



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

Plug in type Camera Connection (Rear Body Assy, Floating Header Assy)

1. SCOPE

1.1. Content

This specification covers the requirements for product performance, test methods and quality assurance provisions of Rear Body Assy & Floating Header Assy

1.2. Qualification

When tests are performed on the subject product line, procedures specified in Figure 1 shall be used. All inspections shall be performed using the applicable inspection plan and product drawing.

1.3. Qualification Test Results

Successful qualification testing on the subject product line has not been completed. The Qualification Test Report number will be issued upon successful qualification testing.

2. APPLICABLE DOCUMENTS AND FORMS

The following documents and forms constitute a part of this specification to the extent specified herein. Unless otherwise indicated, the latest edition of the document applies.

2.1. TE Documents

REAR BODY ASSY

- 2327435 : CUSTOMER DRAWING FOR DN8
- 2364122 : CUSTOMER DRAWING FOR SU2R/B
- 2379429 : CUSTOMER DRAWING FOR CV1
- 2380250 : CUSTOMER DRAWING FOR GN7

FLOATING HEADER ASSY

- 2327462 : CUSTOMER DRAWING FOR DN8
- 2380331 : CUSTOMER DRAWING FOR GN7

3. REQUIREMENTS

3.1. Design and Construction

Product shall be of the design, construction, materials and physical dimensions specified on the applicable product drawing.

3.2. Ratings

Temperature

- Non-Waterproof : -40°C to 85°C
- Waterproof : -40°C ~ 105°C (1.5DS cable), -40°C ~ 120°C (RG316 cable)

Frequency Range : 556.875 MHz.

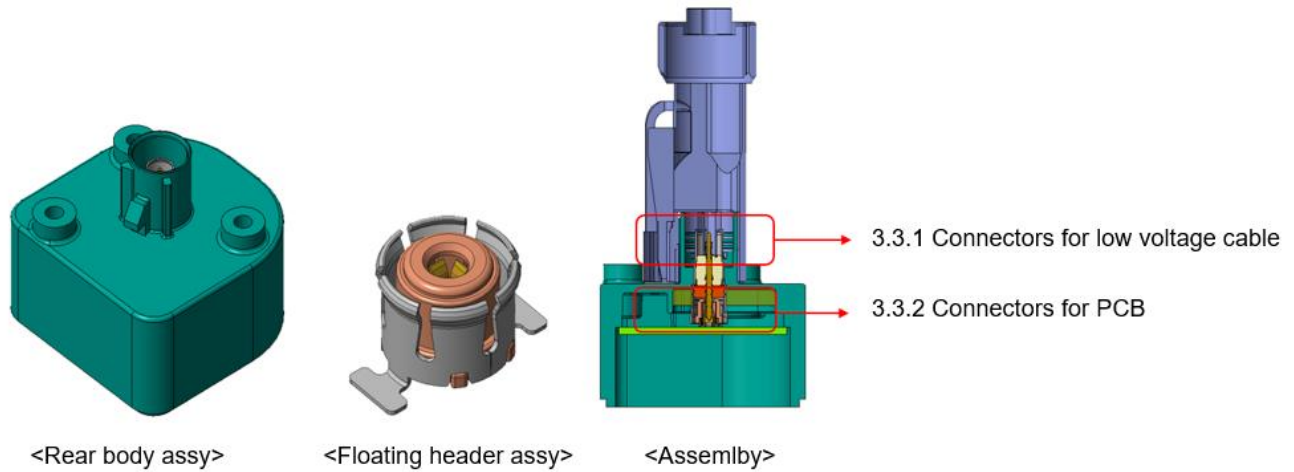


Figure 1.

3.3. Test Requirements and Procedures Summary

Unless otherwise specified, all tests shall be performed at ambient environmental conditions.

3.3.1 Connectors for low voltage cable (Figure 1.)

Items	Characteristics			Measuring
Appearance	No harmful crack, rust, burr, damage, deformation, discoloration etc.			4.1
CONN engage and disengage force	7.6kgf or less (CAP type Joint connector : 10kgf or less)			4.2
Reverse insertion between housing	It shall not be incorrectly inserted and flowed current between terminal by housing deformation on applying force of 20kgf			4.3
Lock release force	Force on release force point of lock part shall be 0.5~6kgf			4.4
Insulation resistance	Division	Initial	After endurance	4.5
	Non-waterproof	100 MΩ or more	100 MΩ or more	
	waterproof	100 MΩ or more	100 MΩ or more	
Leakage current	Division	Initial	After endurance	4.6
	Non-waterproof	1 μA or less	1 μA or less	
	waterproof	1 μA or less	1 μA or less	
High voltage test	There shall be no insulation break.			4.7
Sealing test	Initial	After endurance		4.8
	1.0kgf/cm ² or more	0.5kgf/cm ² or more		
Conn coupling sounds	Connector coupling sounds : 65dB(A) or more at 700±10mm			4.9
Characteristic Impedance	Coaxial cable HSD connector	Satisfy ES96200-03		4.10
Standing wave ratio				4.11

Insertion loss			4.12
CONN endurance test (Twisting test+ CONN engage/Disengage endurance test)	Appearance	No harmful crack, rust, burr, damage, deformation, discoloration etc.	4.13
	Impedance	$50 \pm 5 \Omega$ ($f=556.875\text{MHz}$)	
	Standing wave ratio	1.27 or less ($1.25+0.04f$, $f=556.875\text{MHz}$)	
	Insertion loss	-0.3~0dB	
Cold temperature test	Appearance	No harmful crack, rust, burr, damage, deformation, discoloration etc.	4.14
	Insulation resistance	Initial / After endurance Non-waterproof : 100M Ω or more Waterproof : 100M Ω or more	
	Leakage current	Initial / After endurance Non-waterproof : 1 μA or less Waterproof : 1 μA or less	
	Sealing test	After endurance 0.5kgf/cm ² or more	
	Impedance	$50 \pm 5 \Omega$ ($f=556.875\text{MHz}$)	
	Standing wave ratio	1.27 or less ($1.25+0.04f$, $f=556.875\text{MHz}$)	
	Insertion loss	-0.3~0dB	
Cold and hot temperature shock test	Appearance	No harmful crack, rust, burr, damage, deformation, discoloration etc.	4.15
	Sealing test	After endurance 0.5kgf/cm ² or more	
	Impedance	$50 \pm 5 \Omega$ ($f=556.875\text{MHz}$)	
	Standing wave ratio	1.27 or less ($1.25+0.04f$, $f=556.875\text{MHz}$)	
	Insertion loss	-0.3~0dB	
High temperature test	Appearance	No harmful crack, rust, burr, damage, deformation, discoloration etc.	4.16
	Sealing test	After endurance 0.5kgf/cm ² or more	
	Impedance	$50 \pm 5 \Omega$ ($f=556.875\text{MHz}$)	
	Standing wave ratio	1.27 or less ($1.25+0.04f$, $f=556.875\text{MHz}$)	

