




Operating condition	Storage temperature range (before unpacking)	-10 to +60 [deg. C] (40 to 75%RH)	Storage temperature range(after mounting, but not working)	-40 to +85 [deg. C] (85%RH MAX) No freezing and bedewing	
	Operating temperature range	-10 to +60 [deg. C] (85%RH MAX) No freezing and bedewing	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, OL=open)		<1X10 <sup>-12</sup> (@6.25Gbps)	X	-
6.25Gbps data transmission test	Eye diagram test Input 6.25Gbps PRBS7 differential 200mV signal. $\Delta$ (VDD=3.3V, Single supply mode, OL=open)		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, OL=open) $\Delta$		No mask hit	X	-
Output voltage	Shall be checked the output voltage from Rx plug. (VDD=3.3V, single supply mode, OL=open)		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 <sup>2</sup> ] 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 $\leftrightarrow$ +85 [deg. C] ,w/o applying current Time: 10 minutes $\leftrightarrow$ 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 $\leftrightarrow$ +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
	2	DIS-K-00002328	SJ. SUZUKI	TS. YAMAZAKI	20200317
REMARK			APPROVED	MT. SHIBUTANI	20141028
Each test item shall be checked by mating with suitable receptacle connector on evaluation board.			CHECKED	OM. MIYAMOTO	20141027
			DESIGNED	YA. SANO	20141027
			DRAWN	TS. YAMAZAKI	20140529
Note    QT:Qualification Test,    AT:Assurance Test			DRAWING NO.		ELC4-179036-00
	SPECIFICATION SHEET		PART NO.	BF4MC-6GTXX-B1-**-MM	
	HIROSE ELECTRIC CO., LTD.		CODE NO.		1/1