

Registration No. 1296

JAXA-QTS-2060/H401A

21 March 2025

Superseding

JAXA-QTS-2060/H401

Cancelled

21 March 2025

CONNECTORS, COAXIAL,  
RADIO FREQUENCY,  
HIGH RELIABILITY, SPACE USE,

CABLE PLUG, STRAIGHT

DETAIL SPECIFICATION FOR

Prepared by Waka Manufacturing Co., Ltd.

Issued by Japan Aerospace Exploration Agency

This document is the English version of JAXA QTS/ADS which was originally written and authorized in Japanese and carefully translated into English for international users. If any question arises as to the context or detailed description, it is strongly recommended to verify against the latest official Japanese version.

The release date of the English version of this specification: 24 March 2026

Record of revisions

Rev.	Date	Description
NC	14 Jan. 2014	Original
A	21 Mar. 2025	Reflected the document (document number: JX-009 (Rev. A)) prepared by Waka Manufacturing Co., Ltd.
		The remainder of this page is intentionally left blank.

Revision history

Rev.	Date	Description
NC	14 Jan. 2014	Original
A	21 Mar. 2025	<p>Changed the following items in accordance with JAXA-QTS-2060 (Rev. F).</p> <ul style="list-style-type: none"> <li>• Changed terminology to align with the standardized nomenclature for connectors and contacts. (For Japanese version only.)</li> <li>• Paragraph 4.4: Changes to Test and Inspections <ul style="list-style-type: none"> <li>- Deleted item a), since the name of the test equipment was clarified in JAXA-QTS-2060 (Rev. F).</li> </ul> </li> <li>• Table 3. Performance <ul style="list-style-type: none"> <li>- Added “coupling mechanism retention” to the column of item.</li> <li>- Added measurements with vector network analyzer to the columns of performance of “Voltage Standing Wave Ratio (VSWR)” and “RF insertion loss”.</li> <li>- Added “marking” to the column of item (with requirement of paragraph H.3.3.1, Appendix H of JAXA-QTS-2060).</li> <li>- Moved ethanol immersion in the column of performance of “externals, dimensions and marking” (with requirement of paragraph H.3.3, Appendix H of JAXA-QTS-2060) to the column of performance of “marking” for clarification.</li> </ul> </li> <li>• Paragraph 4.4: Change to Tests and Inspections <ul style="list-style-type: none"> <li>- Added item j) to clarify that ethanol immersion test was not applicable.</li> </ul> </li> <li>• Changed the names of the following tests and inspections. <ul style="list-style-type: none"> <li>- Changed “corona level” to “partial discharge” in Tables 3, 4 and 8, and item f) of paragraph 4.4.</li> <li>- Changed “force to engage/disengage” to “Connector mating and unmating forces” in paragraph 3.1.1 and Tables 4 and 6.</li> <li>- Changed “mating characteristics” to “Contact insertion and removal characteristics” in Tables 3, 4 and 6, and item d) of paragraph 4.4.</li> </ul> </li> <li>• Supplementary figure 1: <ul style="list-style-type: none"> <li>- Added note under the dimension table in order to define the dimension “A” of ID numbers 31A9, 31A5 and 31A6 as coupling dimension, since the cables with these ID numbers were provided as pre-assembled parts.</li> </ul> </li> <li>• Supplementary figure 2: <ul style="list-style-type: none"> <li>- Replaced the dimensions shown in the supplementary figure with dimensions compliant with the applicable standard MIL-PRF-39012 (Rev. F) (or MIL-STD-348 (Rev. B)), since the dimensions shown in the supplementary figure were different from those shown in figure H-4 of JAXA-QTS-2060 (Rev. F).</li> </ul> </li> <li>• Table 3. Performance <ul style="list-style-type: none"> <li>- Added “marking” to the column of item in Table 3 to clarify that the</li> </ul> </li> </ul>

JX-009

Rev.	Date	Description
		requirement for ethanol immersion specified in paragraph H.3.3.1, Appendix H of JAXA-QTS-2060 was not applicable, since laser marking were provided.

**Contents**

1. GENERAL .....	1
1.1 Scope.....	1
1.2 Part Number.....	1
1.2.1 Identification Number .....	1
1.3 Rating .....	3
2. APPLICABLE DOCUMENTS.....	4
3. REQUIREMENTS .....	4
3.1 Performance .....	4
3.1.1 Length of Test Cables .....	6
3.1.2 Coupling Proof Torque .....	7
4. QUALITY ASSURANCE PROVISIONS.....	7
4.1 Qualification Test .....	7
4.2 Quality Conformance Inspection .....	9
4.3 Long-Term Storage .....	10
4.4 Change to Tests and Inspections .....	10
5. PREPARATION FOR DELIVERY.....	13
5.1 Packaging .....	13
5.2 Marking on Package.....	13
6. NOTES.....	13
7. Externals, Dimensions and Marking .....	13