	Insertion loss	-0.3~0dB	
Temperature and humidity cycle test	Appearance	No harmful crack, rust, burr, damage, deformation, discoloration etc.	4.17
	Insulation resistance	Initial / After endurance Non-waterproof : 100MΩ or more Waterproof : 100MΩ or more	
	Leakage current	Initial / After endurance Non-waterproof : 1μA or less Waterproof : 1μA or less	
	Sealing test	After endurance 0.5kgf/cm ² or more	
	Impedance	50±5Ω (f=556.875MHz)	
	Standing wave ratio	1.27 or less (1.25+0.04f, f=556.875MHz)	
	Insertion loss	-0.3~0dB	
Dust test	Sealing test	After endurance 0.5kgf/cm ² or more	4.18
	Impedance	50±5Ω (f=556.875MHz)	
	Standing wave ratio	1.27 or less (1.25+0.04f, f=556.875MHz)	
	Insertion loss	-0.3~0dB	
Waterproof test	Appearance	No harmful crack, rust, burr, damage, deformation, discoloration etc.	4.19
	Insulation resistance	Initial / After endurance Non-waterproof : 100MΩ or more Waterproof : 100MΩ or more	
	Leakage current	Initial / After endurance Non-waterproof : 1μA or less Waterproof : 1μA or less	
	Sealing test	After endurance 0.5kgf/cm ² or more	
	Impedance	50±5Ω (f=556.875MHz)	
	Standing wave ratio	1.27 or less (1.25+0.04f, f=556.875MHz)	
	Insertion loss	-0.3~0dB	
Oil and liquid test	Appearance	No harmful crack, rust, burr, damage, deformation, discoloration etc.	4.20
	Sealing test	After endurance	

		0.5kgf/cm ² or more	
	Impedance	50±5Ω (f=556.875MHz)	
	Standing wave ratio	1.27 or less (1.25+0.04f, f=556.875MHz)	
	Insertion loss	-0.3~0dB	
Ozone test	Appearance	No harmful crack, rust, burr, damage, deformation, discoloration etc.	4.21
	Sealing test	After endurance 0.5kgf/cm ² or more	
	Impedance	50±5Ω (f=556.875MHz)	
	Standing wave ratio	1.27 or less (1.25+0.04f, f=556.875MHz)	
	Insertion loss	-0.3~0dB	
Salt water test	Appearance	No harmful crack, rust, burr, damage, deformation, discoloration etc.	4.22
	Insulation resistance	Initial / After endurance Non-waterproof : 100MΩ or more Waterproof : 100MΩ or more	
	Leakage current	Initial / After endurance Non-waterproof : 1μA or less Waterproof : 1μA or less	
	Impedance	50±5Ω (f=556.875MHz)	
	Standing wave ratio	1.27 or less (1.25+0.04f, f=556.875MHz)	
	Insertion loss	-0.3~0dB	
Sulfur (SO ₂) gas test	Appearance	No harmful crack, rust, burr, damage, deformation, discoloration etc.	4.23
	Sealing test	After endurance 0.5kgf/cm ² or more	
	Impedance	50±5Ω (f=556.875MHz)	
	Standing wave ratio	1.27 or less (1.25+0.04f, f=556.875MHz)	
	Insertion loss	-0.3~0dB	
Mechanical shock test	Sealing test	After endurance 0.5kgf/cm ² or more	4.24
	Impedance	50±5Ω (f=556.875MHz)	

	Standing wave ratio	1.27 or less ($1.25+0.04f$, $f=556.875\text{MHz}$)	
	Insertion loss	-0.3~0dB	
Complex environment endurance test B	Appearance	No harmful crack, rust, burr, damage, deformation, discoloration etc.	4.25
	Instant short circuit	There shall be no 10 μs or more instant short circuit for all test section	
	Sealing test	After endurance 0.5kgf/cm ² or more	
	Impedance	50 \pm 5 Ω ($f=556.875\text{MHz}$)	
	Standing wave ratio	1.27 or less ($1.25+0.04f$, $f=556.875\text{MHz}$)	
	Insertion loss	-0.3~0dB	

3.3.2 Connectors for PCB (Figure 1.)

Items	Characteristics		Measuring
Appearance	No harmful crack, rust, burr, damage, deformation, discoloration etc.		4.1
Voltage drop	Initial : 30m Ω or less After endurance : 50m Ω or less		4.26
Insulation resistance	Initial / After endurance (non-waterproof) : 100M Ω or more		4.5
High voltage test	There shall be no insulation break.		4.27
Connector Solderability	Satisfied an appearance quality and be soldered on lead area more than 95%		4.28
Cold and hot temperature shock test	Appearance	No harmful crack, rust, burr, damage, deformation, discoloration etc.	4.29
	Voltage drop	After endurance : 50m Ω or less	
High temperature test	Appearance	No harmful crack, rust, burr, damage, deformation, discoloration etc.	4.30
	Voltage drop	After endurance : 50m Ω or less	
High temperature and high humidity test	Appearance	No harmful crack, rust, burr, damage, deformation, discoloration etc.	4.31
	Voltage drop	After endurance : 50m Ω or less	
	High voltage test	There shall be no insulation break.	
	Insulation resistance	Initial / After endurance (non-waterproof) : 100M Ω or more	
Temperature and humidity cycle test	Appearance	No harmful crack, rust, burr, damage, deformation, discoloration etc.	4.32

	Voltage drop	After endurance : 50mΩ or less	
	Insulation resistance	Initial / After endurance (non-waterproof) : 100MΩ or more	
Dust test	Voltage drop	After endurance : 50mΩ or less	4.33
Sulfur (SO ₂) gas test	Appearance	No harmful crack, rust, burr, damage, deformation, discoloration etc.	4.34
	Voltage drop	After endurance : 50mΩ or less	
Mechanical shock test	Appearance	No harmful crack, rust, burr, damage, deformation, discoloration etc.	4.35
	Current continuity	No longer than 1 microsecond.	
	Voltage drop	After endurance : 50mΩ or less	
Complex environment endurance test	Appearance	No harmful crack, rust, burr, damage, deformation, discoloration etc.	4.36
	Voltage drop	After endurance : 50mΩ or less	
	Current continuity	No longer than 1 microsecond.	
Resistance force of reflow soldering (Reflow product only)	Appearance	Satisfied an appearance quality and be soldered on lead area more than 95%	4.37

4. GENERAL REQUIREMENTS

4.1. Appearance

After initial and endurance test, check defects on the exterior surfaces of connector
Visual inspect or use tools such as magnifying glass to check crack, corrosion, burr, damage, Deformations, discoloration that are harmful to functionality of connectors.

