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

Operating condition	Storage temperature range (before unpacking)	-10 to +60 [deg.C] (25 to 75%RH) ⚠	Storage temperature range(after mounting, not applying current)	-40 to +85 [deg.C] (85%RH MAX) No freezing and condensation
	Operating temperature range (applying current)	-10 to +60 [deg.C] (85%RH MAX) No freezing and condensation	Characteristic impedance	Differential 100 [ohm]
	Input signal IF	SLVS-200	ACTIVATE voltage	1.0 to 3.6V
	Input signal voltage	Differential voltage 200 to 1400 mV Common voltage 150 to 340 mV		
	Input power voltage	[Single supply mode] (Tx & Rx) 3.3V [Dual supply mode] (Tx) 2.5V, (Rx) 2.5V AND 1.5V		
	Suitable connector	Transmitter (Tx) : BF4-TX-14DS-0.5V, Receiver (Rx) : BF4-RX-14DS-0.5V		

SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
CONSTRUCTION				
Dimension, Construction and Finishing	Visual inspection and dimension measurement	Comply with the drawing	X	X
Marking	Visual inspection		X	X
ELECTRIC PERFORMANCE				
Data rate	Eye diagram test Input differential PRBS7 200mV signal.	No mask hit at 0.05 to 6.25 Gbps	X	-
Bit error rate (BER)	BERT test Input differential PRBS7 200mV signal. (VDD=3.3V, Single supply mode)	$<1X10^{-12}$ (@6.25Gbps)	X	-
6.25Gbps data transmission test	Eye diagram test Input 6.25Gbps PRBS7 differential 200mV signal. (VDD=3.3V, Single supply mode)	No mask hit	X	X
Input voltage	Eye diagram test Input 6.25Gbps PRBS7 differential 200mV and 1400mV signal. (VDD=3.3V, Single supply mode)	No mask hit	X	-
Output voltage	Shall be checked the output voltage from Rx plug. (VDD=3.3V, single supply mode)	Differential voltage: 160-330mV	X	X
		Common mode voltage: 180-330mV	X	-
Signal detect (SD)	Shall be turned SD=High when VDD=3.3V and ACT=High.	SD=High voltage: 1.0 to 1.6V	X	X
Power consumption (TX & RX total)	Shall be checked the voltage and current by digital multi meter.	[Single supply mode] During operation: 120mW Max Sleep mode : 25uW Max [Dual supply mode] During operation : 80mW Max Sleep mode : 25uW Max	X	-
MECHANICAL CHARACTERISTICS				
Mating Durability	50 cycles of mating and unmating with BF4 receptacle.	No looseness, breakage and cracks (Visual and data transmission check before and after test)	X	-
Vibration	Vibration for 2 hours in 3 directions, at an amplitude of 1.5mm with the frequency range 10 to 55 [Hz].		X	-
Shock	3 times and 3 directions with the acceleration 490 [m/s^2] in duration 11ms.		X	-
Fiber Pull.	Measuring fiber tensile strength at breakdown point Pulling direction: Fiber axial direction. Pulling speed: 10mm/min	>7N	X	-
ENVIRONMENTAL CHARACTERISTICS				
Temperature cycling	Temperature: -40 ⇔ +85 [deg.C] ,w/o applying current Time: 10 minutes ⇔ 10 minutes Number of cycle: 100 cycles	No looseness, breakage and cracks (Visual and data transmission check before and after test)	X	-
High Temp storage	Temperature: 85 [deg.C], w/o applying current Time : 1000 hours		X	-
Low Temp storage	Temperature: -40 [deg.C], w/o applying current Time : 1000 hours		X	-
Temperature and humidity cycling	Temperature, Humidity : -10 ⇔ +65 [deg.C], 93%RH w/o applying current Number of cycle: 10 cycles Cycle Time: 24h/cycle		X	-
ESD tolerance	Applying 2kV (Human Body Model)		X	-

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
1	1	DIS-K-00002328	SJ. SUZUKI	TS. YAMAZAKI	20200317

REMARK
Each test item shall be checked by mating with suitable receptacle connector on the evaluation board.

APPROVED	MT. SHIBUTANI	20150421
CHECKED	OM. MIYAMOTO	20150421
DESIGNED	YA. SANO	20150421
DRAWN	YA. SANO	20150421

Note QT: Qualification Test, AT: Assurance Test

DRAWING NO. ELC-179522-00-00

HRS	SPECIFICATION SHEET	PART NO.	BF4MC-6GTXRX-B1-**M
	HIROSE ELECTRIC CO., LTD.	CODE NO.	1 1/1

FORM HD0011-2-1