**CONNECTORS, COAXIAL,  
RADIO FREQUENCY,  
HIGH RELIABILITY, SPACE USE,  
  
CABLE PLUG, STRAIGHT  
  
DETAIL SPECIFICATION FOR**

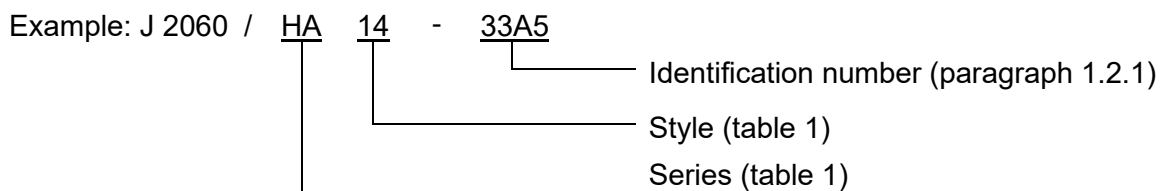
1. GENERAL

1.1 Scope

This specification establishes the requirements for coaxial radiofrequency connectors, straight cable plug specified in JAXA-QTS-2060, Appendix H (hereinafter referred to as “connectors”).

1.2 Part Number

The part number shall identify series, configuration, and identification number as follows. See Table 1 for details.



1.2.1 Identification Number

The identification number for connectors shall indicate material, finish, termination style and applicable cable using one number or one alphabet as shown below. See Table 1 for details.

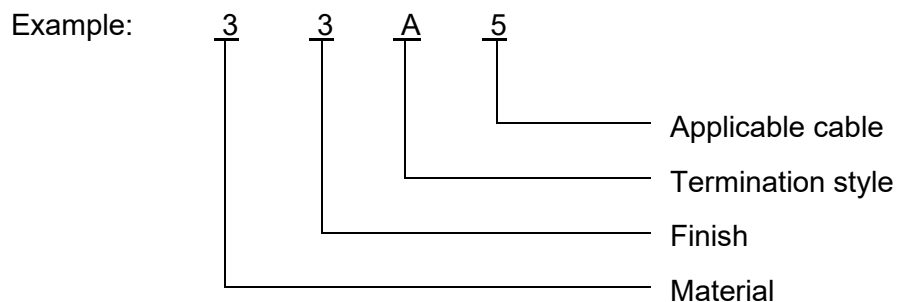


Table 1. Part Number

Item		Applicable paragraph of JAXA-QTS-2060, Appendix H	Description				
Part number		H.1.2	Example: J2060/HA14-33A5				
Series		H.1.2.1	HA: SMA				
Style		H.1.2.2	Connector type		1: Cable plug		
			Connector configuration		4: Straight		
Identification number	Material (shell)	H.1.2.3	3: Stainless steel (shell)				
	Finish (shell)		1: Gold plating 3: Passivation				
	Termination style		Symbol	Center contact	External electrode	Captivation	
			A	Solder	Solder	NA	
	C		Solder	Crimp	NA		
	Applicable cable		No.	Cable name	No.	Cable name	
			3	RG-316/U	5	RG-402/U (UT-141)	
			4	RG-400/U	6	RG-405/U (UT-085)	
9	RG-401/U (UT-250)	-	-				

1.3 Rating

The rating shall be as specified in Table 2. The maximum rated power for operating temperature and frequency shall be shown in Figures 1 and 2, respectively.

Table 2. Rating

Item	Applicable paragraph of JAXA-QTS-2060, Appendix H	Description	
Rated voltage (barometric)	H.3.5.1	500 Vrms	RG-402/U, RG-401/U
		335 Vrms	RG-400/U, RG-405/U
		250 Vrms	RG-316/U
Nominal impedance	H.3.5.2	50Ω	
Operating frequency range	H.3.5.3	0 to 3.0GHz	RG-316/U
		0 to 10.0GHz	RG-401/U
		0 to 12.4GHz	RG-400/U
		0 to 18.0GHz	RG-402/U, RG-405/U
Operating temperature range	H.3.5.4	RG-316/U, RG-400/U	-65 to +165°C
		RG-405/U, RG-401/U, RG-402/U	-65 to +105°C