4.2. CONN engage and disengage force

Measure force by engaging and disengaging the connector with terminal assembled at constant 50 mm/min speed. However, remove lock part when measuring disengage force.

4.3. Reverse insertion between housing

Insert terminal to housing

Fix housing of female connector to moving part of measuring instrument in reverse insertion direction. (Reverse insertion: 180 degree rotation on the locking part)

Set a measuring instrument to stop at force of 20kgf and insert that. At this moment, monitor resistance of one terminal matched to identify current carrying between terminals.

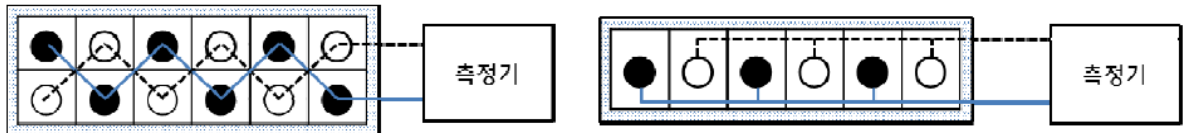
Check the insertion by housing modification of male connector after connector insertion.

4.4. Lock release force

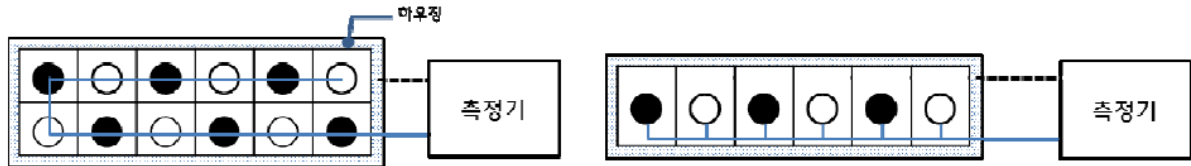
Apply force (F) to lock releasing part, and measure weight on the point of A=0. However, cut connector and then perform test at the section in order to secure visibility.

4.5. Insulation resistance

Measure resistance between neighbor terminals (figure 6), and between terminal and housing surface (figure 7) with DC 500V insulation resistance gauge with connector combined.



<Figure 6 : Between neighboring terminals >



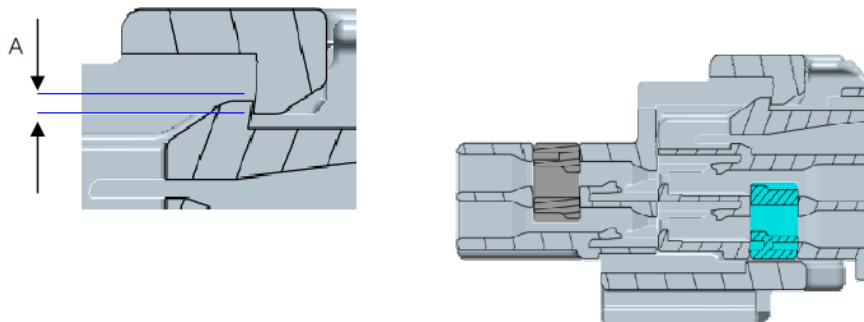
< Figure 7 : Between neighboring terminal and housing surface >

4.6. Leakage current

Measure it by applying DC 14V between neighboring terminals (figure 6).

4.7. High voltage test

Apply AC 1000V voltage of normal frequency for 1 minute between neighboring terminals and between housing surfaces of terminal, with connector combined.



<Figure 2>

4.8. Sealing test

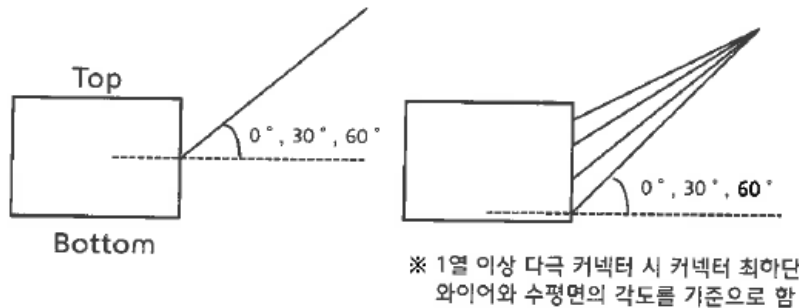
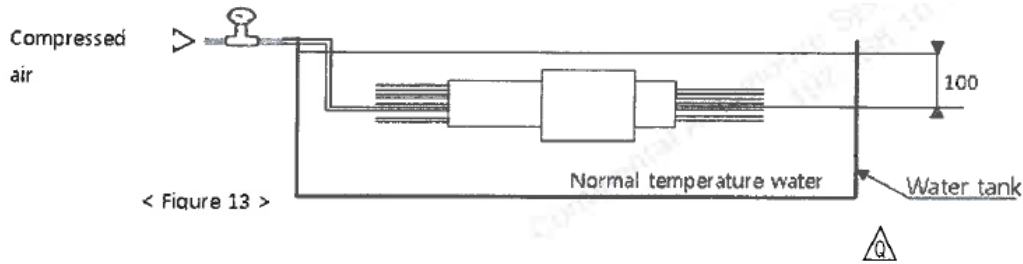
Engage and disengage connector with terminal assembled 10 times with hands, and shake wire 10 times each in the (front, rear, left, right) directions perpendicular to axial direction. And put the combined connector in water as shown in the figure 13 and supply 10Kpa (0.1kg/cm²) to connector for 30 seconds. Then increase it by 10Kpa (0.1kg/cm²) until 200Kpa (2kg/cm²) is reached and maximum value shall be specified in the test report for reference. In order to prevent the internal pressure of the connector, the wires at the end of the specimen shall be sealed.

1) Initial Test

To verify the tightness by wire tension, in initial test, change the wire angle by the base of the connectors at the bottom(0°~180°) and check whether the bobble is triggered by a bending of seal.

