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EIA STANDARD

TP-101

Attenuation Test Procedure for Electrical Connectors, Sockets, Cable Assemblies or Interconnection Systems

EIA-364-101

May 2000



EIA-364-101

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(From Standards Proposal No. 4153-A, formulated under the cognizance of the EIA CE-2.0 National Connector Standards Committee and reaffirmed per Standards Proposal No. 5253.05).

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CONTENTS

Clause	Page
1 Introduction	1
1.1 Scope	1
1.2 Object	1
1.3 Definitions	1
2 Test resources	1
2.1 Equipment	1
2.2 Fixture	2
3 Test specimen	3
3.1 Description	3
4 Test procedure	4
4.1 Fixture attenuation	4
4.2 Method A, frequency domain	4
4.3 Method B, time domain	7
5 Details to be specified	7
6 Test documentation	8
 Figure	
A.1 Technique diagrams	A-1
A.2 Single-ended terminations	A-2
A.3 Differential (balanced) terminations	A-3
A.4 Example of specimen in fixture for attenuation	A-3
 Annex	
A Normative	A-1
B Informative	B-1

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TEST PROCEDURE No. 101

ATTENUATION TEST PROCEDURE FOR
ELECTRICAL CONNECTORS, SOCKETS,
CABLE ASSEMBLIES OR INTERCONNECTION SYSTEMS

(From EIA Standards Proposal No. 4153-A, formulated under the cognizance EIA CE-2.0 Committee on National Connector Standards.)

1 Introduction

1.1 Scope

This standard is applicable to electrical connectors, sockets, cable assemblies or interconnection systems.

1.2 Object

This standard describes one time and two frequency domain methods to measure attenuation as a function of frequency.

1.3 Definitions

1.3.1 Attenuation

The reduction of average power during the transmission from the input to the output of the specimen, usually measured in decibels (dB)

1.3.2 Specimen environment impedance

The impedance presented to the signal conductors by the fixture. This impedance is a result of transmission lines, termination resistors, attached receivers or signal sources, and fixture parasitics.

2 Test resources

2.1 Equipment

2.1.1 Frequency domain

A network analyzer is preferred. When greater dynamic range is required, a signal generator and spectrum analyzer may be used. For differential measurements, an 8 port network analyzer or baluns may be used. For the Open/Short method, an impedance or vector network analyzer may be used.