

PERFORMANCE CHARACTERISTICS

1. Operating temperature

These capacitors are designed to operate over the temperature range -40°C to $+70^{\circ}\text{C}$ without derating. When derated as specified they may be operated up to $+100^{\circ}\text{C}$.

2. Capacitance tolerance

The standard tolerance is $\pm 20\%$. Tolerances of $\pm 10\%$ and $\pm 5\%$ are available to special order. Capacitance for capacitors up to $1\mu\text{F}$ shall be measured at 1 kc/s and 20°C , and for capacitors over $1\mu\text{F}$ 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 $5,000\text{ M}\Omega\mu\text{F}$ or $25,000\text{ M}\Omega$, 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 $3,000\text{ M}\Omega$.

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 .

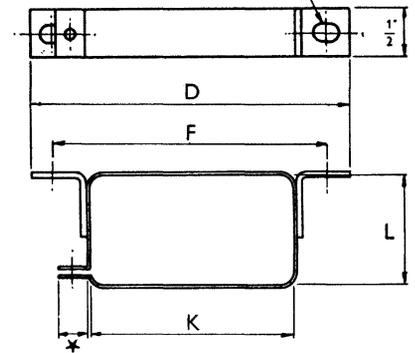
- There shall be no leakage of impregnant.
- The capacitance of each capacitor shall not have changed by more than $7\frac{1}{2}\%$.
- The power factor shall not exceed 0.01.
- The insulation resistance shall be greater than $2,500\text{ M}\Omega\mu\text{F}$ or $12,500\text{ M}\Omega$ whichever is less.

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.

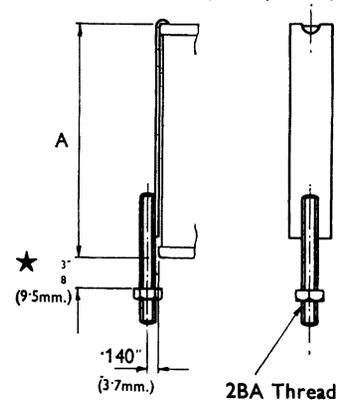
WALL FIXING CLIP

FIXING SLOTS $\frac{1}{16}'' \times \frac{1}{16}''$



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. $\pm \frac{1}{8}$	mm. ± 3	in. $\pm \frac{1}{16}$	mm. ± 1.5	in. $\pm \frac{1}{16}$	mm. ± 1.5	in. max.	mm. max.	in. $\pm \frac{1}{32}$	mm. ± 0.8				
141	C10-D	2 1/8*	63*	1 1/2	44	3 1/8	19	3 1/8	79	19	19	B1	W14	HA	S1
142	C10-E	2 1/8*	63*	2	51	3 1/8	19	3 1/8	79	19	19	B2	W15	HA	S1
143	C10-F	2 1/8*	63*	1 7/8	48	1 1/8	29	3 1/8	79	19	19	B3	W16	HA	S1
144	C10-G	2 1/8*	63*	2 1/8*	54	1 1/8	32	3 1/8	79	19	19	B4	W17	HA	S1
144A	C10-GA	2 1/8*	63*	2 1/8*	54	1 1/4	32	3 7/8	87	1	25	B4	W17	HA	S1
145	C10-H	2 1/8*	63*	1 7/8	48	1 7/8	48	3 1/8	79	19	19	B5	W18	HA	S1
146	C10-J	2 1/8*	63*	1 7/8	48	2 1/8	54	3 1/8	79	19	19	B6	W19	HA	S1
146A	C10-JA	2 1/8*	63*	1 7/8	48	2 1/8	54	3 7/8	87	1	25	B6	W19	HA	S1
147	C10-K	2 1/8*	63*	2 1/8*	60	2 1/8	54	3 1/8	79	19	19	B7	W20	HA	S1
147A	C10-KA	2 1/8*	63*	2 1/8*	60	2 1/8	54	3 7/8	87	1	25	B7	W20	HA	S1
148	C10-L	2 1/8*	63*	3 1/8	79	1 7/8	48	4 1/8	104	17	48	B8	W21	HA	S1
149	C10-M	4	117	1 7/8	48	1 7/8	48	5 1/8	136	19	19	B5	W18	HB	S2
150	C10-N	4	117	2 1/8	67	1 1/8	41	5 1/8	136	19	19	B9	W22	HB	S2
150A	C10-NA	4	117	2 1/8	67	1 1/8	41	5 1/8	144	1	25	B9	W22	HB	S2
151	C10-P	4	117	3 1/8	79	1 1/8	41	6 1/8	162	1 7/8	48	B10	W23	HB	S2
152	C10-R	4	117	1 7/8	48	3 1/8	79	5 1/8	136	19	19	B8	W21	HB	S2
153	C10-S	4	117	3 3/8	86	2 1/8	67	5 1/8	136	1	38	B11	W24	HB	S2
153A	C10-SA	4	117	3 3/8	86	2 1/8	67	5 1/8	144	1 1/8	38	B11	W24	HB	S2
153B	C10-SB	4	117	3 3/8	86	2 1/8	67	6 1/8	162	1 1/8	48	B11	W24	HB	S2
154	C10-T	4	117	5 1/8	130	3 7/8	97	5 1/8	136	1 1/8	44	B12	W25	HB	S2
154A	C10-TA	4	117	5 1/8	130	3 7/8	97	5 1/8	144	2	51	B12	W25	HB	S2
154B	C10-TB	4	117	5 1/8	130	3 7/8	97	6 1/8	162	2	51	B12	W25	HB	S2
155	C10-U	9	229	5 1/8	130	3 1/2	89	10 1/8	255	2	51	B13	W26	HC	—
155A	C10-UA	9	229	5 1/8	130	3 1/2	89	10 1/8	272	2	51	B13	W26	HC	—

* $2\frac{1}{8}$ inch (63 mm.) dimension has tolerance $\pm \frac{1}{16}$ inch (± 1.5 mm.)