2) Durability Test

Sealing test after completion of the Durability test



4.9. Connector coupling sound

Put sound measurement equipment on 700 ± 10 mm away from the connector. Measure the peak Sound that occurs when you combine the connector. Sounds unit : dB(A)

4.10. Characteristic Impedance

Connecting the male and female connectors, and the antenna jack to measure the impedance of each using a network analyzer. Each part impedance is measured by examining the maximum value of the frequency applied to the vehicle

Refer to ES96200-03 (HKMC Antenna cable assembly reliability standards) for detailed test procedures.

4.11. Standing wave ratio

By connecting the female and male connectors, and the antenna jack are measured for each of the high-frequency characteristic Voltage Standing Wave Ratio (V.S.W.R) using a network analyzer.

Standing Wave Ratio are each part Voltage is measured by examining the maximum value of the frequency applied to the vehicle separate.

Refer to ES96200-03 (HKMC Antenna cable assembly reliability standards) for detailed test procedures.

4.12. Insertion loss

Each of the insertion loss by connecting the male and female connectors, and the antenna jack are measured using a network analyzer. Each component insertion loss is measured by examining the maximum value of the frequency applied to the vehicle.

Refer to ES96200-03 (HKMC Antenna cable assembly reliability standards) for detailed test procedures.

4.13. CONN endurance test (Twisting test+ CONN engage/Disengage endurance test)

Apply 8kgf on the end part of combined connector 10 times each in the (front, rear, left, right) directions perpendicular to axial direction.

And make combine connectors engage and disengage. Perform it 50 times.

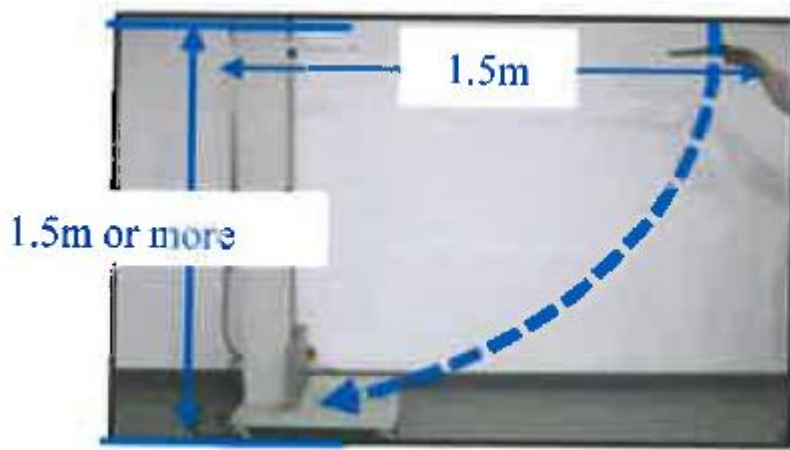
(Do not use locking device)

4.14. Cold temperature test

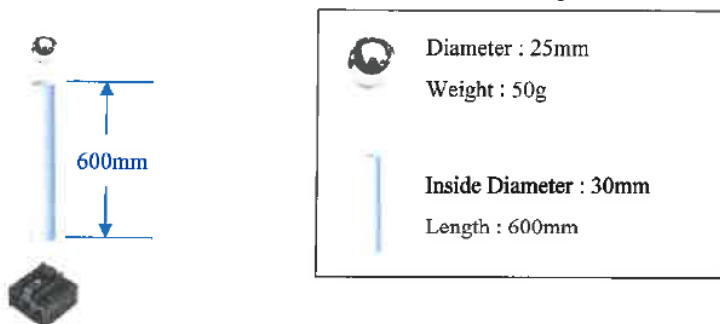
Leave connector with terminal assembled in temperature chamber of -40°C for 105°C(1.5DS), -40°C for 120°C(RG316) hours and estimate below items for each sample dividing two groups.

A. Estimate voltage drop and leakage current assembled connector.

B. Leave connector for 2 hours and separate connector with male and female, and then drop it onto the concrete surface more than 10T from 1.5m height 3 items. The method of connector drop follows figure 10.



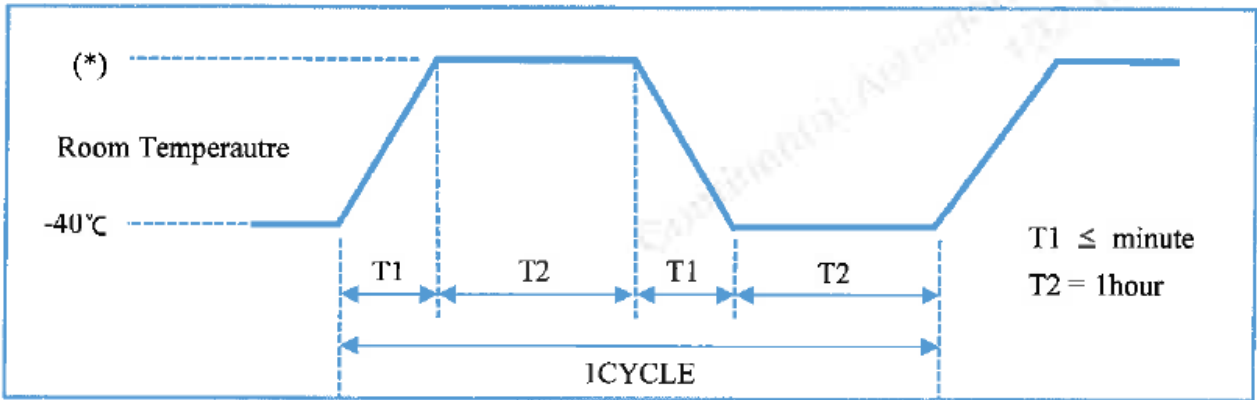
<Figure 10>



<Figure 11>

4.15. Cold and hot temperature shock test

Engage and disengage connector with terminal assembled 10 times with hands, and leave it in combined state at -40°C for 2hours, and perform 200 cycles according of the method specified in figure 12 and table 6. Then leave it at room temperature for 2 hours or more ((*) follows table 6.).



