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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 5095.2509-2020

**Electromechanical components for electronic equipment -
Basic testing procedures and measuring methods - Part 25-9:
Signal integrity tests - Test 25i: Alien crosstalk**

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Foreword

GB/T 5095 "Basic Test Regulations and Measurement Methods of Electromechanical Components for Electronic Equipment" is divided into several parts according to the test methods.

Part 25 of GB/T 5095 is the signal integrity test. The parts that have been released or are planned to be released are as follows.

- Part 25-1. Test 25a. Crosstalk ratio;
- Part 25-2. Test 25b. attenuation (insertion loss);
- Part 25-3. Test 25c. Decay of rise time;
- Part 25-4. Test 25d. Transmission delay;
- Part 25-5. Test 25e. Return loss;
- Part 25-6. Test 25f. Eye diagram and jitter;
- Part 25-7. Test 25g. impedance, reflection coefficient and voltage standing wave ratio (VSWR);
- Part 25-9. Signal integrity test Test 25i. Alien crosstalk.

This part is part 25-9 of GB/T 5095.

This section was drafted in accordance with the rules given in GB/T 1.1-2009.

The translation method used in this part is equivalent to the use of IEC 60512-25-9..2008 "Connector Test and Measurement for Electronic Equipment Part 25-9

Points. Signal Integrity Test 25i. Alien Crosstalk.

The documents in China that have a consistent correspondence with the normatively cited international documents in this section are as follows.

- GB/T 4210-2015 Electrotechnical term Electromechanical components for electronic equipment [IEC 60050-581..2008, IDT];

--- GB/T 18015 (all parts) multi-core or star-stranded multi-core symmetrical cable for digital communication [IEC 61156 (all parts)]

--- GB/T 15157.7-2002 printed circuit board connectors with frequencies lower than 3MHz.
Part 7. Qualified

Detailed specification of 8-position fixed and free connectors with mating characteristics [IEC 60603-7..1996, IDT].

The following editorial changes have been made in this section.

--- The standard name is "Test and Measurement of Connectors for Electronic Equipment Part 25-9. Signal Integrity Test 25i. External

"Crosstalk" is revised to "Basic test procedures and measurement methods for electromechanical components for electronic equipment Part 25-9. Signal integrity

Test Test 25i. Alien Crosstalk.

Please note that some content of this document may involve patents. The issuer of this document does not assume responsibility for identifying these patents.

This part is proposed by the Ministry of Industry and Information Technology of the People's Republic of China.

This part is under the jurisdiction of the National Technical Committee for Standardization of Electromechanical Components for Electronic Equipment (SAC/TC166).

This section was drafted by. Sichuan Huafeng Enterprise Group Co., Ltd., China Electronics Standardization Institute.

1 Scope and purpose

The test method specified in this part of GB/T 5095 is used to assess the proximity between the connectors installed in its installation system.

End Alien Crosstalk (ANEXT) and Far End Alien Crosstalk (AFEXT). Both modular connectors and multi-port panel connectors can be used

Method to conduct experiments. This method provides a way to test for alien (foreign) crosstalk between any two ports, and to assess the

All alien crosstalk at the mouth. This test procedure is widely applicable to all electrical connectors in electromechanical components, especially to the IEC 60603-7 series

Columns and connectors described in IEC 61076-3-104, as well as other types of connectors used for data transmission.

2 Normative references

The following documents are essential for the application of this document. For dated references, only the dated version applies to this article

Pieces. For the cited documents without date, the latest version (including all amendments) applies to this document.

IEC 60050-581 International Electrotechnical Vocabulary (IEV) Chapter 581.
Electromechanical components for electronic equipment [International Electro-
technical Vocabulary (IEV) -Chapter 581.
Electromechanical components for electronic equipment]

IEC 60512-26-100 Test and measurement of connectors for electronic equipment Part
26-100. Conforms to IEC 60603-7 connectors

Measuring device, test and standard configuration and measurement (test 26a ~ 26g)
[Connectors for electronic equipment-Tests and

measurement-Part 26-100. Measurement setup,
test and reference arrangements and measurements

for connectors according to IEC 60603-7 (tests 26a to 26g)]

IEC 60603-7-4..2005 Connectors for electronic equipment Part 7-4. 8-channel non-screen
for data transmission up to 250MHz

Detailed specification for shielded free and fixed connectors
(Connectors for electronic equipment-Part 7-4. Details specification for

8-way, unshielded, free and fixed connectors,
for data transmissions with frequencies up to 250MHz)

IEC 60603-7 (all parts) Connectors for electronic equipment Part 7. 8-channel (non-)
shielded free and fixed for data transmission

Connector detailed specifications (Connectors for electronic equipment-Part 7.
Details specifications for 8-way, (un)

shielded, free and fixed connectors, for data transmissions)

IEC 61076-3-104..2006 Connectors for electronic equipment Part 3-104. 8 channels for
data transmission up to 1000MHz

Detailed specification of free and fixed connectors for shielding
(Connectors for electronic equipment-Part 3-104. Details specifica-

tion for 8-way, shielded, free and fixed connectors, for data transmissions with frequencies up to

1000MHz)

IEC 61156 Multicore and Symmetrical Pair/quad Cable for Digital Communication
digitalcommunications)

3 Terms and definitions

The terms and definitions defined in IEC 60050-581 and the following apply to this document.