%	+15%	0.08	0.15	0.15	0.15	0.01 CU or 1 uA	0.10 CU Or 1 uA	0.10 CU or 1 uA
10	2.2 to 68	-12%	+10%	+15%	0.06	0.12	0.12	0.15	0.01 CU or 1 uA	0.10 CU Or 1 uA	0.10 CU or 1 uA
16	1.5 to 47	"	"	"	"	"	"	"	"	"	"
20	1.0 to 33	"	"	"	"	"	"	"	"	"	"
25	0.68 to 22	"	"	"	"	"	"	"	"	"	"
35	0.1 to 10	"	"	"	"	"	"	"	"	"	"

- (1) Whichever is the greater
 (2) Measured with category voltage