<Figure 12>

Division	High temperature (*)	Connector using part
A	105°C(1.5DS) or 120°C (RG316)	ENG room
B	80°C	except ENG room

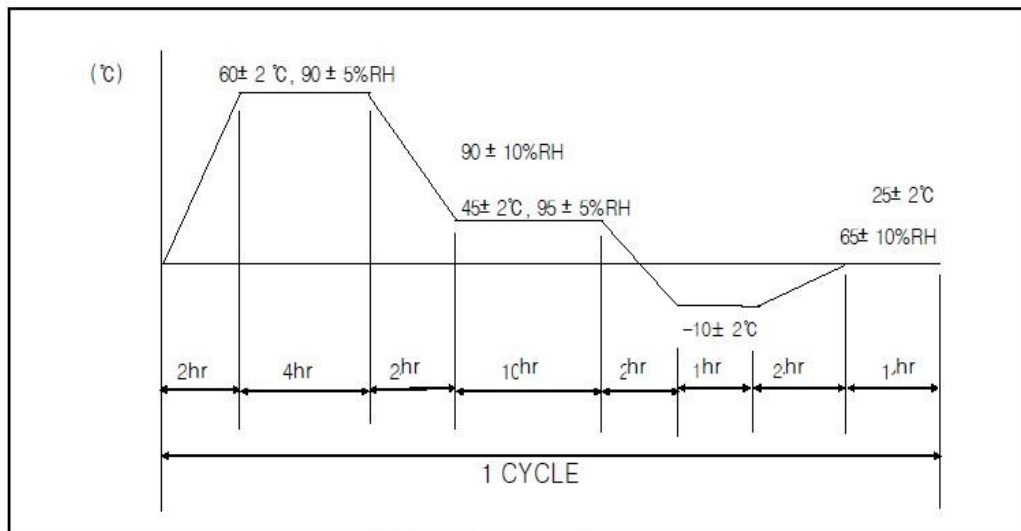
<Table 6>

4.16. High temperature test

Engage and disengage connector with terminal assembled 10 times with hands, and leave it in combined state at the temperature chamber of the table 6 for 300 hours. Then pick it out and leave it until it returns to normal temperature.

4.17. Temperature and humidity cycle test

Engage and disengage connector with terminal assembled 10 times with hands, and leave it at 25°C ambient temperature and 65% relative humidity for 25 hours. And perform 5cycles of the method specified in figure 13. Then pick connector out of chamber and dry it for 2 hours or more.



<Figure 13>

4.18. Dust test

Engage and disengage connector with terminal assembled 10 times with hands, and diffuse 1.5kg Portland cement(JIS R5210) with fan (or others) for 10 seconds per 15 minutes while maintaining 150mm distance from wall in the closed container of 900~1200mm length, width and height, with connector combined. After 1 hour, measure it.

4.19. Waterproof test (for waterproof connector)


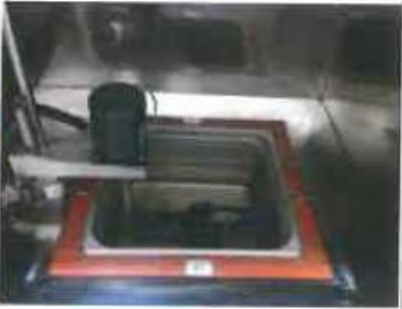

Make combined connectors engaged and disengaged 10 times by hands, and leave it in combined state at 105°C(1.5DS), 120°C(RG316) (Waterproof), 80°(Non-waterproof) ambient temperature for 40 minutes and then spray water of normal temperature for 20 minutes according to S2 of JIS D0203. Repeat 48 cycles of this.

*JIS D0203 S2 condition : Attach specimen at 400mm distance from the waterproof pipe with water spray hole or water discharge hole, and rotate waterproof pipe 23 times per minute around the axis (XX).

4.20. Oil and liquid test (for waterproof connector)

Engage and disengage connector with terminal assembled 10 times with hands, and perform test sequentially with connector combined.

- A. Immerse connector in combined state for 2 hours in mixed oil of 50±2°C ENG OIL. (SAE 10W) 100%
- B. Immerse connector in combined state for 1 hour in car gasoline (JIS K2202) at normal temperature, and then pit it out.
- C. Immerse connector in combined state for 1 hour in brake liquid (pure product) at normal temperature, and then pit it out.
- D. Immerse connector in combined state for 1 hour in 100% washer liquid (pure product) at normal temperature, and then pit it out.
- E. Immerse connector in combined state for 1 hour in 50% ENGINE COOLANT at normal temperature, and then pit it out.
- F. Immerse connector in combined state for 1 hour in 85% ETHANOL FUEL + 15% GASOLINE at normal temperature, and then pit it out.

Prepare Test Samples	② Test 1	③ Test 2
		 <p data-bbox="971 1499 1159 1533"><Voltage drop></p> <p data-bbox="1224 1499 1396 1533"><Sealing test></p>
<p>Immerse the connector with combined state into separate components for each of items .</p>	<p>Set the temperature of liquid and time for each item, and then proceed the test.</p>	<p>After Immersing into each of item, proceed appearance, voltage drop, sealing capability test.</p>

4.21. Ozone test

Engage and disengage Connector with terminal assembled 10 times with hands, and samples keep at 40°C and 50±5pphm Ozone for 100hour. Then pick connector out of chamber and dry it for 2hours or more.

4.22. Salt water test (for waterproof connector)

Engage and disengage connector with terminal assembled 10 times with hands, and put it in 35°C temperature regulation chamber, spray 5% salty water for 24 hours according to JIS Z2371, and maintain room temperature without spray for 1 hours. Then repeat this four times. Then pick connector out of chamber and dray it at room temperature for 2 hours or more.

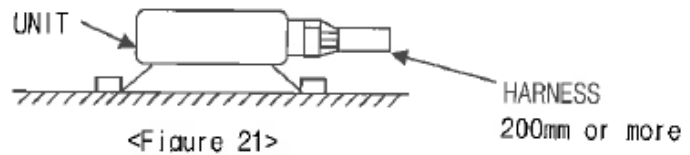
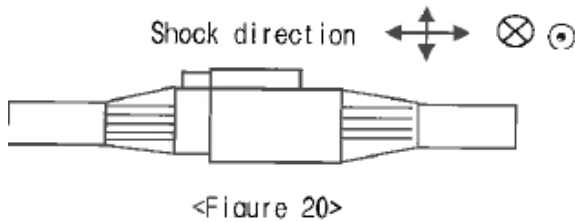
4.23. Sulfur (SO₂) gas test

Engage and disengage connector with terminal assembled 10 times with hands, and expose it in combined state to sulfur gas of 40±3°C,density 10ppm, humidity 90~95%, for 24 hours. Then pick connector out of chamber and dry it for 2 hours or more.

4.24. Mechanical shock test

Engage and disengage connector with terminal assembled 10 times with hands, and apply 1960, 3920, 5880, 9822 m/s² shock in each direction of figure 20 and 21 using assembled male and female samples.

Perform the short circuit current test. Connector for airbag and connector using the gold plated terminal.



