APPLICABLE STANDARD				
RATING	OPERATING TEMPERATURE RANGE	-55 °C TO 85 °C (1)	STORAGE TEMPERATURE RANGE	-10 °C TO 60 °C (2)
	VOLTAGE	100 V AC	STORAGE HUMIDITY RANGE	40 % TO 70 % (2)
	CURRENT	0.5 A (SIGNAL CONTACT) (3) 3 A (MF CONTACT)	OPERATING HUMIDITY RANGE	RELATIVE HUMIDITY 85% max (NOT DEWED)

SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
CONSTRUCTION				
GENERAL EXAMINATION	VISUALLY AND BY MEASURING INSTRUMENT.	ACCORDING TO DRAWING.	×	×
MARKING	CONFIRMED VISUALLY.		×	×
ELECTRIC CHARACTERISTICS				
CONTACT RESISTANCE	100 mA(DC OR 1000Hz)	SIGNAL CONTACT : 90 mΩ MAX. MF CONTACT : 30 mΩ MAX.	×	—
INSULATION RESISTANCE	250 V DC.	1000 MΩ MIN.	×	—
VOLTAGE PROOF	300 V AC FOR 1 min.	NO FLASHOVER OR BREAKDOWN.	×	—
MECHANICAL CHARACTERISTICS				
INSERTION AND WITHDRAWAL FORCES	MEASURED BY APPLICABLE CONNECTOR.	INSERTION FORCE: 60 N MAX. WITHDRAWAL FORCE: 6 N MIN.	×	—
MECHANICAL OPERATION	500 TIMES INSERTIONS AND EXTRACTIONS.	① CONTACT RESISTANCE: SIGNAL CONTACT : 100 mΩ MAX. MF CONTACT : 40 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	—
VIBRATION	FREQUENCY 10 TO 55 TO 10Hz, APPROX 5min SINGLE AMPLITUDE : 0.75 mm, 10 CYCLES FOR 3 DIRECTIONS.	① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	—
SHOCK	490 m/s^2, DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.		×	—
ENVIRONMENTAL CHARACTERISTICS				
DAMP HEAT (STEADY STATE)	EXPOSED AT 40±2 °C, 90 ～ 95 %, 96 h.	① CONTACT RESISTANCE: SIGNAL CONTACT : 100 mΩ MAX. MF CONTACT : 40 mΩ MAX. ② INSULATION RESISTANCE :1000 MΩ MIN. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	—
RAPID CHANGE OF TEMPERATURE	TEMPERATURE -55 → +85 °C TIME 30 → 30 min. UNDER 5 CYCLES. (RELOCATION TIME TO CHAMBER:WITHIN 2～3 MIN)		×	—
SULFUR DIOXIDE	EXPOSED AT 25±2℃, 75±5%RH, 25 PPM FOR 96 h. (TEST STANDARD: JIS C 60068)	NO HEAVY CORROSION.	×	—
RESISTANCE TO SOLDERING HEAT	1)REFLOW SOLDERING : PEAK TMP : 260℃MAX REFLOW TMP: 220℃MIN FOR 60sec 2) SOLDERING IRONS : 360℃ MAX. FOR 5 sec.	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINAL.	×	—
SOLDERABILITY	SOLDERED AT SOLDER TEMPERATURE 240±3℃ FOR IMMERSION DURATION, 3 sec.	A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED.	×	—

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
△0					

REMARKS (1) INCLUDE TEMPERATURE RISE CAUSED BY CURRENT-CARRYING.
(2) "STORAGE" MEANS A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE ASSEMBLY TO PCB.
(3) THE RATED CURRENT APPLIES TO PER CONTACT.

Unless otherwise specified, refer to JIS-C-5402.

APPROVED	HS. OKAWA	12. 04. 10
CHECKED	KI. HIROKAWA	12. 04. 09
DESIGNED	AH. EDASHIGE	12. 04. 09
DRAWN	AH. EDASHIGE	12. 04. 09

Note QT:Qualification Test AT:Assurance Test X:Applicable Test

DRAWING NO. ELC4-343465-00

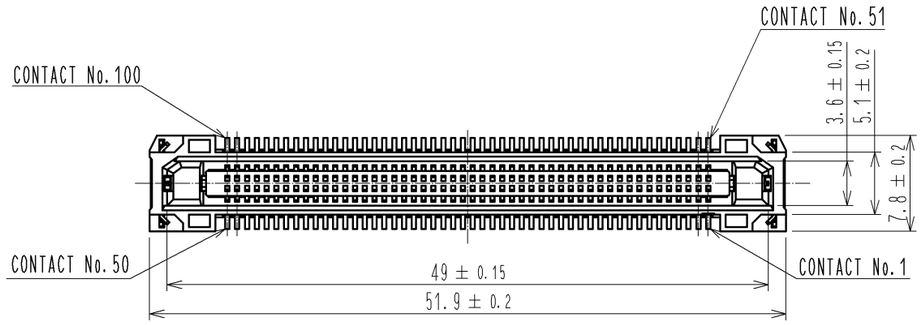
HRS HIROSE ELECTRIC CO., LTD.

