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EIA STANDARD

TP-65B

MIXED FLOWING GAS TEST PROCEDURE FOR ELECTRICAL CONNECTORS CONTACTS AND SOCKETS

EIA-364-65B

(Revision of EIA-364-65A)

DECEMBER 2009



EIA Standards

Electronic Components Association

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(From Standards Proposal No. 5194 formulated under the cognizance of the CE-2.0 National Connector and Socket Standards Committee)

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TEST PROCEDURE No. 65B

MIXED FLOWING GAS TEST PROCEDURE FOR ELECTRICAL CONNECTORS AND SOCKETS

(From EIA Standards Proposal No. 5194, formulated under the cognizance EIA CE-2.0 Committee on National Connector Standards, and previously published in EIA-364-65A.)

1 Introduction

1.1 Scope

This standard establishes the test procedure for producing environmentally related corrosive atmospheres to determine the reaction of plated or unplated surfaces when exposed to different concentrations of flowing gas mixtures.^{1) and 2)}

1.2 Object

The object of this test is to evaluate mated or unmated connectors, components, or experimental materials to the effects of mixed flowing gas exposure. They are placed in an environmentally controlled chamber that is monitored by a gas analyzing system for controlled concentrations of the gas mixture. Corrosion rates are monitored by copper control coupons placed in the chamber for each test. These control coupons are removed and analyzed using weight gain technique.

1.3 Safety

This procedure involves the use of hazardous materials, operations, and equipment. This specification does not purport to address all of the safety problems associated with its use. It is the responsibility of whoever used this specification to consult and establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

1) The Development and Performance Characteristics of Mixed Flowing Gas Test Environments, Electrical Contacts - 1987, Proceedings of the Thirty-Third IEEE Holm Conference on Electrical Contacts, IEEE, New York, 1987, pp67-78.

2) D.W.Rice et al., Atmospheric Corrosion of Copper and Silver, J. Electrochem. Soc., 128, 1981, pp 275-284.