4.25. Complex environment endurance test B (Refer to the attached test process #1)

Engage and disengage connector with terminal assembled 10 times with hands, and leave it in combined state in the temperature chamber of 105°C(1.5DS), 120°C(RG316) for 48 hours.

And then perform the following vibration test.

Vibration test B (for waterproof connector)

Perform both of sine wave and random wave tests.

1) Sine wave test

Division	Condition
Ambient temperature/humidity	Refer to figure 14, 90~95%
Applied current	Basic current (Connect electrodes in series.)
Current application cycle	120 Cycle (45 minutes-ON, 15 minutes-OFF)
Vibration acceleration	Refer to figure 25
Frequency	20 Hz ~ 200 Hz (Sweep time : 3 minutes or less)
Vibration time	40 hours for X, Y, Z each
Connector attaching method	Test Mode A, B, C

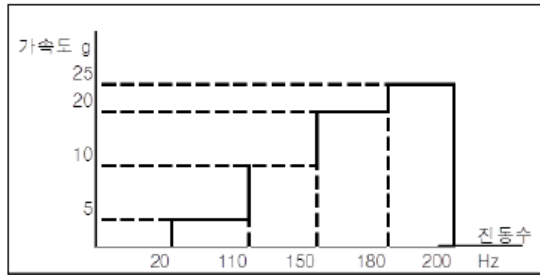


Figure 25. Waterproof Connector Acceleration/Frequency

2) Random wave test

Perform this test for the component of which sine wave test has been finished

Division	Condition
Ambient temperature/humidity	Refer to figure 14, 90~95%
Applied current	Basic current (Connect electrodes in series.)
Current application cycle	24 Cycle (45 minutes-ON, 15 minutes-OFF)
Vibration acceleration / Frequency	Refer to figure 26
Vibration time	8 hours for X, Y, Z each
Connector attaching method	Test Mode D, E, F

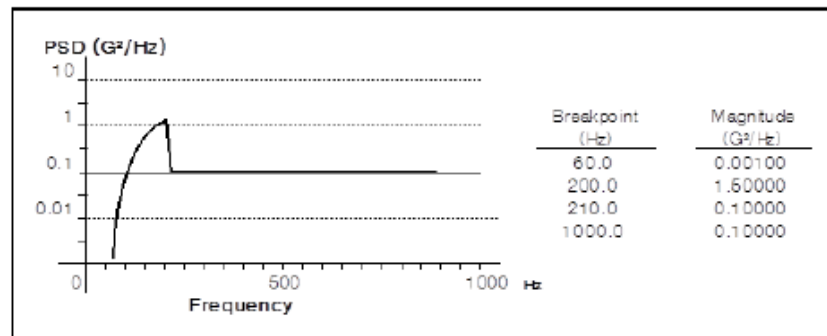
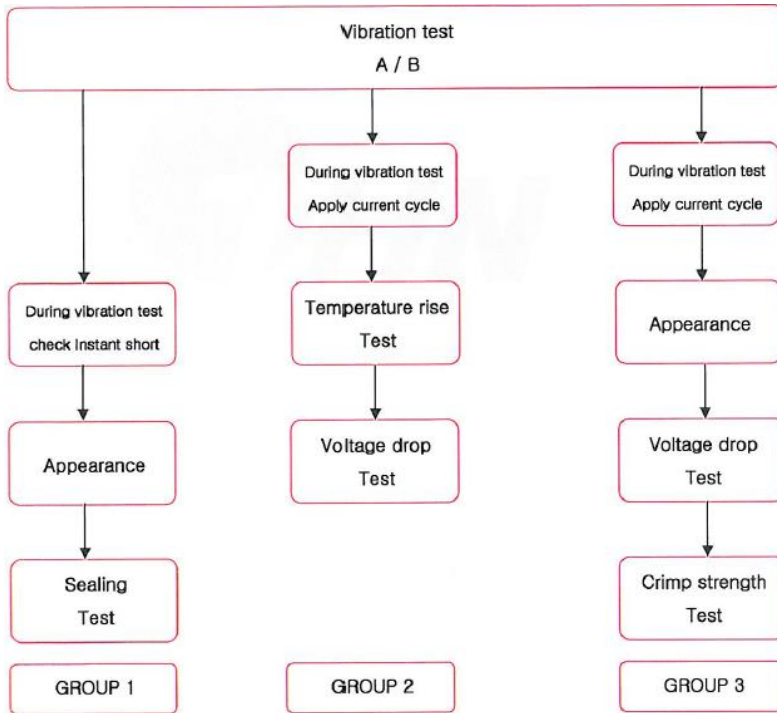


Figure 26. Random vibration test

Test process #1


※ In the multipolar connector, Evaluation test at the same time for group 2/3

4.26. Voltage drop

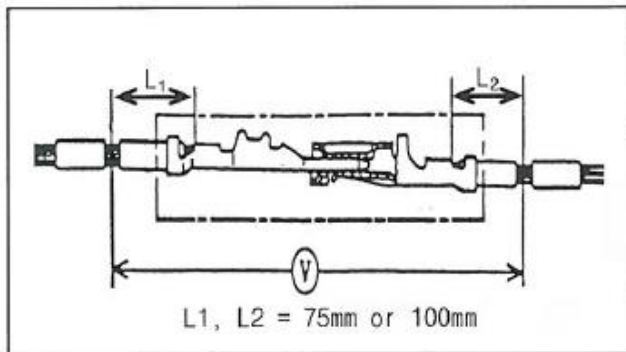
Measure the circuit voltage drop (V) by sending voltage and current described in the table 4 with terminal combined on the connector. Then calculate a voltage drop (VD) in terminal by subtracting cable resistance (L) from the circuit voltage drop (V).

