



HD BNC Plug St Crimp RG-58, 141 50 ohm

1 Scope:

1.1 Content

Introduction

This specification covers performance test, and quality requirements for the TE Connectivity (TE) **HD BNC Plug St Crimp RG-58, 141 50 ohm** (Connector). All dimensions, materials and plating not mentioned in this specification are required to meet the TE Spec. This connector series is designed to mate with all other connector styles and genders that meet the TE Connectivity specification requirements.

1.2 Qualification

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

1.3 Applicable Documents

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

1.4 TE Connectivity (TE) Documents

Design & Construction:

Product construction and physical dimensions must meet the application product drawings.

Drawing: 2510976 (Series)

2 Requirements:

Test Condition & Instrument refer to below tests category:

No.	Test Item	Test Requirement	Test Condition & Instrument
1	Product Examination	According to the drawing	● Visual, dimensional and functional per applicable quality inspection plan

2.1 Electrical Test

No.	Test Item	Test Requirement	Test Condition & Instrument
1	Nominal Impedance	50 ohm	- MIL-PRF-39012, paragraph 3.1 - Milliohm meter
2	Voltage Standing Wave Ratio (VSWR)	1.065 Max. DC ~ 3 GHz 1.2 Max. DC 3 ~ 6 GHz.	- IEC 61169-1, paragraph 9.2.1 - Network Analyzer
3	Return Loss	30 dB Min. DC ~ 3 GHz 20.83 dB Min. DC 3 ~ 6 GHz	- IEC 61169-1, paragraph 9.2.1 - Network Analyzer
4	Insertion Loss	0.25 dB Max.	- IEC 61169-1, paragraph 9.2.1 - Network Analyzer
5	Contact Resistance	Center Conductor : 6 mΩ Max.	- IEC 61169-1, paragraph 9.2.3 - Milliohm meter
		Outer Conductor : 3 mΩ Max.	- IEC 61169-1, paragraph 9.2.3 - Milliohm meter
6	Dielectric Withstand Voltage	500 VOLTS Max.	IEC 61169-1, paragraph 9.2.6 Relative humidity: 50% Max. Voltage source: AC (60Hz) Rate of voltage: approximately 500 V/sec. Testing time : 60 seconds(at sea level) Withstanding Voltage Tester
7	Insulation Resistance	5000 MΩ	- IEC 61169-1, paragraph 9.2.5 - Insulation Tester

2.2 Mechanical Test

No.	Performance item	Test Specification	Test Condition & Instrument
1	Durability	500 cycles Min.	- IEC 61169-1, paragraph 9.3.15 - No evidence of damage
2	Engagement and Disengagement Force	Engagement : 20 N Max.	MIL-PRF-39012, paragraph 3.5.1
		Disengagement : 5 N Min	

2.3 Environmental Test

No.	Performance items	Test Specification	Test Condition & Instrument
1	Salt Spray Test	1. No evidence of corrosion and pitting. No exposure of the base metal on the interface or mating surface.	MIL-STD-202, Method 101, Test Condition B Temp:35±1°C Humidity:95~98%, Total testing time: 48 hours
2	Shock	1. No evidence of damage. 2. No discontinuities of 1 µs or longer duration. 3. "Contact Resistance" should meet the spec. specified.	MIL-STD-202, Method 213, Test Condition B
3	Thermal Shock	1. No evidence of damage. 2. "Contact Resistance" and "Insulation Resistance", should meet the spec. specified. 3. The high temperature resistance should follow each cable type specifications.	MIL-STD-202, Method 107, Test Condition : -65°C ~ +165°C 5 minutes @ each extreme, 5 cycles
4	Moisture Resistance	1. No evidence of damage. 2. "Dielectric Withstanding Voltage" and "Insulation Resistance" meet the spec. specified.	MIL-STD-202, Method 106. 50°C 24hrs (25°C 3hrs, 65°C & 95% 3hrs, total 10 cycles)

3 Quality Assurance Provisions:

3.1 Requalification Testing

If changes significantly affecting form, fit or function are made to the product or manufacturing process, product assurance shall coordinate requalification testing, consisting of all or part of the original testing sequence as determined by development/product quality, and reliability engineering.

3.2 Acceptance

Acceptance is based on verification that the product meets the requirements of table 2. Failures attributed to equipment, test setup or operator deficiencies shall not disqualify the product. If product failure occurs, corrective action shall be taken, and specimens resubmitted for qualification. Testing to confirm corrective action is required before resubmittal.

3.3 Quality Conformance Inspection

The applicable quality inspection plan shall specify the sampling acceptable quality level to be used. Dimensional and functional requirements shall be in accordance with the applicable product drawing and this specification.

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REV	DATE (DD-MM-YY)	CATEGORY	ADDITIONS, DELETIONS, CHANGES
1	27-OCT-2025	All	Preliminary released