



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

GB/T 15491-2008

Replacing GB/T 15491-1995

**Requirements and measurement methods of electrical
performance for duplexers used in the mobile services**

移动通信双工器电性能要求及测量方法

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Foreword

This standard is a revision of GB/T 15491-1995 conducted. The main content of the amendments are as follows:

- a) modify the duplexer frequency range;
- b) modify, add terminology duplexer;
- c) modify the duplexer electrical performance requirements;
- d) Modify the duplexer measurement methods;
- e) adding environmental requirements and test methods duplexer. The reference to the standard IEC 60489-8 "using a mobile device measurement for radio equipment - Part 8. antenna and auxiliary equipment Methods of measurement ", IEC /T CorSC. CS12F" IEC

complementary measurement methods duplexer 489-8 of. " This standard replacement GB/T 15491-1995 "Mobile communication duplexer electrical performance requirements and test methods" from the date of publication. The standard proposed by the People's Republic of China Ministry of Information Industry. The standard by the China Electronics Standardization Institute. This standard drafting units. China Electronics Technology Group Corporation seventh Research Institute. Involved in the drafting of this standard. Guangzhou GCI Science & Technology Co., Ltd., Xi'an Space Star Technology Co., Ltd., Mobi Antenna Technology Surgery (Shenzhen) Co., Ltd. The main drafters. Zhang Jinan, Cao Jing, Liu Jianhua, Liu tsunami, Xiao He, yellow friend. Mobile duplexer electrical performance requirements and methods of measurement

1 Scope

GB/T 15491-2008 is the Chinese national standard on requirements and measurement methods of electrical performance for duplexers used in the mobile services. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 11 April 2008 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 September 2008. Classification: ICS (ICS) , CCS M37. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the definitions of terms related to the mobile communications duplexer (hereinafter referred to as the duplexer), the main electrical performance requirements, test conditions and measurement Volume method. This standard applies to the frequency range of 25MHz ~ 2500MHz mobile communication facilities duplexer.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 15844.2-1995 FM radiotelephone mobile communication environment requirements and test methods

3 Terms and Definitions

The following terms and definitions apply to this standard.

3.1 It allows the use of the same antenna at the same time achieve an apparatus for transmitting and receiving. Diplexer generally have three ports to connect a transmitter, receiver and antenna. Transmit port to the antenna port of the branch, said transmitting branch; day Line port to the receive port of said branch receiving branch.

3.2 Diplexer transmission branch for the degree of inhibition may go directly to the reception band transmitter output noise.

3.3 A diplexer for receiving fingers transmission band carrier level degree of isolation.

3.4 Transmitter output power and receiver input power through the transmission loss caused by the diplexer.

3.5 Diplexer predetermined resistive impedance of each port.

3.6 V_p voltage standing wave ratio SWR Diplexer two ports with a nominal impedance of the load connected to the other port is connected to a lossless transmission line and its load as the pass Transmission line maximum and minimum voltage standing wave ratio.

3.7 Holding diplexer electrical performance requirements specified ambient temperature range.

3.8 Meet rejection diplexer prescribed isolation, insertion loss frequency range, voltage standing wave ratio and other requirements of the transceiver frequency interval.