HARNESS vs. HARNESS : $VD = V - (L1 + L2)$

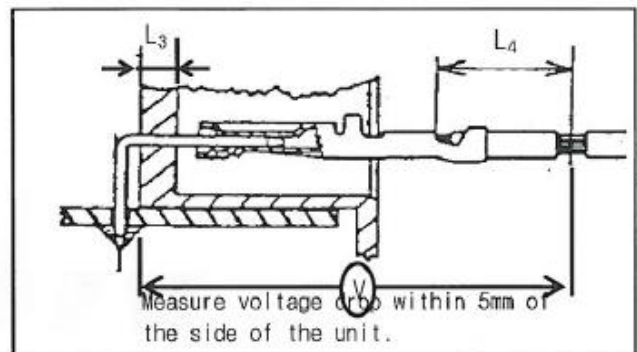
HARNESS vs. UNIT : $VD = V - (L3 + L4)$

Application	Open voltage	Short circuit current	Division
Signal circuit	$20 \pm 5\text{mV}$	10 mA	ECU, Sensor
Power circuit	13 V	1 A	Other than the above

< Table 4 >



< Fig. 4 : HARNESS vs. HARNESS >



< Fig. 5 : HARNESS vs. UNIT >

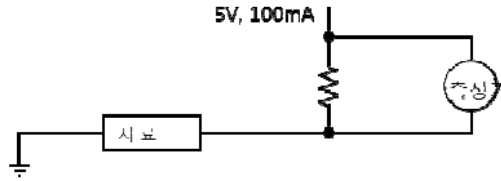
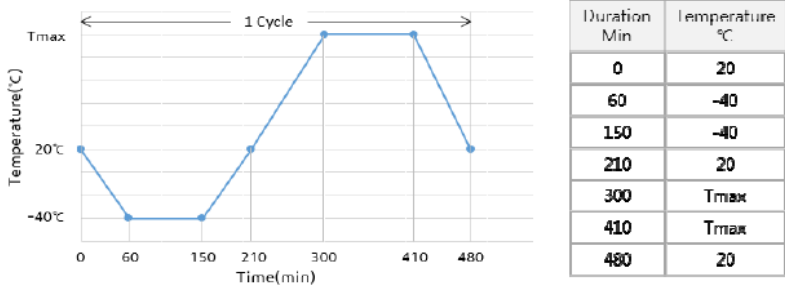


Figure 14.

4.27. High voltage test

Measure the Insulation resistance after applying AC 500V voltage of normal frequency for 1 minute between neighboring leads (figure 5-4), between housing surfaces and lead pin (figure 5-5), with connector combined.

4.28. Connector Solderability

Fluxed soldering section of a specimen shall be dipped in solder of the following conditions.

1) Sn/Pb conditions

- Solder temperature: 230 +/-5°C
- Immersion period: 3 +/-0.5sec

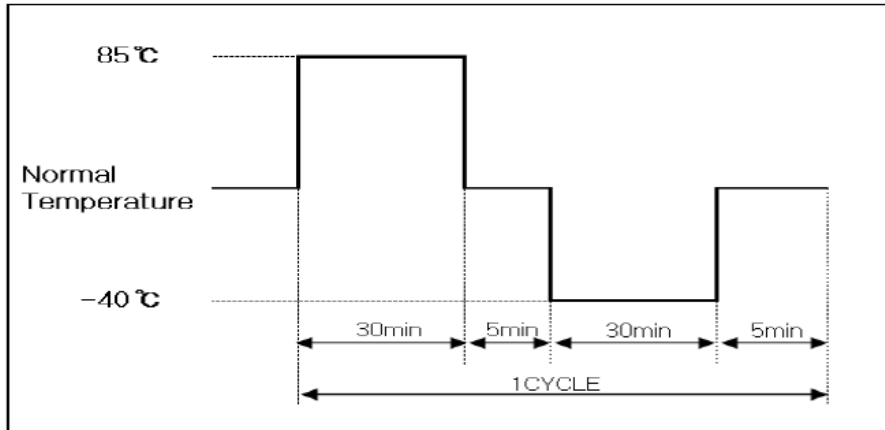
2) Pb free conditions

- Solder temperature: 245 +/-5°C
- Immersion period: 3 +/-0.5sec



4.29. Cold and hot temperature shock test

Engage and disengage connector 10 times by hand, and perform 200 cycles according to the condition in figure 6-1. Then pick specimen out of chamber and leave at room temperature for 2 hours or more.



[Figure 10. Thermal shock test condition]

4.30. High temperature test

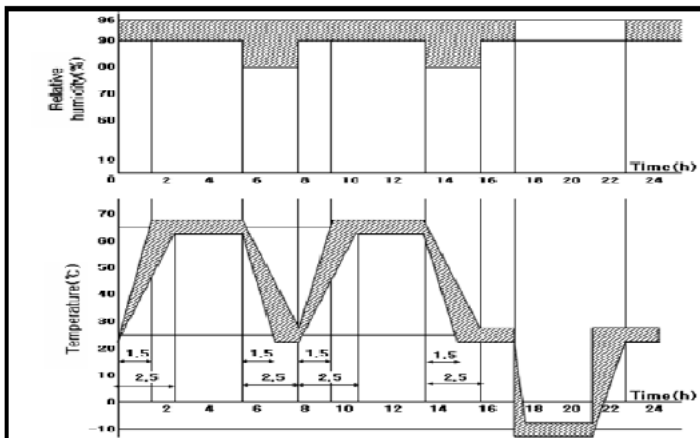
Engage and disengage connector 10 times by hand, and leave it in combined state at the temperature chamber of 85°C for 300 hours. Then pick specimen out of chamber and leave at room temperature for 2 hours or more.

4.31. High temperature and high humidity test

Leave assembled connector in chamber of 85±2°C temperature and 85% humidity for 500 hours with standard voltage after insertion and separation of the connector repeatedly 10 times by hands. Then pick specimen out of the chamber and leave it at room temperature for 2 hours or more. After that, the specimen must meet the requirements of the applicable evaluation tests.

4.32. Temperature and humidity cycle test

Engage and disengage connector 10 times by hand, and perform 10 cycles according to the condition in figure 6-2. Then pick specimen out of chamber and leave it at room temperature for 2 hours or more



[Figure11.Temperature and humidity cycle test condition]

4.33. Dust test

Engage and disengage connector with terminal assembled 10 times with hands, and diffuse 1.5kg Portland cement(JIS R5210) with fan (or others) for 10 seconds per 15 minutes while maintaining 150mm distance from wall in the closed container of 900~1200mm length, width and height, with connector combined. After 1 hour, measure it.

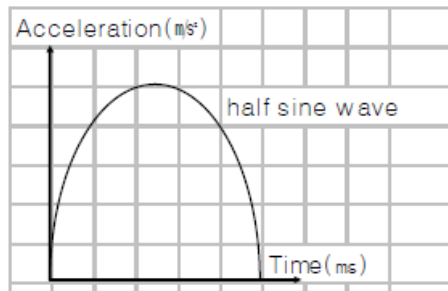
4.34. Sulfur test

Engage and disengage connector 10 times by hand, and expose it state of SO₂, 10 ppm density, 40±3°C temperature and 90~95% humidity for 24 hours. Then pick specimen out of chamber and leave it at room temperature for 2 hours or more.

4.35. SHOCK test

Connector shall be mounted in PCB board.

