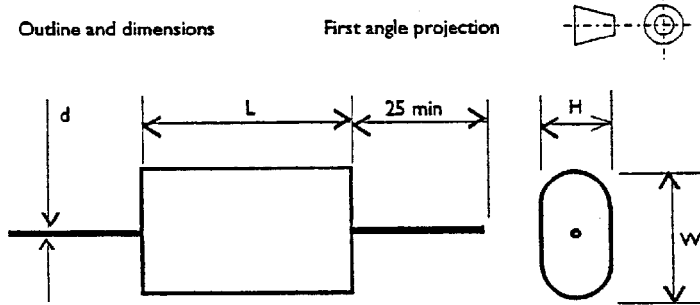


BRITISH STANDARDS INSTITUTION 2 PARK STREET, LONDON	BS CECC 30 401-065  ISSUE 1 MAY 1992
Specification available from: AS SHOWN IN PD 9002, CECC 00 200 and  I.C.W.Ltd Miners Road Llay Industrial Estate WREXHAM Clwyd LL12 0PJ	MANUFACTURER'S TYPE NUMBER PEOA/TW SEE PD 9002 AND CECC 00 200 For ordering information see clause 1.6
ELECTRONIC COMPONENTS OF ASSESSED QUALITY DETAIL SPECIFICATION IN ACCORDANCE WITH BS CECC 30 000: 1984 BS CECC 30 400: 1984 Outline and dimensions First angle projection  All dimensions in mm Marking information: see clause 1.5	FIXED METALLIZED POLYETHYLENE-TEREPHTHALATE FILM DIELECTRIC D.C. CAPACITOR TYPICAL CONSTRUCTION: OVAL WRAP AND END FILL AXIAL TERMINATIONS ASSESSMENT LEVEL E

QUICK REFERENCE DATA

Capacitance range	10 nF to 47 μ F
Capacitance tolerance	$\pm 5\%$, $\pm 10\%$, $\pm 20\%$
Rated voltage ranges	63 V d.c. to 630 V d.c.
Climatic category	55/100/56
Performance grade	I (Long life)

Refer to Qualified Products List PD 9002 and/or CECC 00 200 for details of manufacturers approved to this specification

1 General data**1.1 Method of mounting for vibration and bump tests**

Each capacitor shall be mounted on a printed circuit board, the body being pressed firmly against the mounting surface and fixed by soldering the leads, which shall be bent through 90° at a point 6 mm to 6.5 mm from the point of emergence of the termination. Units of mass of 3g or greater shall also have their bodies clamped.

1.2 Dimensions

Table 1

Case size reference	L max	W max	T max	d min	d nom	d max
Dimensions (in mm)						
1	16	6	3	0,55	0,6	0,66
2	16	8	4	0,55	0,6	0,66
3	16	8	5	0,55	0,6	0,66
4	16	8	6	0,55	0,6	0,66
5	16	10	8	0,55	0,6	0,66
6	16	13	10	0,55	0,6	0,66
7	20	10	5	0,55	0,6	0,66
8	20	10	6	0,55	0,6	0,66
9	20	10	8	0,55	0,6	0,66
10	20	13	8	0,55	0,6	0,66
11	20	13	10	0,75	0,8	0,88
12	20	16	13	0,75	0,8	0,88
13	20	20	16	0,75	0,8	0,88
14	32	10	8	0,55	0,6	0,66
15	32	13	8	0,75	0,8	0,88
16	32	13	10	0,75	0,8	0,88
17	32	16	8	0,75	0,8	0,88
18	32	16	10	0,75	0,8	0,88
19	32	16	13	0,75	0,8	0,88
20	32	20	10	0,75	0,8	0,88
21	32	20	13	0,75	0,8	0,88
22	32	20	16	0,75	0,8	0,88
23	32	25	16	0,75	0,8	0,88
24	32	25	20	0,75	0,8	0,88
25	35	20	13	0,75	0,8	0,88
26	35	20	16	0,75	0,8	0,88
27	35	25	16	0,75	0,8	0,88
28	35	25	20	0,75	0,8	0,88
29	35	32	20	0,75	0,8	0,88
30	35	32	25	0,75	0,8	0,88
31	35	32	32	0,75	0,8	0,88
32	35	40	32	0,75	0,8	0,88
33	50	32	25	0,75	0,8	0,88
34	50	32	32	0,75	0,8	0,88
35	50	40	32	0,75	0,8	0,88
36	50	50	40	0,75	0,8	0,88

1.3 Ratings and characteristics

Capacitance range	10 nF to 47 μ F The preferred values of rated capacitance conform to the E6 values of IEC 63 (See Table 2). Where the use of other values is essential they shall be chosen from that document		
Tolerance on rated capacitance	$\pm 5\%$, $\pm 10\%$, $\pm 20\%$		
Rated voltage	63 Vd.c. 100 Vd.c. 160 Vd.c., 250 Vd.c., 400 Vd.c. 630 Vd.c. (See Table 2)		
Climatic category	55/100/56		
Rated temperature	85 °C		
Tangent of the loss angle (@1 kHz)	$C_R \leq 1 \mu\text{F}$	$\leq 80 \times 10^{-4}$	
	$C_R > 1 \mu\text{F}$	$\leq 100 \times 10^{-4}$	
Insulation resistance:			
Measuring point 1a (between terminations)	$C_R \leq 330 \text{ nF}$	$U_R \leq 100 \text{ V}$	$\geq 15 \text{ GOhm}$
		$U_R > 100 \text{ V}$	$\geq 30 \text{ GOhm}$
	$C_R > 330 \text{ nF}$	$U_R \leq 100 \text{ V}$	$\geq 5 \text{ ks}$
		$U_R > 100 \text{ V}$	$\geq 10 \text{ ks}$
Measuring point 1c (between terminations connected together and foil or V-block)			$\geq 30 \text{ GOhm}$

Table 2
Values of capacitance related to voltages and case sizes

Rated voltage (V @ 85 °C)	63	100	160	250	400	630
Category voltage (V @ 100 °C)	50	80	128	200	320	504
Rated capacitance	Case size reference					
10 nF						1
15 nF						2
22 nF						3
33 nF					2	5
47 nF					4	7
68 nF				2	5	8
100 nF				4	5	10
150 nF			2	5	9	14
220 nF		2	3	6	10	15
330 nF	2	4	5	9	11	19
470 nF	3	5	5	11	12	21
680 nF	5	7	8	12	19	25
1,0 µF	7	9	10	13	21	28
1,5 µF	9	10	11	21	23	30
2,2 µF	10	11	19	23	28	33
3,3 µF	15	17	20	24	30	34
4,7 µF	18	18	21	29	31	35
6,8 µF	21	21	23	31	34	36
10 µF	21	23	24	32	35	
15 µF	27	28	29	35	36	
22 µF	28	30	30	36		
33 µF	30	32				
47 µF	31					

Note: The preferred case size reference for values of rated capacitance lying between those given above is that corresponding to the next higher value.