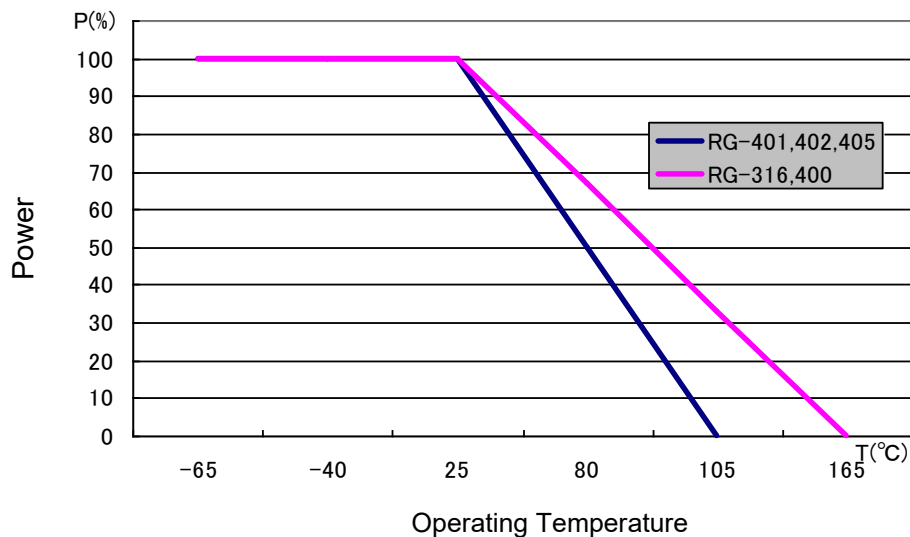
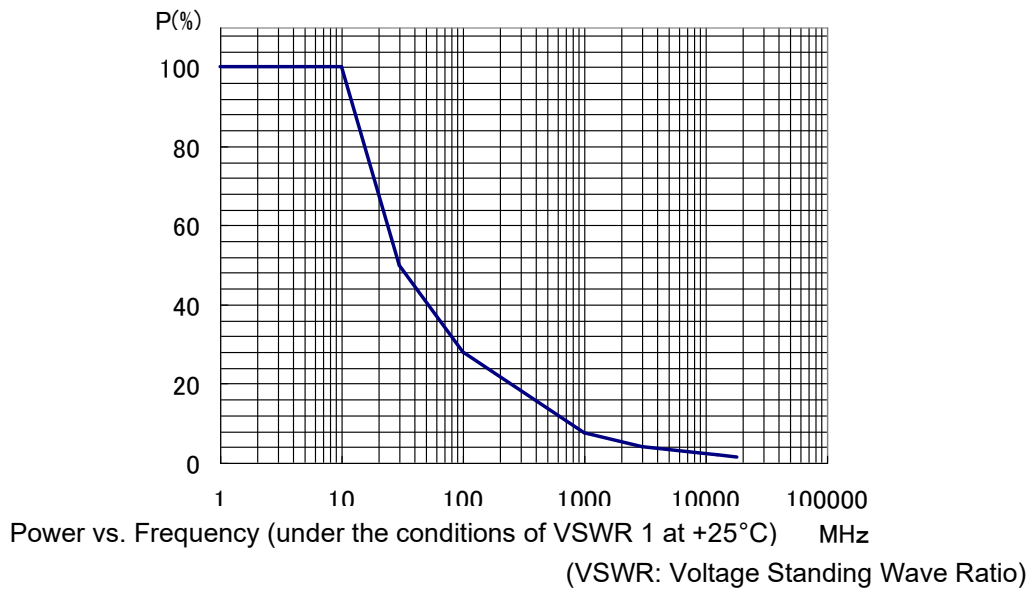


Figure 1. Maximum Rated Power in relation with Operating Temperature



**Figure 2. Maximum Rated Power in relation with Frequency**

**2. APPLICABLE DOCUMENTS**

The applicable documents shall be as specified in paragraph H.2.1, Appendix H of JAXA-QTS-2060.

**3. REQUIREMENTS**

The requirements shall be in accordance with paragraph H.3, Appendix H of JAXA-QTS-2060 and as follows.

**3.1 Performance**

The performances of the connector shall be as shown in Table 3.

Table 3. Performance (1/2)

Item	Requirement of JAXA-QTS-2060	Performance
Material	H.3.2	As specified in Appendix H of JAXA-QTS-2060. However, the surface finish shall be specified as follows.
Externals, dimensions and marking	H.3.3	As specified in supplementary figures 1 and 2.
Marking	H.3.3.1	Ethanol immersion shall not be performed due to laser marking.
Traceability	H.3.3.2	As specified in Appendix H of JAXA-QTS-2060.
Workmanship	H.3.3.3	As specified in Appendix H of JAXA-QTS-2060.
Plating	H.3.4	As specified in Appendix H of JAXA-QTS-2060.
Electrical characteristics	H.3.6	As specified in Appendix H of JAXA-QTS-2060. However, dielectric withstanding voltage, voltage standing wave ratio (VSWR), partial discharge, RF leakage and RF insertion loss shall be as follows.
Dielectric withstanding voltage	H.3.6.1	The test voltage shall be 1,500Vrms when the applicable cable is "RG-401/U"
Voltage Standing Wave Ratio (VSWR)	H.3.6.2	When VSWR is measured with vector network analyzer and the applicable cable is "RG-401/U", VSWR of the connectors shall not exceed the following values: 1) VSWR (Max.): 1.10+0.01f (GHz) 2) Frequency: 10GHz as a maximum
Partial discharge	H.3.6.5	When partial discharge occurs under normal pressure, reduce the barometric pressure to the specified value. Partial discharge shall not occur at the test voltage + 20% (or 5pc or less is allowed). The test voltage shall be 375Vrms when the applicable cable is "RG-401/U".
RF high potential withstanding voltage	H.3.6.6	The test voltage shall be 1,000Vrms when the applicable cable is "RG-401/U".
RF leakage	H.3.6.7	As specified in Appendix H of JAXA-QTS-2060. The RF leakage shall be -90dB as a maximum when the applicable cable is "RG-401/U".
RF insertion loss	H.3.6.8	The requirement for RF insertion loss shall be $0.06 \times \sqrt{\text{frequency (GHz)}}$ dB as a maximum when RF insertion loss is measured with vector network analyzer and the applicable cable is "RG-316". When the applicable cable is "RG-401", the test frequency shall be up to 10GHz and requirement for RF insertion loss shall be $0.03 \times \sqrt{\text{frequency (GHz)}}$ dB as a maximum.