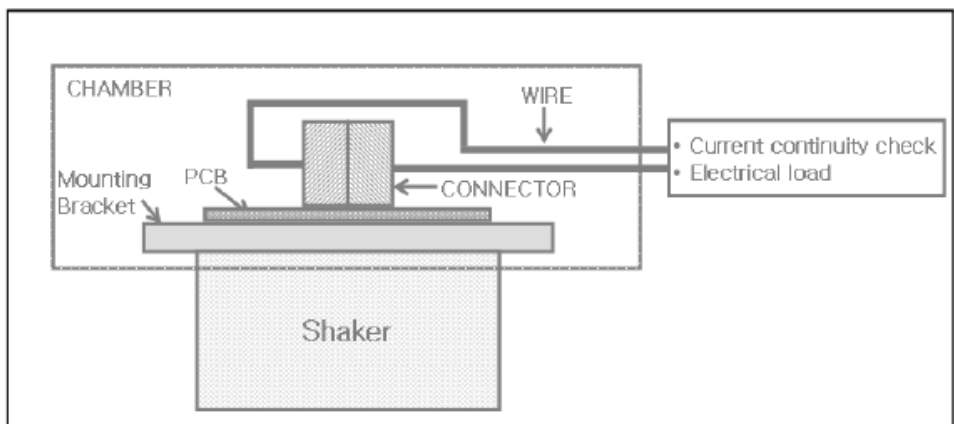
After testing connector with half sine wave and following conditions, Connector must meet the requirements of appearance, voltage drop and Instantaneous short.



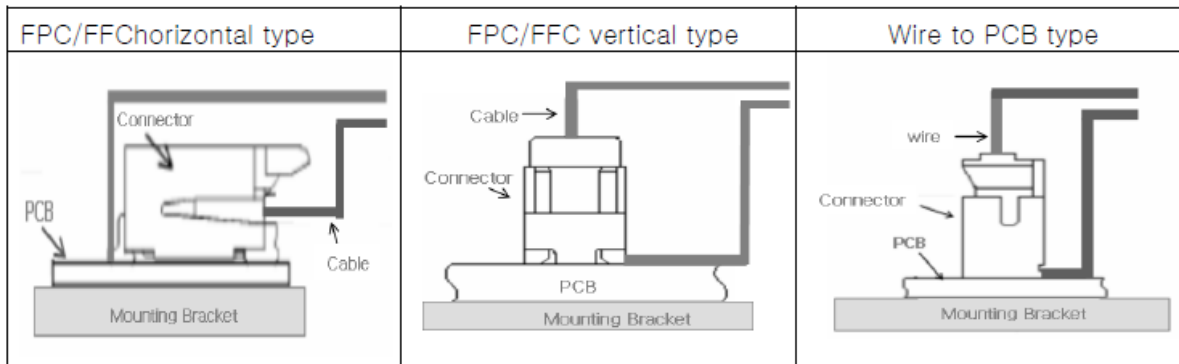
- Test conditions :
- 1) Acceleration: 980 m/s²(100G)
 - 2) Time of shock : 6 ms
 - 3) Axes : X,Y,Z
 - 4) Number of test : 10 times per each axe

4.36. Complex environment endurance test

Engage and disengage connector 10 times by hand, and then perform the test with the conditions of Complex environment endurance test(table6-2) in combined with vibration tester as following figure 6-3,4. Then measure instant short circuit



[Figure 12. Complex environment endurance test method]



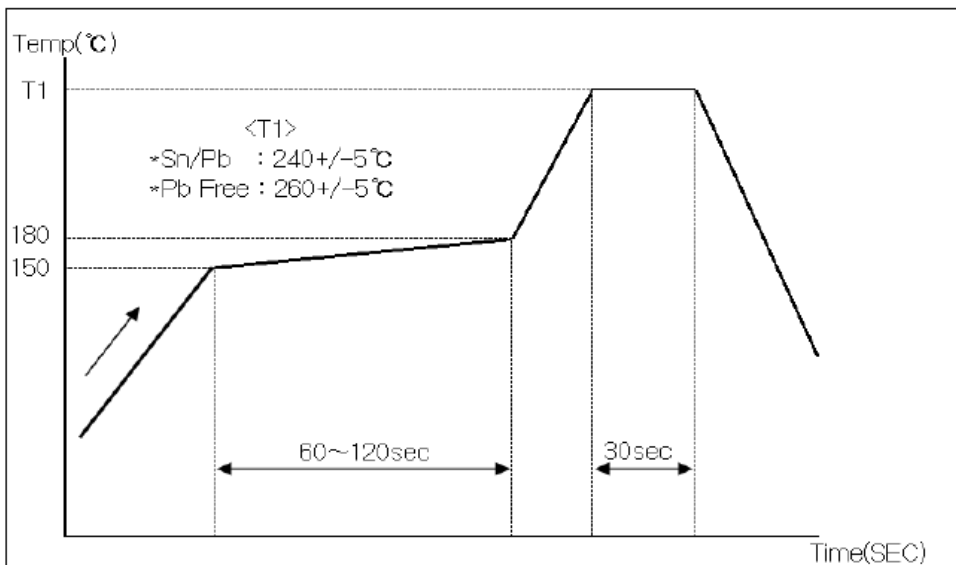
[Figure13. Connector mounting method]

Division	Conditions
Ambient temperature/humidity	80℃, 90~95%
Applied current	Basic current(Connect electrodes in series.)
Current application cycle	120 CYCLE(45minutes-ON, 15minutes-OFF)
Vibration acceleration	4.4 g
Frequency	20 Hz ~ 200 Hz (Sweep Time max3 minutes)
Vibration time	40 hours for ., Y. each

[Table6-2. Complex environment endurance test condition]

4.37. Resistance force of reflow soldering (Reflow product only)

The specimen shall be subjected to a reflow soldering of the condition shown in figure 6-5 and inspection after reflow soldering 3 times.



[Figure6-5. Reflow soldering temperature condition]

5. APPLIED PART NO LIST

TE Part no	Description
2327435-2	DN8 Rear Body Assy
2364122-2	SU2R/B Rear Body Assy
2379429-2	CV1 Rear Body Assy
2380250-2	GN7 Rear Body Assy
2327462-1	DN8 Floating Header Assy
2380331-1	GN7 Floating Header Assy

Rev	Change	Description	Date
A		Initial Released	16.Mar.'22

Prepared by, JH KIM	Checked By, GC KWON	Approved by GC KWON
Product Engineer	Senior Product Engineer	Product Engineering Manager