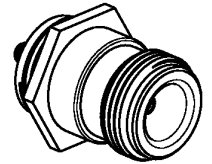


DESIGN OBJECTIVES

The product described herein has not been fully tested to ensure conformance to the requirements outlined below. Tyco Electronics makes no representation or warranty, express or implied, that the product will comply with these requirements. Further, Tyco Electronics may change these requirements based on the results of additional testing and evaluation. Contact Tyco Electronics Engineering for further details.

Type N Jack (Screw-in version)



1. SCOPE

1.1 Introduction

- This specification covers performance, test and quality requirements for the TYCO ELECTRONICS TYPE N JACK. All dimensions, materials and plating which are not mentioned in this specification have to meet the requirements specified in the IEC 169-16.
- This connector is designed to make a connection with a Type N Plug connector and opposite side to be panel mounted, screw-in version.

1.2 Qualification

When tests are performed on subject product, procedures specified in this Product Specifications shall be used. All inspections shall be performed using applicable inspection plan and product drawing.

2. APPLICABLE DOCUMENTS

The following documents form a part of this specification to the extent specified herein. Unless otherwise specified, latest edition of the document applies. In the event of conflict between requirements in this specification and product drawing, this specification shall take precedence. In the event of conflict between requirements in this specification and referenced documents, this specification shall take precedence.

2.1 Tyco drawings

- C-1460118 : Customer drawing

DR. F. Hellin

DATE 16-03-2004

APVD. R. Leeman

EC-SR10-0039-04

DATE 16-03-2004

3. REQUIREMENTS**3.1 Design and construction**

Products construction and physical dimensions must meet the applicable product drawing.

3.2 Materials and finish**3.2.1 Center Conductor**

Material: Beryllium Copper (CuBe2Pb)

Plating: min. 5 µm Silver (Ag) plating over 1-2µm Copper (Cu) plating

3.2.2 Thread locking on center conductor (if applicable)

Material: Polyamide

Color: Blue

Trade name: Tuf-Lok®

Applied by: Kerb Konus GmbH, Germany.

3.2.3 Dielectric

Material: Polytetrafluoroethylene (PTFE)

Color: nature (white)

3.2.4 Body

Material: Brass (CuZn39Pb3)

Plating: min. 2 µm White Bronze (CuZnSn) plating

3.3 Electrical specifications

3.3.1 Characteristic Impedance

Z = 50 Ω

3.3.2 Return loss (reflection)

According to IEC 169-1 / 14.1 / 169-1-1 section one

Not defined.

3.3.3 Insertion loss / attenuation

According to CECC 22 000 / item 4.4.11 (K)

Not defined.

3.3.4 Insulation resistance

According to IEC 169-1 / 14.5

Value: Initial : ≥ 5 GΩ
 After conditioning : ≥ 200 MΩ

3.3.5 Proof voltage at sea level

According to IEC 169-1 / 14.6

Value: Initial : 2500V (rms) 50Hz
 After conditioning : 1500V (rms) 50Hz

No flashover or breakdown.

3.3.6 Contact resistance

According to CECC 22 000 / item 4.4.2

Inner contact:

Value: Initial : ≤ 1.0 mΩ
 After conditioning : ≤ 1.5 mΩ

Outer contact:

Value: Initial : ≤ 0.25 mΩ
 After conditioning : ≤ 1.0 mΩ

3.3.7 Intermodulation , 3rd order, EGSM band

According to IEC 62037

Transmit power per carrier: 46 dBm. (40W)
 Carrier frequency between 925 MHz and 960 MHz.
 Value: IM3 (890 MHz up to 915 MHz) < -118 dBm (> 164 dBc @ 46dBm carrier power)

3.3.8 Intermodulation , 3rd order, GSM band

According to IEC 62037

Transmit power per carrier: 46 dBm. (40W)
 Carrier frequency between 935 MHz and 960 MHz.
 Value: IM3 (910 MHz up to 915 MHz) < -118 dBm (> 164 dBc @ 46dBm carrier power)

3.3.9 Intermodulation , 3rd order, DCS / PCN band

According to IEC 62037

Transmit power per carrier: 46 dBm. (40W)

Carrier frequency between 1805 MHz and 1880 MHz.

Value: IM3 (1730 MHz up to 1785 MHz) < -118 dBm (> 164 dBc @ 46dBm carrier power)

3.4 Mechanical specifications**3.4.1 Contact captivation**

According to IEC 169-1 / 15.2.4

Direction: towards interface side

Axial force: min. 28N

No captivation against rotation.

3.4.2 Centre conductor torque strength

M3 thread (back end of center conductor) shall withstand a 0.8Nm fastening torque.

3.5 Environmental specifications**3.5.1 Climatic sequence**

According to IEC 169-1 / 16.2

Climatic category: 55/155/21

3.5.2 Corrosion test

According to IEC 169-1 / 16.7 / IEC 68-2-11 Ka

Duration of spraying: 48h

3.6 Endurance specifications**3.6.1 Mechanical endurance**

According to IEC 169-1 / 17

Value: Min. 500 operations

3.6.2 High temperature endurance

According to IEC 169-1 / 18

Temperature: 155°C

Duration: 1000 h