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(JEITA)

**Electromechanical components
for electronic equipment —
Basic testing procedures and
measuring methods — Part 23-3:
Test 23c: Shielding effectiveness
of connectors and accessories**

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Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal of establishing a Japanese Industrial Standard from Japan Electronics and Information Technology Industries Association (JEITA), with a draft of Industrial Standard based on the provision of Article 12 Clause 1 of the Industrial Standardization Law.

This Standard has been made based on **IEC 60512-23-3:2000** *Electromechanical components for electronic equipment — Basic testing procedures and measuring methods — Part 23-3: Test 23c: Shielding effectiveness of connectors and accessories* for the purposes of making it easier to compare this Standard with International Standard; to prepare Japanese Industrial Standard conforming with International Standard; and to propose a draft of an International Standard which is based on Japanese Industrial Standard.

Attention is drawn to the possibility that some parts of this Standard may conflict with a patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have technical properties. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying the patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have the said technical properties.

JIS C 5402 series consists of the standards shown in **JIS C 5402-1-100**.

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In the event of any doubts arising as to the contents,
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**Electromechanical components for
electronic equipment — Basic testing procedures
and measuring methods — Part 23-3:
Test 23c: Shielding effectiveness
of connectors and accessories**

Introduction This Japanese Industrial Standard has been prepared based on the first edition of **IEC 60512-23-3** *Electromechanical components for electronic equipment — Basic testing procedures and measuring methods — Part 23-3: Test 23c: Shielding effectiveness of connectors and accessories* published in 2000 without modifying the technical contents.

1 Scope This section of **JIS C 5402-23** defines a standard test method for measuring the shielding effectiveness of a connector, or a connector fitted with an accessory and terminated with a cable. The complete assembly has a continuous 360° shielding capability throughout its length.

This test method utilizes the principle that the intrinsic shielding property of the connector/accessory/cable assembly is its surface transfer impedance which can be expressed as the longitudinal voltage inside the shield, relative to the current flow on the outside shell.

The test method is based on two impedance matched circuits. See figure 1 for the measurement principle. The connector under test is integrated into the secondary circuit 02. The impedance matched injection line of the primary circuit 01, which activates the electromagnetic field, runs parallel to the surface of the test sample under test.

This test is suitable for measuring the shielding effectiveness of a connector fitted with triaxial contacts terminated with shielded, twisted pair cables as used in data bus systems.