

BRITISH STANDARD 9070 : Section 8 : 1971

UDC 621.38.03:621.319.45

METRIC UNITS

**SPECIFICATION FOR
FIXED CAPACITORS OF
ASSESSED QUALITY: GENERIC
DATA AND METHODS OF TEST**

Section 8. Aluminium electrolytic capacitors

Amendment Slip No.1, published 12 July, 1974

to BS 9070 : Section 8 : 1971

Fixed capacitors of assessed quality: Generic data and methods of test

Section 8. Aluminium electrolytic capacitors

Revised text

8.1.12 Standard ratings and characteristics. In items (2) and (3), insert 'preferably' between 'shall' and 'be as'.
In item (4), insert 'Preferred' before 'Climatic categories'.

8.2.6.4 Bumping. Delete the title 'Bumping' and substitute 'Bump'. Delete the last three lines of text.

8.2.6.7 Vibration. Delete the first and second paragraphs.

8.2.6.8 Climatic sequence. In item (1), delete 'D0' and substitute 'D1'.

8.2.6.11 Storage. In item (2), delete 'D0' and substitute 'D5'. Also delete 'measurements' and 'subgroup D5'.

8.2.6.12 Mould growth. In item (1), delete 'D0' and substitute 'D3'.

In item (3), delete '(except category —/—/21 which shall be visual examination only)'.

8.2.6.13 Salt mist. In item (1), delete 'D0' and substitute 'D4'.

8.2.7 Endurance test procedure. In item (1), delete 'D0' and substitute 'D2'.

8.3 Inspection schedule. In first sentence, delete 'the general application category' and substitute 'full assessment'.

Subgroup B1. Delete '(outline)'.

Subgroup C1. Delete '1.2.3.2' and 'Dimensions (detail)'.

Subgroup C4. Delete '1.2.6.8(2)', 8.2.6.8(2) and 'Dry heat'. After 'Leakage current (at upper category temperature)' insert '(see 1.2.1 of BS 9070 : Section 1 and 2)'.

Group D. Delete subgroup D0 entirely. In all subgroups insert 'Initial measurements (see Table 1)' following 'Destructive test(s)'.

Subgroup D1. Delete '50 % of the specimens' in item (1) and substitute 'Approximately 50 % of the sample (minimum 7)'. Delete 'The other 50 % of the specimens' in item (2) and substitute 'Remainder of the sample (minimum 6)'.

Subgroup D4. Insert '(not applicable to insulated types)' following 'Salt mist'.

Subgroup D7. Delete entire subgroup.

Table 1. Initial and final measurements. Repeat the initial measurements for D0 as initial measurements for D1, D2, D4, D5 and D6 only. Then delete the column headed 'D0'.

Delete the asterisk and associated footnote. Delete all tests in column headed 'D3 Final' other than test for Visual examination. Delete the column headed 'D7' entirely.



Amendment Slip No.2, published 31 October 1975
to BS 9070 : Section 8 : 1971

Fixed capacitors of assessed quality : Generic data
and methods of test

Section 8. Aluminium electrolytic capacitors

Revised text

AMD 1686
October 1975

Clause 8.2.4.6 Impedance

In (2) delete '20 kHz in Subgroups C7 and D2' and substitute:

'For subgroups C7 and D2, the following limits shall apply:

For $CV > 100 \text{ mC}$: 20 kHz

For $100 \text{ mC} \geq CV > 10 \text{ mC}$: 20 kHz or 100 kHz

For $CV \leq 10 \text{ mC}$: 100 kHz'

AMD 1686
October 1975

Table 1. Initial and final measurements

Delete impedance as an initial measurement in Subgroup D1.

Gr 0

Amendment Slip No.3, published 31 August 1978
to BS 9070 : Section 8 : 1971

Fixed capacitors of assessed quality : Generic data and methods of test

Section 8. Aluminium electrolytic capacitors

Revised text

8.2.7 Endurance test procedure (as amended by Amendment No.1).

At the end of the existing text of item (4) insert the following paragraph:

'A convenient way of applying ripple current is to apply an alternating voltage from a constant voltage source. The capacitor shall be divided into groups, if necessary, such that the capacitance of any one capacitor in a group does not differ by more than 20 % from the central value.

The ripple voltage applied is such as to give the appropriate ripple current in the central capacitance value provided that:

- a. the peak of the ripple voltage plus the applied direct voltage does not exceed the rated voltage,
- b. the peak of the applied ripple voltage does not exceed the applied direct voltage by more than 0.5 V.

Under the above conditions, if there is any change in the impedance of the capacitor, its current will change accordingly.'

