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In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

Applicable standard				
Rating	Operating temperature range	-25 °C to +85 °C	Storage temperature range	-10 °C to +60 °C
	Voltage	AC 30 V , DC 42 V	Wire size	———
	Current	2 A	Applicable cable	———

Specifications

Item	Test Method	Requirements	QT	AT
Construction				
General Examination	Visually and by measuring instrument.	According to drawing.	X	X
Marking	Confirmed visually.		X	X
Electrical Characteristics				
Contact resistance	Contact measured at DC 1 A.	15 mΩ max.	X	X
Insulation resistance	100 V DC.	1000 MΩ min.	X	X
Voltage proof	300 V AC. for 1 min.	No flashover or breakdown.	X	X
Mechanical characteristics				
Contact insertion and withdrawal forces	Measured with ϕ0.53±0.003 steel pin gage.	Insertion and withdrawal forces : 0.15 N min.	X	—
Connector insertion and Withdrawal forces	Connector mating and unmating forces Without locking device.	Insertion and withdrawal forces. Without locking device : 25 N max. With locking device : — N max.	X	—
Mechanical operation	Mated and unmated 1,000 times.	Contact resistance : 30 mΩ max.	X	—
Vibration	Frequency: 10 → 55 → 10 Hz, Single Amplitude 0.75 mm, 5min/cycle, for 10 cycles in each of three mutually perpendicular directions.	① No electrical discontinuity of 10 μs. ② No damage, cracks or looseness of parts.	X	—
Shock	Acceleration: 490m/s², half sine wave pulses of 11ms. Performed 3 times in each of three mutually perpendicular directions.	① No electrical discontinuity of 10 μs. ② No damage, cracks or looseness of parts.	X	—
Breaking strength	MAX 100 N applied to the cable in up, down, left and right directions while mated.	No breakage max 100N.	X	—
Environmental characteristics				
Damp heat (Steady state)	Subjected to 40°C, at a humidity of 90～95% for 96h.	① Insulation resistance: 10 MΩ min. (At high humidity). ② Insulation resistance: 100 MΩ min. (At dry). ③ No damage, cracks or looseness of parts.	X	—
Rapid change of temperature	Temperature -55→R/T(1) → +85→ R/T(1) °C Time 30 → 2～3 → 30 → 2～3 min for 5 cycles	① Insulation resistance : 100 MΩ min. ② No damage, cracks or looseness of parts.	X	—
Corrosion salt mist	Subjected to 5% salt spray for 48h.	No heavy corrosion which impairs functionality.	X	—
Heat Resistance	Subjected to +85°C for 96h.	No damage, cracks or looseness of parts.	X	—
Cold Resistance	Subjected to -55°C for 96h.	No damage, cracks or looseness of parts.	X	—
Resistance to soldering heat	Soldering iron is placed to the soldering surface for 5±1s. (Iron tip temperature +350±10℃)	No deformation or excessive looseness of terminals.	X	—
Solderability	Place soldering iron(Iron tip temperature +350±10℃) And solder to DIP area for 2 to 3 s.	Soldering surface shall be free from pin-holes, e-wetted and un-wetted areas and other defects.	X	—
Sealing (2)	Subjected to a depth of 1.8m for 48h.	No water penetration into the connector.	X	—
Air tightness (2)	17.6 kPa of air pressure applied to the inside of the mated connector for 30s.	No air bubbles emitted from the inside of the connector.	X	X

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
A					

Remarks

Notes (1) R/T : Room temperature

(2) Sealing and Air Tightness shall be tested in mated condition with an applicable connector

Unless otherwise specified, refer to IEC 60512(JIS C 5402).

APPROVED	EJ.KUNII	20190328
CHECKED	EJ.KUNII	20190328
DESIGNED	KN.IKEHARA	20190327
DRAWN	KN.IKEHARA	20190327

Note QT:Qualification Test AT:Assurance Test X:Applicable Test

DRAWING NO. ELC-387322-00-00

HRS

SPECIFICATION SHEET

HIROSE ELECTRIC CO., LTD.

PART NO. LF07WBRB-6S

CODE NO. CL136-0054-0-00 A 1/1

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