May.1.2021 Copyright 2021 HIROSE ELECTRIC CO., LTD. All Rights Reserved.
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	−55℃ TO +105℃ △1	STORAGE TEMPERATURE RANGE	−10℃ TO +50℃(PACKED CONDITION)
	VOLTAGE	30V AC/DC	OPERATING OR STORAGE HUMIDITY RANGE	RELATIVE HUMIDITY 90%MAX(NOT DEWED)
	CURRENT	0.2A	APPLICABLE CABLE	t=0.2±0.03mm, GOLD PLATED

SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
CONSTRUCTION				
GENERAL EXAMINATION	VISUALLY AND BY MEASURING INSTRUMENT.	ACCORDING TO DRAWING.	×	×
MARKING	CONFIRMED VISUALLY.		×	×
ELECTRICAL CHARACTERISTICS				
VOLTAGE PROOF	90V AC FOR 1 min.	NO FLASHOVER OR BREAKDOWN.	×	×
INSULATION RESISTANCE	100V DC.	50MΩ MIN.	×	×
CONTACT RESISTANCE	AC 20mV MAX (1KHz), 1mA.	100mΩ MAX. INCLUDING FPC BULK RESISTANCE (L=12mm)	×	×
MECHANICAL CHARACTERISTICS				
VIBRATION	FREQUENCY 10 TO 55 Hz, HALF AMPLITUDE 0.75 mm FOR 10 CYCLES IN 3 AXIAL DIRECTIONS.	① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② CONTACT RESISTANCE: 100mΩ MAX. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	—
SHOCK	981 m/s², DURATION OF PULSE 6ms AT 3 TIMES IN 3 BOTH AXIAL DIRECTIONS.		×	—
MECHANICAL OPERATION	10 TIMES INSERTIONS AND EXTRACTIONS.	① CONTACT RESISTANCE: 100mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	—
FPC RETENTION FORCE	MEASURED BY APPLICABLE FPC. (THICKNESS OF FPC SHALL BE t=0.20mm AT INITIAL CONDITION.)	DIRECTION OF INSERTION: 0.2N × NUMBER OF CONTACTS MIN. *(note1)*	×	—
ENVIRONMENTAL CHARACTERISTICS				
CORROSION SALT MIST	EXPOSED AT 35±2℃, 5% SALT WATER SPRAY FOR 96h.	① CONTACT RESISTANCE: 100mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. ③ NO EVIDENCE OF CORROSION WHICH AFFECTS TO OPERATION OF CONNECTOR.	×	—
RAPID CHANGE OF TEMPERATURE	TEMPERATURE −55→+15 TO +35→+85→+15TO+35 ℃ TIME 30 → 2 TO 3 → 30 → 2 TO 3 min UNDER 5 CYCLES.	① CONTACT RESISTANCE: 100mΩ MAX. ② INSULATION RESISTANCE: 50MΩ MIN. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	—
DAMP HEAT (STEADY STATE)	EXPOSED AT 40±2℃, RELATIVE HUMIDITY 90 TO 95%, 96h.		×	—
DAMP HEAT,CYCLIC	EXPOSED AT −10 TO +65 ℃ RELATIVE HUMIDITY 90 TO 96 % 10 CYCLES, TOTAL 240h.	① CONTACT RESISTANCE: 100mΩ MAX. ② INSULATION RESISTANCE: 1MΩ MIN. (AT HIGH HUMIDITY) ③ INSULATION RESISTANCE: 50MΩ MIN. (AT DRY) ④ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	—

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
△1	1	DIS-F-00000511	YH.MICHIDA	YN.TAKASHITA	15.07.29

REMARK

Unless otherwise specified, refer to IEC 60512

APPROVED	MO.ISHIDA	14.01.24
CHECKED	HS.SAKAMOTO	14.01.24
DESIGNED	YS.EBI	14.01.24
DRAWN	NM.SANPEI	14.01.21

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

DRAWING NO. ELC4-338903-05

HRS	SPECIFICATION SHEET	PART NO.	FH35C-**S-0.3SHW(99)	
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL580 △1	1/2

FORM HD0011-2-1

SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
DRY HEAT	EXPOSED AT 85±2℃, 96h.	① CONTACT RESISTANCE: 100mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	—
COLD	EXPOSED AT −55±3℃, 96h.		×	—
SULPHUR DIOXIDE [JIS C 60068-2-42]	EXPOSED AT 40±2℃, RELATIVE HUMIDITY 80±5 %, 25±5 ppm FOR 96h.	① CONTACT RESISTANCE: 100mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. ③ NO EVIDENCE OF CORROSION WHICH AFFECTS TO OPERATION OF CONNECTOR.	×	—
HYDROGEN SULPHIDE [JIS C 60068-2-43]	EXPOSED AT 40±2℃, RELATIVE HUMIDITY 80±5 %, 10 TO 15 ppm FOR 96h.		×	—
SOLDERABILITY	SOLDERED AT SOLDER TEMPERATURE, 235±5℃ FOR IMMERSION DURATION, 2±0.5 sec.	A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED.	×	—
RESISTANCE TO SOLDERING HEAT	1) REFLOW SOLDERING: PEAK TMP. 250℃MAX. REFLOW TMP. 230℃ MIN WITHIN 60 sec. 2) SOLDERING IRONS: TMP. 350±10℃ FOR 5±1 sec.	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.	×	—

(*note1*)

FASTEN FPC ON PCB OR SOMETHING FIXED IF FORCE IN VERTICAL DIRECTION SHALL BE PREDICTED.
DO NOT CLOSE THE ACTUATOR BEFORE INSERTING FPC EVEN AFTER THE CONNECTOR IS MOUNTED ONTO A PCB. CLOSING THE ACTUATOR WITHOUT FPC COULD MAKE THE CONTACT GAP SMALLER, WHICH INCREASES THE FPC INSERTION FORCE.
THIS CONNECTOR HAS CONTACT POINTS ON BOTH TOP AND BOTTOM.

May.1.2021 Copyright 2021 HIROSE ELECTRIC CO., LTD. All Rights Reserved.
In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.