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

GB/T 44644.1-2024

**Road vehicles - 50ohm impedance radio frequency connection
system interface - Part 1: Dimensions and electrical
requirement**

道路车辆 50Ω阻抗射频连接系统接口 第1部分：尺寸和电气要求

(English Translation)

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Foreword

This document was drafted in accordance with the rules provided in GB/T 1.1-2020 Directives

for Standardization - Part 1: Rules for the Structure and Drafting of Standardizing Documents.

This document is Part 1 of GB/T 44644 Road Vehicles - 50 ohm Impedance Radio Frequency

Connection System Interface. GB/T 44644 has issued the following parts:

---Part 1: Dimensions and Electrical Requirements;

---Part 2: Test Procedures.

This document identically adopts ISO 20860-1:2008 Road Vehicles - 50 ohm Impedance Radio

Frequency Connection System Interface - Part 1: Dimensions and Electrical Requirements.

This document makes the following minimal editorial modifications:

- a) Due to errata, the error-proofing structural combination relation "b2-c" of the connection system interface with the mechanical structure code "I" is modified into "b2-d" (see Table 1);
- b) Due to errata, the description of Y in the "Insertion Loss" and "Shielding Effectiveness" property illustrations is modified (see Table 2);
- c) As the original text lacks the mechanical coding and color coding of the non-error-proofing 50 ohm connection system, in order to meet the actual application demands, the mechanical structure coding and color coding of the non-error-proofing 50 ohm connection system interface are added (see Appendix NA).

Please be noted that certain content of this document may involve patents. The institution issuing this document does not undertake the responsibility of identifying these patents.

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

This document shall be under the jurisdiction of National Technical Committee of Auto Standardization (SAC/TC 114).

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Road Vehicles - 50 ohm Impedance Radio Frequency

Connection System Interface - Part 1: Dimensions and

Electrical Requirements

1 Scope

This document specifies the requirements for the dimensions and electrical characteristics of

male and female connectors of the 50 ohm impedance radio frequency connection system interface

of road vehicles.

This document is applicable to all relevant devices and cables for use on road vehicles with 50

ohm impedance radio frequency connection system interfaces.

2 Normative References

The contents of the following documents constitute indispensable clauses of this document through the normative references in the text. In terms of references with a specified date, only

versions with a specified date are applicable to this document. In terms of references without a

specified date, the latest version (including all the modifications) is applicable to this document.

ISO 20860-2 Road Vehicles - 50 ohm Impedance Radio Frequency Connection System Interface

- Part 2: Test Procedures

NOTE: GB/T 44644.2-2024 Road Vehicles - 50 ohm Impedance Radio Frequency Connection System

Interface - Part 2: Test Procedures (ISO 20860-2:2009, IDT)

3 Terms and Definitions

The following terms and definitions are applicable to this document.

3.1 male contact

pin contact

A contact that is inserted into the female contact (sheath) and electrically engaged through its

outer surface.

3.2 female contact

socket contact

A contact that is inserted into the male contact (contact pin) and electrically engaged through

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