Table 3. Performance (2/2)

Item	Requirement of JAXA-QTS-2060	Performance
Mechanical performance	H.3.7	As specified in Appendix H of JAXA-QTS-2060. However, Contact insertion and removal characteristics, coupling mechanism retention and center contact crimp tensile strength shall be as follows.
Contact insertion and removal characteristics	H.3.7.3	For coupling dimension, contact and insulation protrusion dimension shall be measured from the electrical, mechanical datum plane (see supplementary figure 2)
Coupling mechanism retention	H.3.7.4	As specified in Appendix H of JAXA-QTS-2060.
Cable retention	H.3.7.6	When the applicable cable is "RG-401/U", the cable retentions for longitudinal and axial directions are 266.8N {27.21kgf} and 38.83N·cm {3.96kgf·cm}
Center contact crimp tensile strength	H.3.7.8	Not applicable
Environmental performance	H.3.8	As specified in Appendix H of JAXA-QTS-2060. However, thermal shock shall be specified as follows.
Thermal shock	H.3.8.3	In quality conformance inspection, the maximum temperature shall be 105°C. When the applicable cable is "RG-401/U", the maximum temperature shall be 105°C.

### 3.1.1 Length of Test Cables

Group I: Tests were performed without a cable.

(Connector mating and unmating forces test and coupling proof torque test are not able to be performed, since connectors with semi-rigid cable are not provided with coupling. As for proof torque test, internal dimensions of the connector shall be measured only).

Group II: Cable with a connector on one end: Around 50mm due to salt spray only.

Group III: Cable with connectors on both ends (a connector on one end is the same as the other and is not included in the number of measured connectors): 203.2mm±25.4mm long.

Group IV: Cable with a connector on one end: Around 800mm in consideration of fixation during vibration test for flex cable in Group IV. Any other cable: 100mm long. The cable may be cut after vibration test due to the unmanageability of 600mm long cables.

Group V: Cable with connectors on both ends: (connector on one end is the same as the other and is not included in the number of measured connectors): 300mm long.

Group VI: Cable with connectors on both ends: Three 300mm±2mm long cable, three 100mm ±1mm long cable.

JX-009

Group VII: Cable with a connector on one end: Around 30mm due to contact resistance only

Groups VIII and IX: Connector without cable

### 3.1.2 Coupling Proof Torque

When the connectors are mated in each test, the recommended coupling torque for screws shall be 78.94 {8.05} to 112.88N·cm {11.51Kgf·cm}.

## 4. QUALITY ASSURANCE PROVISIONS

### 4.1 Qualification Test

The qualification test for the connectors shall be performed in accordance with paragraph H.4.1, Appendix H of JAXA-QTS-2060 and Tables 4 and 5.

