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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 +85 [deg. C] (85 %RH MAX) No freezing and condensing
	Storage temperature Range (At packing)	-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-IR2 plug (Terminated optical fiber)		

SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
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CONSTRUCTION

Dimension, Construction and Finishing	Check visually and measure the dimension by dimensional measurement equipments	According to drawing	X	X
Marking	Check visually		X	X

ELECTRIC PERFORMANCE

Data transmission performance	Measure eye diagram of output signal during input 200mVp PRBS7 differential signal (*1)	No mask hit at 0.05 to 6.25 Gbps.	X	-
Voltage proof	200 V AC for 1 min. (Shall be tested this product alone.)	No flashover or breakdown.	X	X

MECHANICAL CHARACTERISTICS

Insertion and extraction forces	Measure the force at the mating speed less than 12.5mm/min	Insertion force : 25N MAX Extraction force : 25N MAX	X	-
Durability	1000 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 ²] in duration 11 ms. (*1)		X	-

ENVIRONMENTAL CHARACTERISTICS

Transportation and storage temperature and humidity test	Applying temperature and humidity load as below Before test measurement 23 deg.C Cold test -20 deg.C (soak time: 72hours) Intermediate measurement 23 deg.C Damp heat test +60 deg.C, 90%Rh (soak time: 72hours) After test measurement 23 deg.C	No looseness, breakage and cracks (Visual and data transmission check before test, intermediate test and after test)	X	-
Temperature cycling	Temperature : -40 to +85 deg C Time : 10 [min] to 10 [min] Number of cycle : 100 cycles (*1)		X	-
High temperature storage	Temperature : 85 deg C Time : 1000 hours (*1)		X	-
Low temperature storage	Temperature : -40 deg C Time : 1000 hours (*1)		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 style="text-align: center;"> <p>The graph shows a temperature profile over 24 hours. It starts at 25°C, rises to 65°C at 2.5h, stays at 65°C until 5.5h (RH93%), drops to 25°C until 8h, rises to 65°C again until 10.5h (RH93%), drops to 25°C until 13.5h, then drops to -10°C until 16h. From 16h to 22h, there is a 'No humidity control' period where temperature fluctuates between 25°C and -10°C. Finally, it rises to 25°C until 24h (RH93%).</p> </div>		X	-

COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
△				

REMARK (*1) Shall be checked by mating with BF4M cable assembly (Tx-Rx).	APPROVED	YY.HIYAMA	20200907
	CHECKED	TS.YAMAZAKI	20200907
	DESIGNED	TY.SATO	20200907
	DRAWN	SK.AOYAMA	20200907

Note QT: Qualification Test, AT: Assurance Test	DRAWING NO.	ELC-384993-01-00
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HRS	SPECIFICATION SHEET	PART NO.	BF4-IR2-16P-0.5SH(01)	
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL831-1020-0-01	△ 1/2

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SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
Solderbility	The duration and temperature of immersion shall be 245 +/- 3 °C 3 +/- 0.3 sec	All leads shall exhibit a continuous solder coating free from defect for a minimum of 95% of the critical area of any individual lead	X	-
Resistance to soldering heat	Reflow 2times in the Fig-1 condition	No critical connector deformation or looseness of contacts	X	-

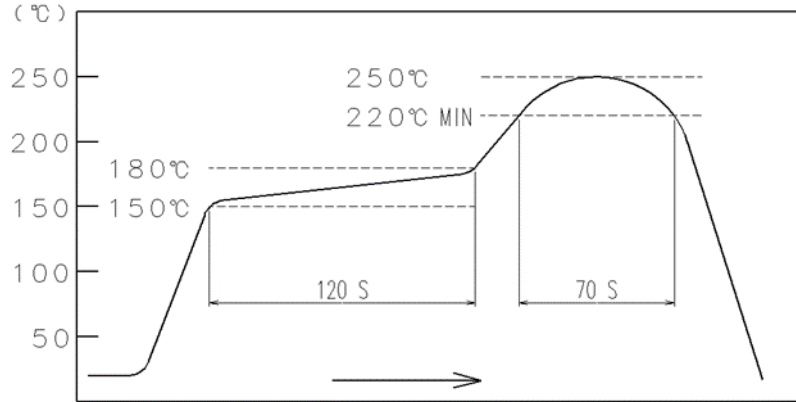


Fig-1. Reflow condition of resistance to soldering heat
(Temperature at the top surface of connector)

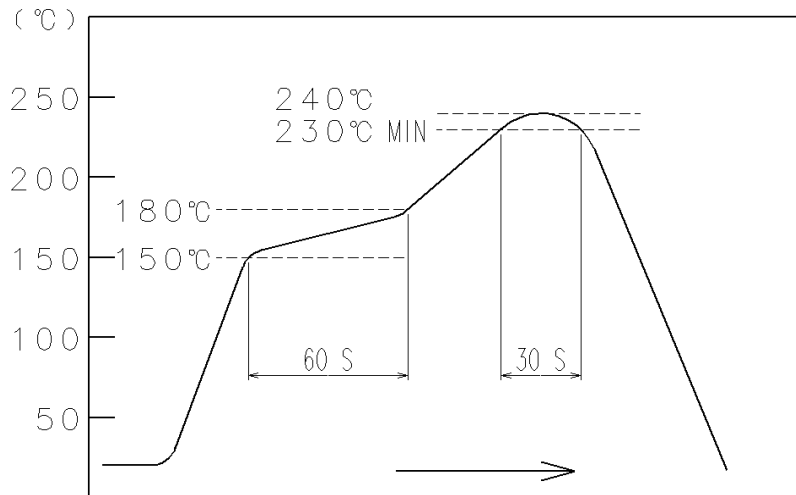


Fig-2 Recommended reflow profile temperature (Temperature at SMT leads)

Note QT:Qualification Test AT:Assurance Test X:Applicable Test		DRAWING NO.	ELC-384993-01-00	
HRS	SPECIFICATION SHEET	PART NO.	BF4-IR2-16P-0.5SH(01)	
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