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BS CECC 30201 020

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Specification available from:— AS SHOWN IN PD 9002

CECC 00200 AND

ITT COMPONENTS GROUP

STANDARD TELEPHONES & CABLES LTD

BRIXHAM ROAD, PAIGNTON, DEVON TQ4 7BE

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ELECTRONIC COMPONENTS OF ASSESSED QUALITY
DETAIL SPECIFICATION IN ACCORDANCE WITH

BSE 9070 (CECC 30 000)

BSE 9073 (CECC 30 200)

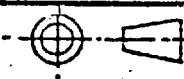
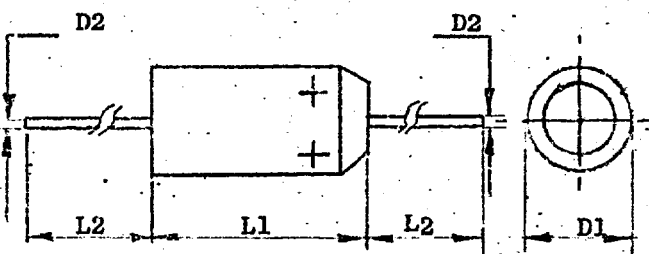
MANUFACTURER'S TYPE NUMBER

TAR

SEE PD 9002 AND

CECC 00 200

Outline and dimensions Third angle projection

ALL DIMENSIONS IN MILLIMETRES
SEE TABLE 1 BELOWFor ordering information
see Clause 6TANTALUM CAPACITOR
SOLID ELECTROLYTE
POROUS ANODE
POLARRESIN MOULDED
CYLINDRICAL CASE
AXIAL TERMINATIONSASSESSMENT LEVEL
FULL PLUS ADDITIONAL
(LONG LIFE GRADE)

Marking information See clause 5

TABLE 1. DIMENSIONS (mm)

CASE SIZE	L1 MAX	L2 MIN	D1 MAX	D2 NOM	TYPICAL MASS (grams)
R	7.65	25	2.75	0.5	0.26
S	8.85	25	4.55	0.5	0.54
T	13.75	25	5.05	0.5	0.95

NOTE: Up to 0.2 mm of "gate" flash is allowed on both ends of the body, which may exceed specified L1 maximum.

Clause 1. Tolerances on the wire dimensions are given in IEC 301

Refer to Qualified Products List PD 9002 and/or CECC 00200 for details of manufacturers approved to this specification.

2. SPECIFIED METHOD OF MOUNTING FOR VIBRATION AND SHOCK TESTING

Capacitors shall be mounted by clamping the body and the terminations.

3. RATINGS AND CHARACTERISTICS

Grade - Long Life

Capacitance range (E12 series)	-	See Table 2A
Capacitance tolerance	-	$\pm 10\%$ $\pm 20\%$
Rated Voltage	-	See Table 2A
Category Voltage	-	See Table 2A
Rated Temperature	-	125°C
Leakage Current	-	See Table 2B
Tangent of loss angle	-	See Table 2B
Impedance	-	See Table 2C
Climatic category	-	55/125/56
Surge Voltage	-	See Table 3A
Typical Ripple Ratings	-	See graphs - Appendix A

3.1. Additional information (not for inspection purposes)

The reliability of these capacitors depends on circuit impedance. In very low impedance (e.g. less than 3 ohms per volt) circuits, such as power supplies, particular care is necessary to ensure that the surge voltage rating is not exceeded. This may necessitate voltage derating of up to 50%.

The main mode of failure is high leakage current or short circuit.

These capacitors may not meet the above mechanical severities when mounted solely by their leads.

TABLE 2A. VALUES OF CAPACITANCE AND VOLTAGE RELATED TO CASE SIZE

Capacitance/ μ F	Rated V Category V	<u>6.3</u> 4	<u>10</u> 6.3	<u>16</u> 10	20 13	<u>25</u> 16	35 23
0.10							R
0.12							R
0.15							R
0.18							R
0.22							R
0.27							R
0.33							R
0.39							R
0.47							R
0.56							R
0.68							R
0.82							R
1.0							R
1.2							R
1.5						R	S
1.8						R	S
2.2						R	S
2.7					R	S	S
3.3				R		S	S
3.9				R		S	S
4.7			R			S	S
5.6			R			S	T
6.8			R			S	T
8.2		R			S	T	T
10		R			S	T	T
12		R		S		T	
15				S		T	
18			S		T		
22		S	S		T		
27		S		T			
33		S		T			
39			T				
47			T				
56		T					
68		T					

Notes 1. Letters indicate case size

2. Preferred rated voltages are underlined.

3. The capacitors may be used for any lower voltage rating.

TABLE 2B - CAPACITANCE CHANGE : TAN DELTA AND LEAKAGE CURRENT

TEST TEMPERATURE	CAPACITANCE CHANGE	TAN DELTA		LEAKAGE CURRENT MAX (1)
		≤10V	>10V	
<u>ROOM TEMPERATURE</u>				
1) Initial measurements	-	0.06	0.06	As table 2D
2) Intermediate Measurements	-	0.06	0.06	As table 2D
3) Final Measurements	-	0.10	0.06	As table 2D
-55°C ± 2°C	≤12%	0.08	0.08	-
+125°C ± 2°C	≤15%	0.12	0.12	12.5 x re- quirement of table 2D

- 1) Measured at rated voltage at room temperature and at rated voltage at rated temperature and category voltage at maximum category temperature as applicable.

See table 3A

TABLE 2C. IMPEDANCE AT 100 kHz (C ≥ 0.68 μF only)

Case size	Imp. Ω (max)
R ≥ 0.68 μF	10
S	5
T	5