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EIA STANDARD

TP-54A

Magnetic Permeability Test Procedure for Electrical Connectors, Contacts, and Sockets

EIA/ECA-364-54A

(Revision of EIA-364-54)

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ELECTRONIC INDUSTRIES ALLIANCE

**Electronic Components, Assemblies, Equipment & Supplies
Association**



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EIA-364-54A

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This standard is based upon the major technical content of International Electrotechnical Commission standard 512-9, test 24a, residual magnetism, 1992-04. It conforms in all essential respects to this IEC standard.

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(From Standards Proposal Number 4214, formulated under the cognizance of the CE-2.0 National Connector Standards Committee.)

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TEST PROCEDURE No. 54A

MAGNETIC PERMEABILITY TEST PROCEDURE
FOR
ELECTRICAL CONNECTORS, CONTACTS, AND SOCKETS

(From EIA Standards Proposal No.4214, formulated under the cognizance EIA CE-2.0 Committee on National Connector Standards, and previously published in EIA-364-54.)

1 Introduction

1.1 Scope

This standard applies to electrical connectors, contacts and sockets.

1.2 Object

The object of this test is to detail a standard method to determine whether the magnetic permeability of a test item is below a specified value.

2 Test resources

2.1 Equipment

Permeability Indicator; Low-Mu: Severn Engineering Co., Permeability Indicator #3904, or equivalent.

3 Test specimen

3.1 Description

The test specimen shall consist of a fully assembled connector, connector components or contacts, as specified.

4 Test procedure

4.1 Unless otherwise specified, a 2.0 Mu pellet (insert) shall be used. The magnet of the hand-held indicator shall be alternately applied to and delicately removed from all the areas of the specimen.

4.2 Pulling the magnet from the calibrated pellet (insert) of the indicator shall constitute failure.

5 Detail to be specified

The following details shall be specified in the referencing document:

5.1 Number of specimens to be tested

5.2 Magnetic permeability value if other than 2.0 Mu

6 Test documentation

Documentation shall contain the details specified in clause 5, with any exceptions, and the following:

6.1 Title of test

6.2 Sample description

6.3 Test equipment used, and date of last and next calibration

6.4 Test procedure

6.5 Values and observations.

6.6 Date of test and name of operator

EIA Document Improvement Proposal

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