

May.1.2020 Copyright 2020 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					
Operating condition	Characteristic impedance	Differential 100 [ohm]	Operating temperature range	-10 to +60 [deg. C] (85 %RH MAX) No freezing and condensing	
	Storage temperature Range (before unpacking)	-10 to +60 [deg. C] (93 %RH MAX)	Storage temperature Range (after mounting, but not working)	-40 to +85 [deg. C] (85 %RH MAX) No freezing and condensing	
	Applicable connector	BF4-TX plug (Terminated optical fiber)			
SPECIFICATIONS					
ITEM	TEST METHOD		REQUIREMENTS	QT	AT
CONSTRUCTION					
Dimension, Construction and Finishing	Shall be carried out visually and measuring instrument.		According to drawing	X	X
Marking	Confirmed visually			X	X
ELECTRIC PERFORMANCE					
Data rate	Shall be checked by Eye Diagram when input differential 100 mV signal. (*1)		No mask hit at 0.5 to 3.0 Gbps.	X	-
Voltage proof	100 V AC for 1 min. (Shall be tested this product alone.)		No flashover or breakdown.	X	X
MECHANICAL CHARACTERISTICS					
Durability	50 cycles of mating and extraction. (*1)		No looseness, breakage and cracks (Visual and data rate check)	X	-
Vibration	Vibration for 10 cycles in 3 directions, at an amplitude of 1.5 mm with the frequency range 10 to 55 [Hz].(*1)			X	-
Shock	3 times and 3 directions with the acceleration 490 [m/s <sup>2</sup> ] in duration 11 ms. (*1)			X	-
ENVIRONMENTAL CHARACTERISTICS					
Temperature cycling	Temperature : -40 to +85 deg C Time : 10 [min] to 10 [min] Number of cycle : 100 cycles (*1)		No looseness, breakage and cracks (Visual and data rate check)	X	-
Resistance to dry heat	Temperature : 85 deg C Time : 1000 hours (*1)			X	-
Resistance to cold	Temperature : -40 deg C Time : 1000 hours (*1)			X	-
Applying current under heat and humidity	Temperature : 85 deg C, Humidity : 85%RH Time: 1000 hours, Applying current. (*1)			X	-
Temperature and humidity cycling	Shall be test 10 cycles of temperature ( -10 deg.C ⇔ +65 deg.C ) and humidity (93 %RH) cycling.			X	-
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
REMARK			APPROVED	MT.SHIBUTANI	12.10.29
(*1) Shall be checked by mating with BF4M cable assembly (Tx-Rx).			CHECKED	SJ.SHIMIZU	12.10.29
			DESIGNED	KS.JOKURA	12.10.26
			DRAWN	KS.JOKURA	12.10.26
Note QT: Qualification Test, AT: Assurance Test			DRAWING NO.		ELC4-178301-00
	SPECIFICATION SHEET		PART NO.	BF4-TX-14DS-0.5V(**)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.		1/1