**Table 4. Qualification Test (Connector)**

		Test		Requirement paragraph of JAXA-QTS-2060	Test method paragraph of JAXA-QTS-2060	Pass/Fail criteria	
Group	Order	Item	Sample size			Quantity of allowable defectives	
I	1	Material <sup>(1)</sup>		H.3.2	H.4.3.2	-	-
	2	Externals, dimensions and marking		H.3.3	H.4.3.3	35	0
	3	Connector mating and unmating forces		H.3.7.1	H.4.3.5.1		
	4	Coupling proof torque		H.3.7.2	H.4.3.5.2		
	5	Contact insertion and removal characteristics		H.3.7.3	H.4.3.5.3		
	6	Residual magnetization <sup>(2)</sup>		H.3.2.2	H.4.3.2.4		
	7	Workmanship		H.3.3.3	H.4.3.3		
	8	Insulation resistance		H.3.6.3	H.4.3.4.3		
II	1	Center contact retention		H.3.7.5	H.4.3.5.5		
	2	Salt spray		H.3.8.5	H.4.3.6.5	5	0
III	1	Voltage Standing Wave Ratio (VSWR)		H.3.6.2	H.4.3.4.2	5	0
	2	Durability		H.3.7.7	H.4.3.5.7		
IV	1	Contact resistance (between center contacts)		H.3.6.4	H.4.3.4.4	5	0
	2	Dielectric withstanding voltage		H.3.6.1	H.4.3.4.1		
	3	Vibration		H.3.8.1	H.4.3.6.1		
	4	Shock		H.3.8.2	H.4.3.6.2		
	5	Thermal shock		H.3.8.3	H.4.3.6.3.1		
	6	Moisture resistance		H.3.8.4	H.4.3.6.4		
	7	Partial discharge		H.3.6.5	H.4.3.4.5		
	8	RF High potential withstanding voltage		H.3.6.6	H.4.3.4.6		
	9	Cable retention		H.3.7.6	H.4.3.5.6		
	10	Coupling mechanism retention		H.3.7.4	H.4.3.5.4		
V	1	RF Leakage		H.3.6.7	H.4.3.4.7		
VI	1	RF Insertion Loss		H.3.6.8	H.4.3.4.8		
VII	1	Contact resistance		H.3.6.4	H.4.3.4.4	5	0
VIII	1	Solderability		H.3.7.9	H.4.3.5.9	5	0
IX	1	Outgassing		H.3.2.6	H.4.3.2.5	-	-

Notes: <sup>(1)</sup> The document shall be submitted to prove the design specification is satisfied.

<sup>(2)</sup> The measurement results shall be listed in application datasheet.

**Table 5. Qualification Test (Contact)**

Test			Requirements paragraph of JAXA-QTS-2060	Test method paragraph of JAXA-QTS-2060	Pass/Fail criteria	
Group	Order	Items			Sample size	Quantity of allowable defects
I	1	Center contact crimp tensile strength	H.3.7.8	H.4.3.5.8	Not applicable	
II	1	Plating porosity	H.3.4.1	H.4.3.2.2	4	0
III	1	Plating thickness	H.3.4.2	H.4.3.2.3	4	0

**4.2 Quality Conformance Inspection**

Quality conformance inspection shall be as specified in paragraph H.4.2, Appendix H of JAXA-QTS-2060 and Tables 6, 7 and 8.

**Table 6. Quality Conformance Inspection (Group A)**

Inspection			Requirements paragraph of JAXA-QTS-2060	Test method paragraph of JAXA-QTS-2060	Pass/Fail criteria	
Group	Order	Item			Sample size	Quantity of allowable defects
A1	1	Materials	H.3.2	H.4.3.2	All	0
	2	Externals, dimensions and marking <sup>(1)</sup>	H.3.3	H.4.3.3		
	3	Thermal shock <sup>(2)</sup>	H.3.8.3	H.4.3.6.3.2		
	4	Insulation resistance <sup>(2)</sup>	H.3.6.3	H.4.3.4.3		
	5	Dielectric withstanding voltage <sup>(2)</sup>	H.3.6.1	H.4.3.4.1		
	6	Contact insertion and removal characteristics <sup>(3)</sup>	H.3.7.3	H.4.3.5.3		
A2	1	Surface finish	H.3.2.5	H.4.3.2.1	AQL=2.5% <sup>(4)</sup>	
	2	Connector mating and unmating forces <sup>(2)</sup>	H.3.7.1	H.4.3.5.1	AQL=2.5% <sup>(4)</sup>	
	3	Coupling proof torque	H.3.7.2	H.4.3.5.2	AQL=2.5% <sup>(4)</sup>	

Notes: <sup>(1)</sup> Connectors fail marking inspection only when the marking is unreadable or incorrect in external view. The acceptance or rejection of the dimensions and mass shall be based on 1.0% of the acceptable quality level (AQL) in "Single sampling plan for normal inspection" specified in JIS Z 9015, Attachment Table 2-A.

<sup>(2)</sup> The connectors without center contacts shall not be used.

<sup>(3)</sup> The coupling dimensions shall be measured only. Protrusion of insulation body shall be measured.)

<sup>(4)</sup> The acceptance quality level (AQL) is based on "Single sampling plan for normal inspection", specified in JIS Z 9015-1, Attachment Table 2-A.

JX-009

**Table 7. Quality Conformance Inspection (Group B)**

Inspection			Requirements paragraph of JAXA-QTS-2060	Test method paragraph of JAXA-QTS-2060	Pass/Fail criteria	
Group	Order	Item			Sample size	Quantity of allowable defects
B1	1	RF leakage	H.3.6.7	H.4.3.4.7	2	0
B2	1	RF insertion loss	H.3.6.8	H.4.3.4.8	2	0
B3	1	Contact resistance	H.3.6.4	H.4.3.4.4	2	0
B4	1	Solderability	H.3.7.9	H.4.3.5.9	2	0
B5	1	Center contact retention	H.3.7.5	H.4.3.5.5	Not applicable	
B6	1	Voltage Standing Wave Ratio (VSWR)	H.3.6.2	H.4.3.4.2	2	0
B7	1	Center contact crimp tensile strength	H.3.7.8	H.4.3.5.8	Not applicable	
B8	1	Plating porosity <sup>(1)</sup>	H.3.4.1	H.4.3.2.2	4	0
B9	1	Plating thickness <sup>(1)</sup>	H.3.4.2	H.4.3.2.3	4	0

