PERFORMANCE CHARACTERISTICS

1. Operating temperature

These capacitors are designed to operate over the temperature range —40°C to +70°C without derating. When derated as specified they may be operated up to +100°C.

2. Capacitance tolerance

The standard tolerance is ±20%. Tolerances of ±10% and ±5% are available to special order. Capacitance for capacitors up to 1μF shall be measured at 1 kc/s and 20°C, and for capacitors over 1μF at 50 c/s and 20°C.

3. Power factor

The power factor shall not exceed 0·01, measured as in paragraph 2.

4. Insulation resistance

After one minute electrification at 20°C the insulation resistance between terminals shall be greater than 5,000 MΩμF or 25,000 MΩ, whichever is the less.

After one minute electrification at 20°C the insulation resistance between the shorted terminals and the case shall be greater than 3,000 MΩ.

For both tests the applied voltage shall be 500V. for capacitors rated at 500V. and above at 70°C. For capacitors below this voltage, the rated voltage at 70°C shall be applied.

5. Voltage proof

Capacitors rated up to 5,000 volts at 70°C shall withstand 2·5 times the rated D.C. voltage at 70°C for two seconds. Capacitors rated above 5,000 volts at 70°C shall withstand twice the rated D.C. voltage at 70°C for two seconds. The tests shall be carried out at 20°C.

6. Climatic and tropical exposure tests

The capacitors shall withstand the tests for Category 40/100 H1 as defined in paragraphs 6.11 and 6.14 of Defence Specification DEF-5131.

The AQL normally to be applied for samples taken for this test shall be 4%. Sampling procedure according to Defence Specification DEF-131.

7. Life tests

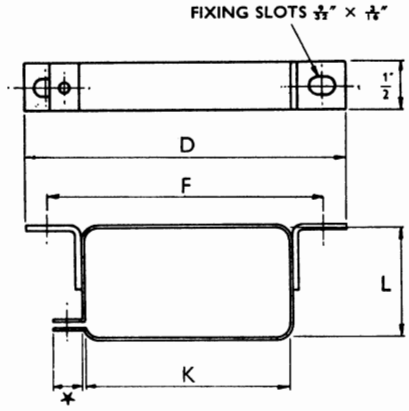
Capacitors shall be submitted to 1,000 hour life test at the appropriate rated voltage at 100°C. After the test the following conditions shall be satisfied when remeasured at 20°C.

(*a*) There shall be no leakage of impregnant.
(*b*) The capacitance of each capacitor shall not have changed by more than 7½%.
(*c*) The power factor shall not exceed 0·01.
(*d*) The insulation resistance shall be greater than 2,500 MΩμF or 12,500 MΩ whichever is less.

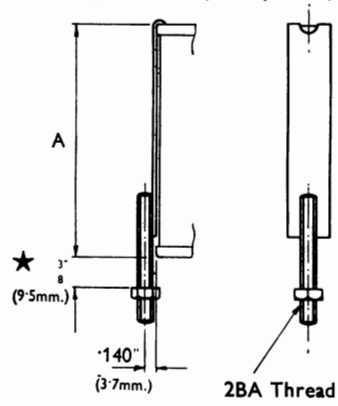
The AQL normally to be applied for samples taken for this test shall be 4%. Sampling procedure according to Defence Specification DEF-131.

Paragraphs 6 and 7 are in the nature of Type Tests.

WALL FIXING CLIP



PLAIN HOOK CLAMP
(2 required per capacitor)



PAPER DIELECTRIC CAPACITORS IN METAL CASES—CASE SIZES

T.C.C. Case Code	DEF-5131 Case Size	Case Height A		Case Breadth B		Case Depth C		Overall Height E		Distance between terminal centres H		Base fixing clip	Wall fixing clip	Plain hook clamp	Spring hook clamp (Service)
		in. ±1/8	mm. ±3	in. ±1/16	mm. ±1·5	in. ±1/16	mm. ±1·5	in. max.	mm. max.	in. ±1/32	mm. ±0·8				
141	CP10–D	2½*	63*	1¾	44	¾	19	3⅛	79	¾	19	B1	W14	HA	S1
142	CP10–E	2½*	63*	2	51	¾	19	3⅛	79	¾	19	B2	W15	HA	S1
143	CP10–F	2½*	63*	1⅞	48	1⅛	29	3⅛	79	¾	19	B3	W16	HA	S1
144	CP10–G	2½*	63*	2⅛*	54	1¼	32	3⅛	79	¾	19	B4	W17	HA	S1
144A	CP10–GA	2½*	63*	2⅛	54	1¼	32	3 7/16	87	1	25	B4	W17	HA	S1
145	CP10–H	2½*	63*	1⅞	48	1⅞	48	3⅛	79	¾	19	B5	W18	HA	S1
146	CP10–J	2½*	63*	1⅞	48	2⅛	54	3⅛	79	¾	19	B6	W19	HA	S1
146A	CP10–JA	2½*	63*	1⅞	48	2⅛	54	3 7/16	87	1	25	B6	W19	HA	S1
147	CP10–K	2½*	63*	2⅜	60	2⅛	54	3⅛	79	¾	19	B7	W20	HA	S1
147A	CP10–KA	2½*	63*	2⅜	60	2⅛	54	3 7/16	87	1	25	B7	W20	HA	S1
148	CP10–L	2½*	63*	3⅛	79	1⅞	48	4⅛	104	1⅞	48	B8	W21	HA	S1
149	CP10–M	4⅝	117	1⅞	48	1⅞	48	5⅜	136	¾	19	B5	W18	HB	S2
150	CP10–N	4⅝	117	2⅝	67	1⅜	41	5⅜	136	¾	19	B9	W22	HB	S2
150A	CP10–NA	4⅝	117	2⅝	67	1⅜	41	5 1/16	144	1	25	B9	W22	HB	S2
151	CP10–P	4⅝	117	3⅛	79	1⅜	41	6⅜	162	1⅞	48	B10	W23	HB	S2
152	CP10–R	4⅝	117	1⅞	48	3⅛	79	5⅜	136	¾	19	B8	W21	HB	S2
153	CP10–S	4⅝	117	3⅜	86	2⅝	67	5⅜	136	1½	38	B11	W24	HB	S2
153A	CP10–SA	4⅝	117	3⅜	86	2⅝	67	5 1/16	144	1½	38	B11	W24	HB	S2
153B	CP10–SB	4⅝	117	3⅜	86	2⅝	67	6⅜	162	1⅞	48	B11	W24	HB	S2
154	CP10–T	4⅝	117	5⅛	130	3⅞	97	5⅜	136	1¾	44	B12	W25	HB	S2
154A	CP10–TA	4⅝	117	5⅛	130	3⅞	97	5 1/16	144	2	51	B12	W25	HB	S2
154B	CP10–TB	4⅝	117	5⅛	130	3⅞	97	6⅜	162	2	51	B12	W25	HB	S2
155	CP10–U	9	229	5⅛	130	3½	89	10 1/16	255	2	51	B13	W26	HC	—
155A	CP10–UA	9	229	5⅛	130	3½	89	10 11/16	272	2	51	B13	W26	HC	—

* 2½ inch (63 mm.) dimension has tolerance ±1/16 inch (±1·5 mm.)