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

GB/T 17737.106-2018

**Coaxial communication cables -- Part 1-106: Electrical test
methods -- Test for withstand voltage of cable sheath**

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Foreword

GB/T 17737 "Coaxial Communication Cable" has or plans to issue the following parts.

- Part 1. General rules, definitions and requirements;
- Part 1-100. General requirements for electrical test methods;
- Part 1-101 . Electrical test methods Conductor direct current resistance test ;
- Part 1-102 . Electrical test methods ; Insulation resistance test of dielectrics for cables ;
- Part 1-103 . Electrical test methods Capacitance test of cables ;
- Part 1-104 . Electrical test methods ; Capacitance stability test of cables ;
- Part 1-105. Electrical test methods for withstand voltage test of cable dielectrics;
- Part 1-101 . Electrical test methods Voltage withstand test of cable sheathing ;
- Part 1-107 . Electrical test methods Vibrating cable charge level (mechanically induced noise) test;
- Part 1-108. Electrical test methods Characteristic impedance, phase delay, group delay, electrical length and propagation speed test;
- Part 1-110 . Electrical test method continuity ;
- Part 1-111 . Electrical test methods Stability test for phase constants ;
- Part 1-112. Electrical test methods Return Loss (Impedance Consistency) test;
- Part 1-113 . Electrical test method attenuation constant test ;

- Part 1-114 . Electrical test methods Inductors ;
- Part 1-115. Electrical test method impedance uniformity (pulse/step function return loss) test;
- Part 1-116 . Electrical test methods TDR method measuring characteristic impedance ;
- Part 1-119 . Electrical test methods RF power rating ;
- Part 1-122. Electrical test methods - Cross-talk test between coaxial cables;

This part is part 1-106 of GB/T 17737.

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

This section uses the translation method identical to the use of IEC 61196-1-106.2008 "coaxial communication cable Part 1-106. Electrical test method

Cable jacket withstand voltage test".

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

---GB/T 17737.1-2013 Coaxial telecommunication cables Part 1. General specifications General, definitions and requirements (IEC 61196-1. 2005, IDT).

1 Scope

This part of GB/T 17737 applies to coaxial communication cables. It specifies the test method for determining the withstand voltage of a coaxial cable sheath.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article

Pieces. For undated references, the latest version (including all amendments) applies to this document.

IEC 61196-1 Coaxial Communication Cables Part 1. Generic Specification General, Definitions and Requirements (Coaxialcommunicationcables-Part 1.Generic specification-General,definitionsandrequirements)

3 Terms and definitions

The terms and definitions defined by IEC 61196-1 apply to this document.

4.1 Principle

This test measures the withstand voltage of the sheath by immersion in water.

4.2 Test Equipment

A metal water tank with a suitable electrode and an AC power supply with a frequency of 40 Hz to 60 Hz, with a voltage RMS adjustment range of 0.8 kV~

5kV.

4.3 sample preparation

A sufficient length of cable shall be taken from the finished cable as specified in the relevant sub-standard or detailed specification, and the sheath shall be stripped off at one end of the cable so that

Shield and power connection.

4.4 Procedures

Dip the cable into water at a temperature of 15°C to 35°C for 1 hour. Both ends of the cable are exposed to sufficient length to prevent voltage breakdown. When soaking

At the end of the interval, the AC test voltage specified in the table below (unless otherwise specified) shall be applied between the outer conductor or the shield and the water for not less than 1 min.

It does not exceed 2 minutes.