Note: <sup>(1)</sup> Applicable for contacts

**Table 8. Quality Conformance Inspection (Group C)**

Inspection			Requirements paragraph of JAXA-QTS-2060	Test method paragraph of JAXA-QTS-2060	Pass/Fail criteria	
Group	Order	Item			Sample size	Quantity of allowable defects
C1	1	Center contact retention	H.3.7.5	H.4.3.5.5	Not applicable	
	2	Salt spray	H.3.8.5	H.4.3.6.5	2	0
C2	1	Voltage Standing Wave Ratio (VSWR)	H.3.6.2	H.4.3.4.2	2	0
	2	Durability	H.3.7.7	H.4.3.5.7		
C3	1	Contact resistance (between center contacts)	H.3.6.4	H.4.3.4.4	2	0
	2	Vibration	H.3.8.1	H.4.3.6.1		
	3	Shock (waveform specified)	H.3.8.2	H.4.3.6.2		
	4	Thermal shock	H.3.8.3	H.4.3.6.3.1		
	5	Moisture resistance	H.3.8.4	H.4.3.6.4		
	6	Partial discharge	H.3.6.5	H.4.3.4.5		
	7	RF withstanding voltage	H.3.6.6	H.4.3.4.6		
	8	Cable retention	H.3.7.6	H.4.3.5.6		
9	Coupling mechanism retention	H.3.7.4	H.4.3.5.4			

#### 4.3 Long-Term Storage

The long-term storage shall be in accordance with paragraph H.4.4, Appendix H of JAXA-QTS-2060.

#### 4.4 Change to Tests and Inspections

The changes from the qualification test and quality conformance inspections specified in Appendix H of JAXA-QTS-2060 shall be as follows.

- a) (Deleted)

b) RF insertion loss

Change: The test procedure is changed as follows:

- 1) A cable assembly with three 300±2mm long cables (Group A) is measured for insertion loss and the average ( $IL_A$ ) of these three cables is calculated.
- 2) A cable assembly with three 100±1mm long cables (Group B) is measured for insertion loss and the average ( $IL_B$ ) of these three cables is calculated.
- 3) Insertion loss per unit long ( $\alpha$ ) is calculated.  $\alpha = (IL_A - IL_B)/200$
- 4) Average of connector loss ( $IL_{A'}$ ) in Group A is calculated.  $IL_{A'} = (IL_A - (300 \times \alpha))/2$
- 5) Average of connector loss ( $IL_{B'}$ ) in Group B is calculated.  $IL_{B'} = (IL_B - (100 \times \alpha))/2$
- 6) Insertion loss of a single connector ( $IL_C$ ) is calculated.  $IL_C = (IL_{A'} + IL_{B'})/2$

Reason: To perform the test rationally and accurately.

c) RF leakage

Change: RF signal generator and calibrated microwave receiver are replaced by a network analyzer.

Reason: Currently, measurement with a network analyzer is common and is accurate for the tests of VSWR and insertion loss.

Change: For RG-316/U and RG-400/U, a brass tube shall be swaged on the cable. For other cables, a brass tube is not used.

Reason: A brass tube cannot be secured by screwing onto the connector. Except for RG-316/U and RG-400/U, the external conductors of semi-rigid cables are copper tubes which play a role similar to brass tubes without brass coating.

d) Contact insertion and removal characteristics

Change: The mating dimension shall be measured from the electrical and mechanical base surface of contact and Teflon.

Reason: The internal dimension cannot be measured after connectors are mated.

e) Vibration

Change: The method of securing the test equipment and the cable length are different from the specification.

Reason: The method of securing the connector is designed for SMA connectors using the mounting bracket to fit with the connectors and the block jig for testing on each XYZ direction. The lead wire shall be connected to the terminal side of the connector and conductor side of the center of the cable. Flex cable shall be secured onto the non-vibrating table with tape, etc. at the section of the cable which is 203mm or longer from the connector.

f) Partial discharge

Change: The insulation oil shall not be used.

Reason: The insulation oil can be substituted by one-component RTV Silicone rubber and insulation oil tends to contaminate the chamber.

Change: After partial discharge occurs by increasing the voltage under normal pressure, partial discharge level shall be measured under reduced pressure (4.4kPa) at the test voltage of 300Vrms for 60 seconds. Partial discharge shall not be occurred (or discharge level should be 5pC or below).

Reason: Partial discharge occurrence under reduced pressure will damage the connectors.

g) RF high potential withstanding voltage

Change: RF voltage shall be measured by an oscilloscope.