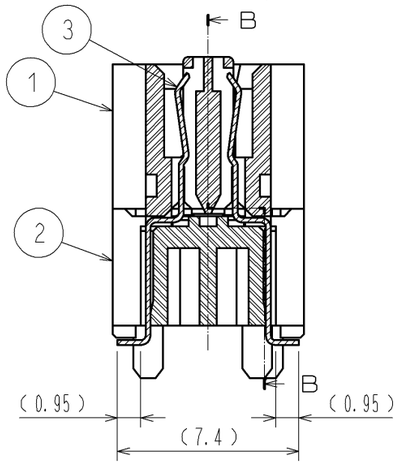
SPECIFICATION SHEET

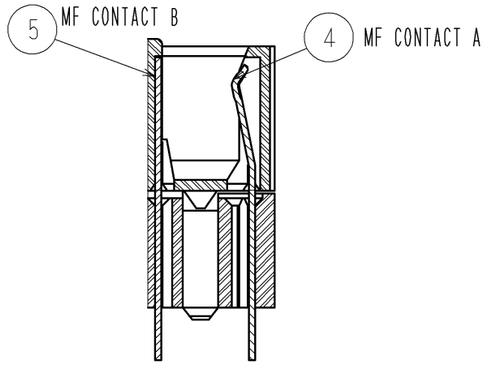
PART NO. FX18-100S-0.8SV15

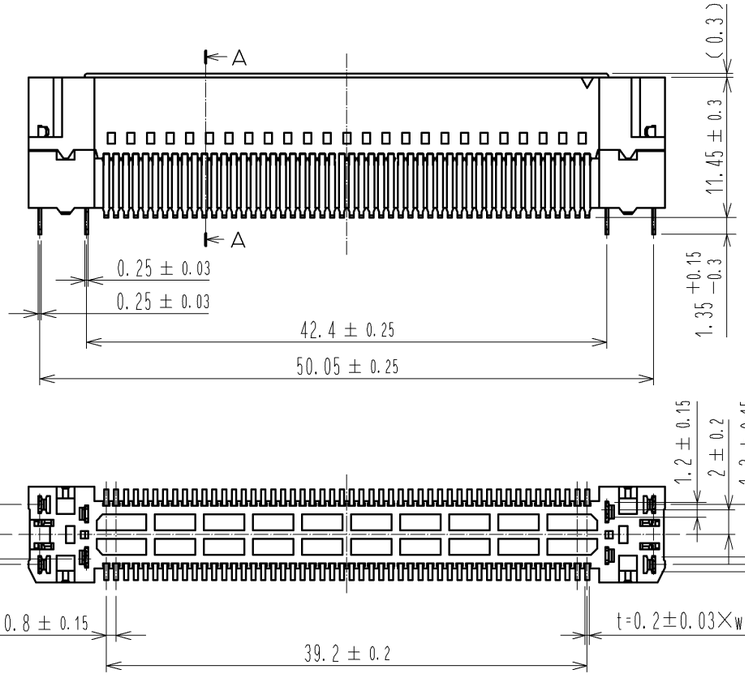
CODE NO. CL579-0036-7-00 △0 1/1

FORM HD0011-2-1

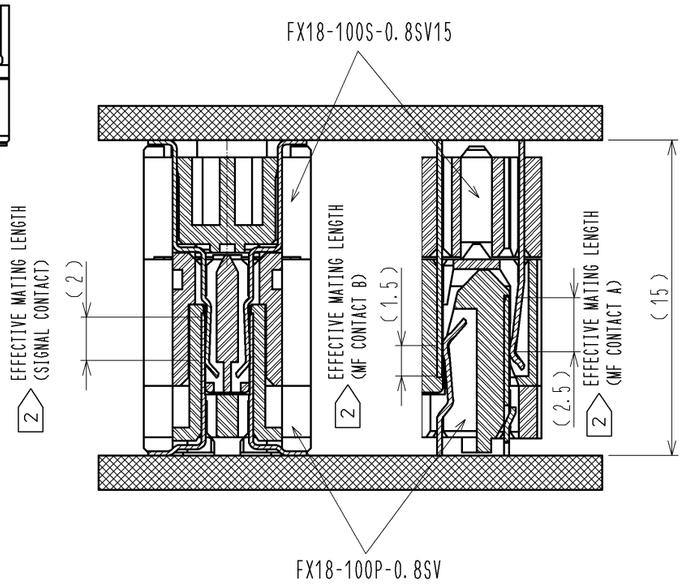




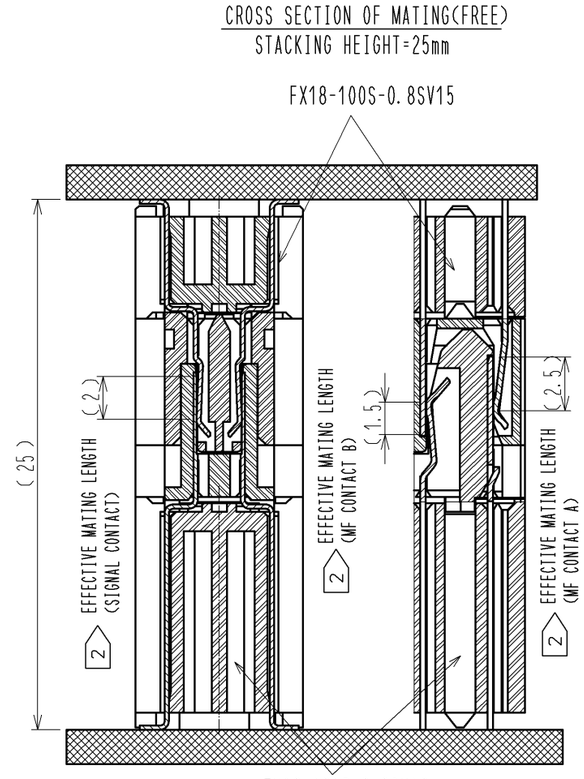




CROSS SECTION OF MATING(FREE)
STACKING HEIGHT=15mm



CROSS SECTION OF MATING(FREE)
STACKING HEIGHT=25mm



NOTE 1 LEAD CO—PLANARITY IS 0.1mm MAX.
2 CONTACTS ARE 3 STEPS SEQUENTIAL. (MF CONTACT A=>SIGNAL CONTACT=>MF CONTACT B)
WHEN USING THIS SEQUENTIAL STRUCTURE, PLEASE AVOID ANGLED INSERTION.
3 MF CONTACT A AND MF CONTACT B CAN BE USED AS POWER SUPPLY CONTACT. (3A/PIN MAX)
4 IT SHOWS THE VACUUM PICKUP AREA.(SEE PAGE 2)
REMOVE THE MYLAR TAPE BEFORE MATING CONNECTORS.
5 THIS IS PACKAGED IN TRAY.(40pcs/TRAY)
6 BLEMISH AND HIT MARK CAN BE OCCURED THROUGH OUT THE MANUFACTURING PROCESS WHICH DOESN' T AFFECT QUALITY LEVEL.
7 THE DIMENSIONS IN PARENTHESES ARE FOR REFERENCES.

NO.	MATERIAL	FINISH , REMARKS
3	PHOSPHOR BRONZE	CONTACT AREA:GOLD 0.1μm
		LEAD AREA:GOLD 0.03μm
		UNDER PLATING:NICKEL 1.3μm
2	POLYAMIDE	BLACK UL94V-0
1	POLYAMIDE	BLACK UL94V-0

