

APPLICABLE STANDARD		USB2.0 SPECIFICATION AND MICRO-USB CABLE AND CONNECTORS SPECIFICATION.			
RATING	OPERATING TEMPERATURE RANGE	-30 °C TO +85°C		STORAGE TEMPERATURE RANGE	-30°C TO +85°C
	VOLTAGE	30V AC		OPERATING HUMIDITY RANGE	— % TO — %
	CURRENT	SIGNAL ONLY	1 A / pin	APPLICABLE CABLE	OUTER DIAMETER OF CABLE: φ3.4
	POWER APPLY	1.8A / pin (PIN No.1, No.5) 0.5 A / pin (PIN No.2 TO 4)			

SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
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CONSTRUCTION

GENERAL EXAMINATION	VISUALLY AND BY MEASURING INSTRUMENT.	ACCORDING TO DRAWING.	X	X
MARKING	CONFIRMED VISUALLY.		X	X

ELECTRICAL CHARACTERISTICS

CONTACT RESISTANCE	100 mA (DC OR 1000 Hz).	30 mΩ MAX.	X	X
INSULATION RESISTANCE	500 V DC.	100 MΩ MIN.	X	X
VOLTAGE PROOF	100 V AC FOR 1 min.	NO FLASHOVER OR BREAKDOWN.	X	X

MECHANICAL CHARACTERISTICS

INSERTION AND WITHDRAWAL FORCES	A MAXIMUM RATE OF 12.5 mm/min. MEASURED BY APPLICABLE CONNECTOR.	INSERTION FORCE 35 N MAX. WITHDRAWAL FORCE 8 N MIN.	X	—
MECHANICAL OPERATION	10000 TIMES INSERTIONS AND EXTRACTIONS. MATING SPEED - MECHANICALLY OPERATED: 500 CYCLES / h - MANUALLY OPERATED: 200 CYCLES / h	① CONTACT RESISTANCE: NO INCREASE OF MORE THAN 10 mΩ FROM INITIAL VALUE. ② INSERTION FORCE 35 N MAX. WITHDRAWAL FORCE 8 N MIN. ③ NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.	X	—
VIBRATION	FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, AT 2 h, FOR 3 DIRECTIONS, TOTAL 6 h.	① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.	X	—
RADOM VIBRATION	FREQUENCY 50 TO 2000 Hz, AT 15 min, FOR 3 DIRECTIONS.		X	—
SHOCK	490 m/s ² DURATIONS OF PULSE 11 ms AT 3 TIMES FOR 6 DIRECTIONS, TOTAL 18 TIMES.		X	—

ENVIRONMENTAL CHARACTERISTICS

THERMAL SHOCK	TEMPERATURE -55 → 15 TO 35 → 85 → 15 TO 35 °C TIME 30 → 2 TO 3 → 30 → 2 TO 3 min. UNDER 10 CYCLES. (MATING APPLICABLE CONNECTOR)	① CONTACT RESISTANCE: 70 mΩ MAX. ② INSULATION RESISTANCE: 10 MΩ MIN. ③ NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.	X	—
HUMIDITY LIFE	TEMPERATURE -10 TO 65 °C, HUMIDITY 90 TO 98 %, UNDER 7 CYCLES (168h). (MATING APPLICABLE CONNECTOR)	NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
DRY HEAT	EXPOSED AT +85±2 °C, 96 h. (MATING APPLICABLE CONNECTOR)		X	—
COLD	EXPOSED AT -40±2 °C, 96 h. (MATING APPLICABLE CONNECTOR)		X	—
CORROSION SALT MIST	EXPOSED IN 5 % SALT WATER, 35 °C FOR 48 h. (LEFT UNDER UNMATED CONDITION)	NO HEAVY CORROSION.	X	—

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COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
△ 1	DIS-E-00000490	TS. ITO	NM. NISHIMATSU	16. 03. 02

REMARK HIROSE will not guarantee the performance on these specifications in case this product will be mated with the others which is not HIROSE's. Unless otherwise specified, refer to USB2.0, EIA364 or IEC 60512.	APPROVED	NM. NISHIMATSU	15. 10. 27
	CHECKED	KN. ICHIKAWA	15. 10. 27
	DESIGNED	TS. ITO	15. 10. 27
	DRAWN	AK. AKIYAMA	15. 10. 27

Note QT:Qualification Test AT:Assurance Test X:Applicable Test DRAWING NO. ELC-125961-31-00

HRS	SPECIFICATION SHEET	PART NO.	ZX64-B-5S-UNIT (31)		
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL242-0009-3-31	△	1/2

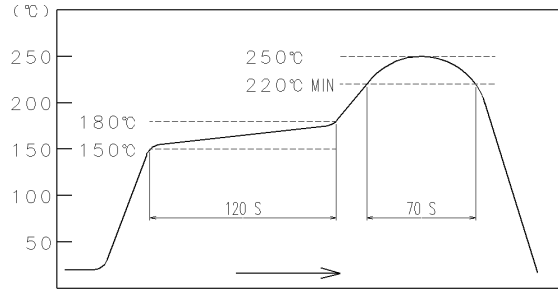
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SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
RESISTANCE TO SOLDERING HEAT	A PROFILE IS SHOWN IN FIG-1, UNDER 2 CYCLE.	NO DEFORMATION OR SIGNIFICANT LOOSENESS OF CONTACTS.	X	—
SOLDERBILITY	SOLDERING POINT IMMERSSED IN BATH OF 255±5 °C, 5 sec. (USING TYPE R FLAX)	SOLDER SHALL COVER MINIMUM OF 95 % OF THE SURFACE BEING IMMERSSED.	X	—

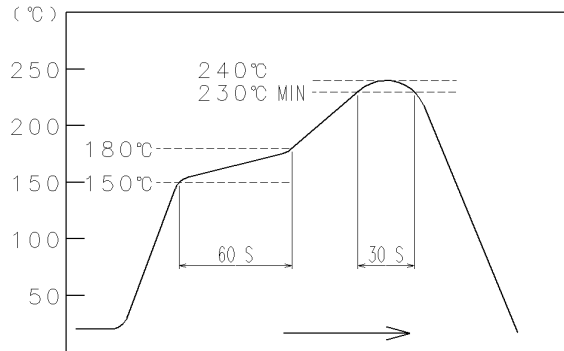
FIG-1

RESISTANCE OF SOLDERING HEAT (TEMPERATURE AT TOP SURFACE OF CONNECTOR)



RECOMMENDED PROFILE REFERS TO FIG-2 (TEMPERATURE AT SMT LEAD)

FIG-2 RECOMMENDED REFLOW PROFILE TEMPERATURE



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	HIROSE ELECTRIC CO., LTD.		CODE NO		CL242-0009-3-31	
					▲	2/2