JX-009

Reason: As a RF voltmeter, the oscilloscope capable of measuring more than 1000V, 5MHz shall be used. The current shall be measured by a resistor.

h) Cable retention

Change: Bending test shall not be performed for semi-rigid cables.

Reason: Unlike flex cables, semi-rigid cables are not flexible and cannot be bent repeatedly since they are formed to a certain shape for use.

i) Coupling mechanism retention

Change: If the applicable cable is not strong enough, remove the cable including the contact from the connector and attach the jig to the connector.

Reason: When the cable is pulled, the cable itself will break down with the torque lower than the ones specified.

j) Marking

Change: Ethanol immersion test shall not be performed.

Reason: Laser marking are provided.

## 5. PREPARATION FOR DELIVERY

Preparation for delivery shall be in accordance with paragraph H.5, Appendix H of JAXA-QTS-2060 and as follows.

### 5.1 Packaging

The connectors shall be placed in a heat-sealed transparent polyethylene bag. If the packaging method is specified in the purchase specification, the connectors shall be packaged in such way to satisfy the requirement.

### 5.2 Marking on Package

Marking on package shall be as specified in Table 9.

Table 9. Marking on Package

Item	Applicable paragraph of JAXA-QTS-2060	Description
Part name	–	Coaxial radiofrequency connectors (cable plug, straight)
Part number	H.1.2	Example: J2060/HA14-33A3
Applicable specification number	–	JAXA-QTS-2060/H401
Lot identification code	H.3.3.1	Example: <u>13</u> <u>12</u> - <u>01</u>
Purchaser	–	–
Certified manufacturer	–	Waka Manufacturing Co., Ltd.
Quantity of packaged products	–	Pcs.
Date of inspection	–	Year-month-day
Inspection result	–	“Pass” or “good”

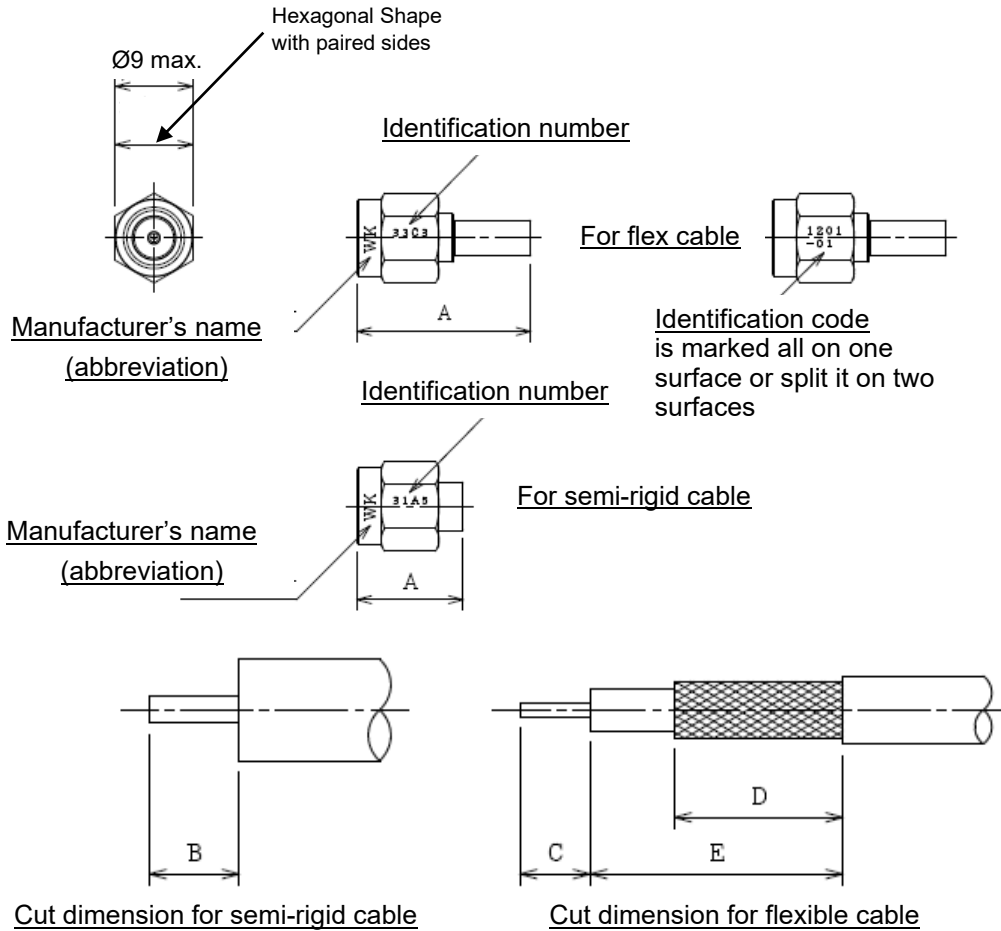
## 6. NOTES

As specified in paragraph H.6, Appendix H of JAXA-QTS-2060.

