

(PREVIEW)

Indian Standard

SPECIFICATION FOR CERAMIC DIELECTRIC CAPACITORS, TYPE I

PART 1 GENERAL REQUIREMENTS AND METHODS OF TESTS

0. FOREWORD

0.1 This Indian Standard (Part II) was adopted by the Indian Standards Institution on 25 September 1975, after the draft finalized by the Capacitors and Resistors for Electronic Equipment Sectional Committee had been approved by the Electrotechnical Division Council.

0.2 This standard (Part II) lays down methods of tests and requirements for judging the performance of ceramic dielectric capacitors, Type 1 suitable for use in resonant circuits or any other applications where low loss and high stability are essential.

0.2.1 Dimensional requirements of ceramic dielectric capacitors, Type 1 are not at present covered in this standard.

0.3 The specification for ceramic dielectric capacitors was originally covered by IS : 1980-1967*. This standard supersedes IS : 1980-1967* which was prepared originally to cover ceramic dielectric capacitors. This standard follows closely the IEC Publication 108-1967 'Recommendation for ceramic dielectric capacitors, Type 1', issued by International Electrotechnical Commission.

0.4 In addition to improving certain performance characteristics, the major factors of this standard in comparison to IS : 1980-1967* relate to the following:

- a) Reviewing the climatic categories of the component,
- b) Aligning the rated voltage values with those in the corresponding IEC Publications, and
- c) Prescribing the requirements for those which have been kept open either due to non-availability of data or investigation.

0.5 General requirements and tests are covered in IS : 7305 (Part I)-1973†, which is a necessary adjunct to this standard.

*Specification for ceramic dielectric capacitors, Type 1 (*first revision*).

†Specification for fixed capacitors used in electronic equipment: Part I General requirements and tests.

IS : 10825 (Part 1) - 1975

0.6 This standard requires reference to IS : 589-1961* in which details of the various climatic tests prescribed have been fully covered. Only the appropriate degrees of severity and any other special conditions relating to climatic and mechanical tests have been included in this standard.

0.7 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test, shall be rounded off in accordance with IS : 2-1960†. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

1. SCOPE

1.1 This standard (Part II) prescribes the requirements for judging the electrical, mechanical and climatic properties of ceramic dielectric capacitors, Type I (*see 3.1*) intended for use in electronic and telecommunication equipment.

1.1.1 This standard does not lay down dimensional requirements of such capacitors.

1.1.2 Capacitors for radio frequency currents exceeding 1A or reactive power exceeding 200 var are not covered by this standard.

*Basic climatic and mechanical durability tests for electronic components (*revised*).

†Rules for rounding off numerical values (*revised*).

‡Specification for fixed capacitors used in electronic equipment: Part I General requirements and tests.