



JAPANESE
INDUSTRIAL
STANDARD

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Japanese Standards Association

JIS C 0064 : 1993

(IEC 695-1-2 : 1982)

**Fire hazard testing Part 1 :
Guidance for the preparation
of requirements and test
specifications for assessing fire
hazard of electrotechnical products
Guidance for electronic components**

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Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of International Trade and Industry through deliberations at Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law:

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In the event of any doubts arising as to the contents,
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Fire hazard testing

Part 1: Guidance for the preparation of requirements and test specifications for assessing fire hazard of electrotechnical products

Guidance for electronic components

Foreword as Japanese Industrial Standard

This Japanese Industrial Standard has been prepared based on the 1st edition issued in 1982 of IEC 695-1-2 [Fire hazard testing, Part 1: Guidance for the preparation of requirements and test specifications for assessing fire hazard of electrotechnical products Guidance for electronic components] without changing the technical contents.

1. Introduction and scope

Fire hazard testing of electronic components is influenced by the following:

- Electronic components are made of heterogeneous materials in relatively small amounts arranged in such a complex construction that synergistic effects may be various and are generally unforeseeable.
- Functioning of electronic components implies a supply of electrical energy; in normal operation heat dissipation is generally small but sparks may be produced (e.g. by relays). However, when operated under faulty or abnormal conditions, a large amount of energy may be liberated as heat.
- Electronic components of various kinds are generally associated into equipments in quite a large number and for various purposes, so that each type of component has to perform in a wide range of situations and a typical situation can therefore not be defined. Only in exceptional cases where some components may be particularly dangerous or endangered with regard to fire hazard a study of the actual situation may be useful and specified requirements may be necessary.

2. Hazard concepts

- 2.1 An electronic component may, under internal fault, or an overload condition resulting from an external fault, generate excess heat such that fire may be initiated.

The fire may start due to either:

- a) self-ignition of the component, or
- b) its exterior surfaces becoming sufficiently hot to ignite other items in contact with or in close proximity to it, or