## 7. EXTERNALS, DIMENSIONS AND MARKING

The externals, physical dimensions and marking of connectors shall be specified in supplementary Figures 1 and 2.

JX-009



Unit: mm

ID number	A	B	C	D	E	Weight (g)	Remarks
33C3	20.0 max.	-	2.5	6.0	9.0	2.5 to 2.8	RG-316
33C4	22.0 max.	-	2.5	5.4	7.9	3.5 to 3.8	RG-400
31A9	21.5 max.	4.2	-	-	-	3.3 to 3.6	RG-401 (UT-250)
31A5	11.5 max.	3.2	-	-	-	2.1 to 2.3	RG-402 (UT-141)
31A6	10.4 max.	3.2	-	-	-	2.3 to 2.5	RG-405 (UT-085)

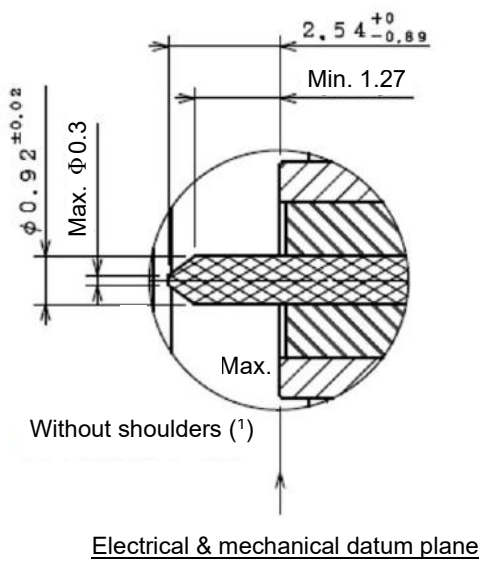
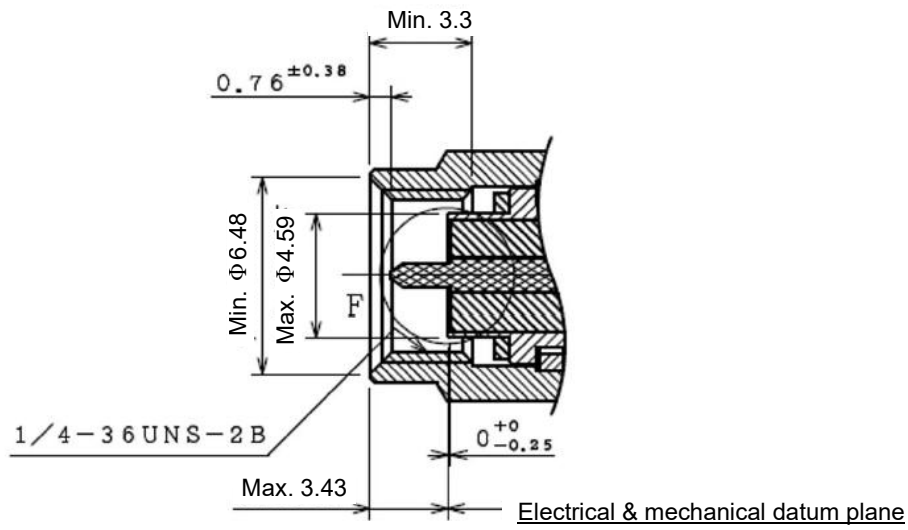
Note: Since the cables with ID numbers 31A9, 31A5 and 31A6 are provided as pre-assembled parts, dimension A to be inspected in item "Externals, dimensions and marking" of quality conformance inspection (group A) shall be coupling dimension.

Identification code Example : 13 12 - 01  
 Year manufactured Week manufactured Product lot number (series)

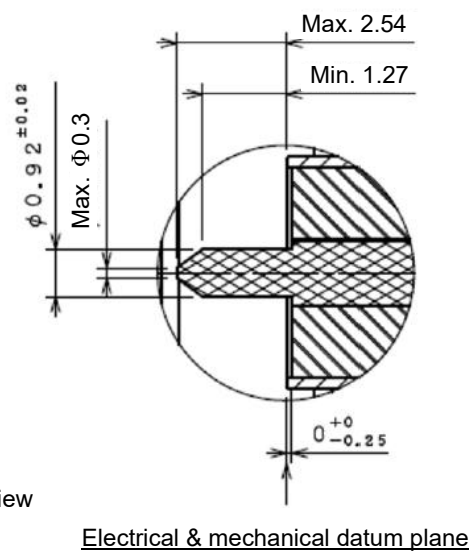
**Supplementary Figure 1. Externals View and Dimension of the Connector**

JX-009

Unit: mm



Point F:  
Enlarged view



Note: <sup>(1)</sup> The connector type without shoulders: 31A6

**Supplementary Figure 2. Detail Dimensions of Connector**