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.	≦160mW	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

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.

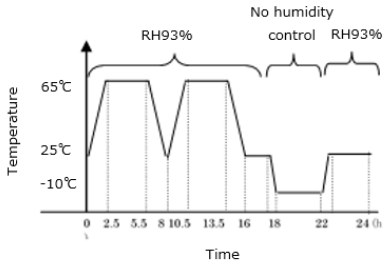
APPROVED	YY.HIYAMA	20221212
CHECKED	TS.YAMAZAKI	20221208
DESIGNED	SK.AOYAMA	20221206
DRAWN	SK.AOYAMA	20221206

Note QT:Qualification Test, AT:Assurance Test

DRAWING NO. ELC-391952-00-00

HRS	SPECIFICATION SHEET	PART NO.	BF4-IR2IR2-01-3M	
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL0831-1275-0-00 ⚠1	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  		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-391952-00-00		
SPECIFICATION SHEET	PART NO.	BF4-IR2IR2-01-3M	
HIROSE ELECTRIC CO., LTD.	CODE NO	CL0831-1275-0-00	A 2/2