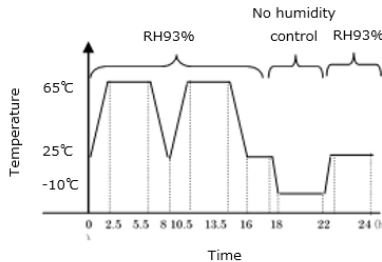




Operating condition	Storage temperature range (before unpacking)	-10 to +60 [deg. C] (40 to 75%RH)	Storage temperature range (after mounting, but not operating)	-40 to +85 [deg. C] (85%RH MAX) No freezing and condensing		
	Operating temperature range	-10 to +60 [deg. C] (85%RH MAX) No freezing and condensing	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 mVp	Input power voltage	3.0 to 3.6V (typ 3.3V)		
	Suitable connector	(BF4-IR2) BF4-IR2-16P-0.5SH,				
SPECIFICATIONS						
ITEM		TEST METHOD		REQUIREMENTS	QT	AT
CONSTRUCTION						
Dimension, Construction and Finishing		Check visually and measure dimension with dimension measurement instrument.		According to the drawing	X	X
Marking		Check visually.			X	X
ELECTRIC CHARACTERISTICS						
Data rate performance		Measure eye diagram when input differential 200mVp signal.		No mask hit at 0.05 to 6.25 Gbps (The mask should be similar to standard ethernet mask)	X	-
		Measure eye diagram input 6.25Gbps PRBS7 differential 200mVp signal.		No mask hit (The mask should be similar to standard ethernet mask)	X	X
Signal detect (OE-SDn)		Shall be turned OE-SDn=Low when EO-ACT=High and VDD=3.3V. (Same measurement method as "Data rate")		OE-SDn voltage -0.3 to 1.0V	X	X
ACT detect (EO-ACTn)		Shall be turned EO-ACTn=Low when TX is during VDD=3.3V.		EO-ACTn voltage -0.3 to 1.0V	X	X
Bit error rate (BER)		Measure BER with BERT during input differential 6.25Gbps PRBS7 200mVp signal.		$< 1 \times 10^{-12}$	X	-
Power consumption		Measure current by digital multimeter during operating condition at VDD=3.3V.		$\leq 160\text{mW}$	X	-
Output signal voltage		Shall be checked by eye diagram when input 6.25Gbps PRBS7 differential 200mVp signal.		160 to 330mVp	X	X
OPTICAL CHARACTERISTICS						
LED light emission (Green)		Apply V=3.0 to 3.6V at the pin, then check if LED light is visible or not.		Green light shall be visible	X	X
LED light emission (Amber)		Apply V=3.0 to 3.6V at the pin, then check if LED light is visible or not.		Amber light shall be visible	X	X
MECHANICAL CHARACTERISTICS						
Mating Durability		(BF4-IR2) 1000 cycles of mating and unmating with BF4-IR2 socket.		No looseness, breakage and cracks (Visual and data transmission check before and after test)	X	-
					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 clamping strength		Loading tensile force to the fiber until break for same direction with fiber exit.		> 10N	X	-
	COUNT	DESCRIPTION OF REVISIONS		DESIGNED	CHECKED	DATE
△	0					
REMARK				APPROVED	YY.HIYAMA	20221212
Each test item shall be checked by mating with suitable receptacle connector on evaluation board (BF4-IR2) This specifications sheet is based on using BF4MC type in BF4-IR2.				CHECKED	TS.YAMAZAKI	20221208
				DESIGNED	SK.AOYAMA	20221206
				DRAWN	SK.AOYAMA	20221206
Note QT:Qualification Test, AT:Assurance Test				DRAWING NO.		ELC-392025-00-00
HRS	SPECIFICATION SHEET			PART NO.	BF4-IR2IR2-01-5M	
	HIROSE ELECTRIC CO., LTD.			CODE NO.	CL0831-1277-0-00	△ 1/2

SPECIFICATIONS					
ITEM	TEST METHOD		REQUIREMENTS	QT	AT
ENVIRONMENTAL CHARACTERISTICS					
Transportation and storage temperature and humidity test	Applying temperature and humidity load as below Testmethod Start at 23 deg.C⇒-20 deg.C (72hours) ⇒ (Ramp up time 1.5hours) ⇒23 deg.C⇒ (Ramp down time 1.2hours) ⇒ +60 deg.C, 90%Rh (72hours) ⇒23 deg.C		No looseness, breakage and cracks (Visual and data transmission check before test, intermediate test and after test)	X	-
Temperature cycling test	-40 to 85 degree Celsius with dwell time of 10min, 100 cycles			X	-
High temprerature storage	85 degree Celsius , 1000 hours			X	-
Low temperature storage	-40 degree Celsius, 1000 hours			X	-
Temperature and Humidity cycling	Temperature, Humidity: -10 ⇔ 65 degree Celsius, 93%RH w/o applying current. Number of cycle: 10 cycles, Cycle time: 24 hours/cycle <div></div>			X	-
ESD tolerance	(BF4-IR2) Applied voltage 2kV (Human Body Model)			X	-
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.	ELC-392025-00-00	
	SPECIFICATION SHEET		PART NO.	BF4-IR2IR2-01-5M	
	HIROSE ELECTRIC CO., LTD.		CODE NO	CL0831-1277-0-00	 2/2