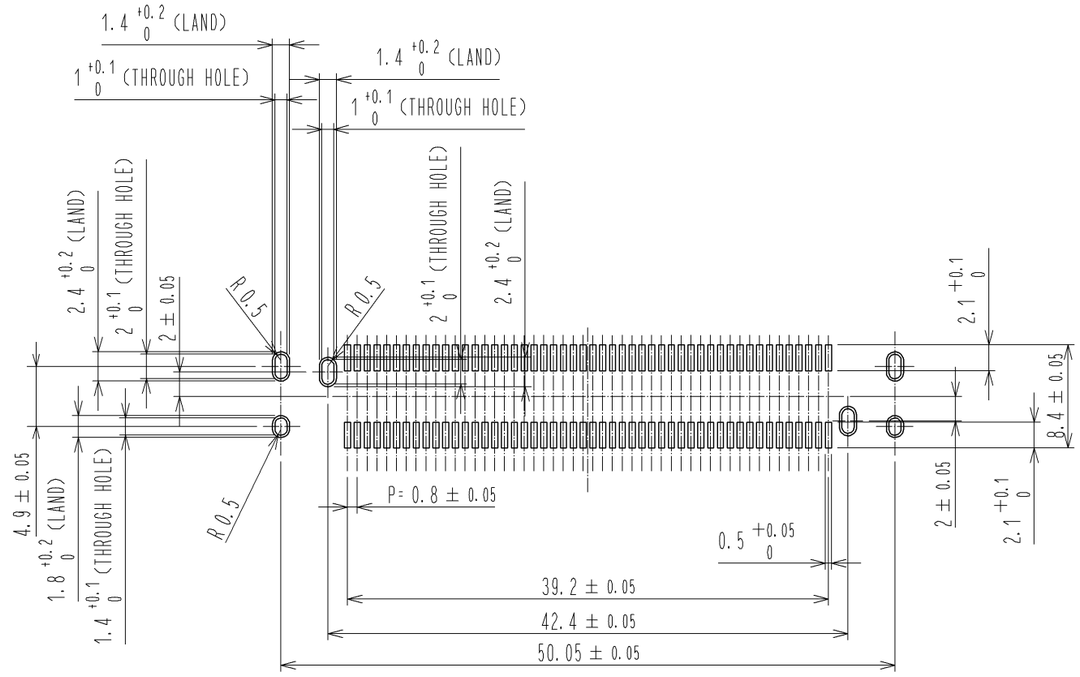
NO.	MATERIAL	FINISH , REMARKS
7	POLYIMIDE	
6	POLYSTYRENE	
5	COPPER ALLOY	CONTACT AREA:GOLD 0.1μm
		LEAD AREA:TIN-PLATING 1μm
		UNDER PLATING:NICKEL 1.3μm
4	COPPER ALLOY	CONTACT AREA:GOLD 0.1μm
		LEAD AREA:TIN-PLATING 1μm
		UNDER PLATING:NICKEL 1.3μm

UNITS	SCALE	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
mm	2 : 1					

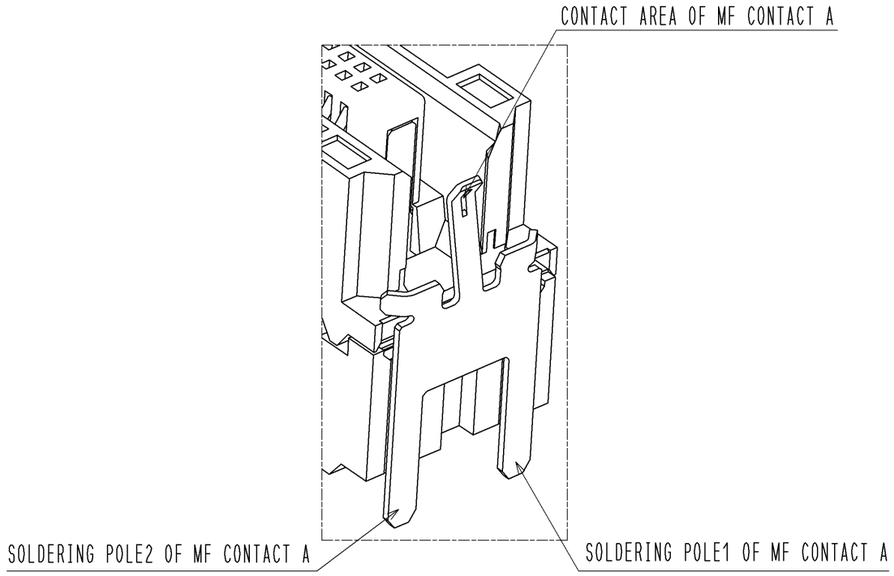
HRS HIROSE ELECTRIC CO., LTD.

APPROVED	HS. OKAWA	12.06.12	DRAWING NO. EDC3-343465-00
CHECKED	KI. HIROKAWA	12.06.12	PART NO. FX18-100S-0.8SV15
DESIGNED	AH. EDASHIGE	12.06.12	CODE NO. CL579-0036-7-00
DRAWN	AH. EDASHIGE	12.06.12	1/2

RECOMMENDED LAND PATTERN DIMENSION OF PCB(2:1)
(PCB THICKNESS:t=1.6mm METAL MASK THICKNESS:t=0.12mm)

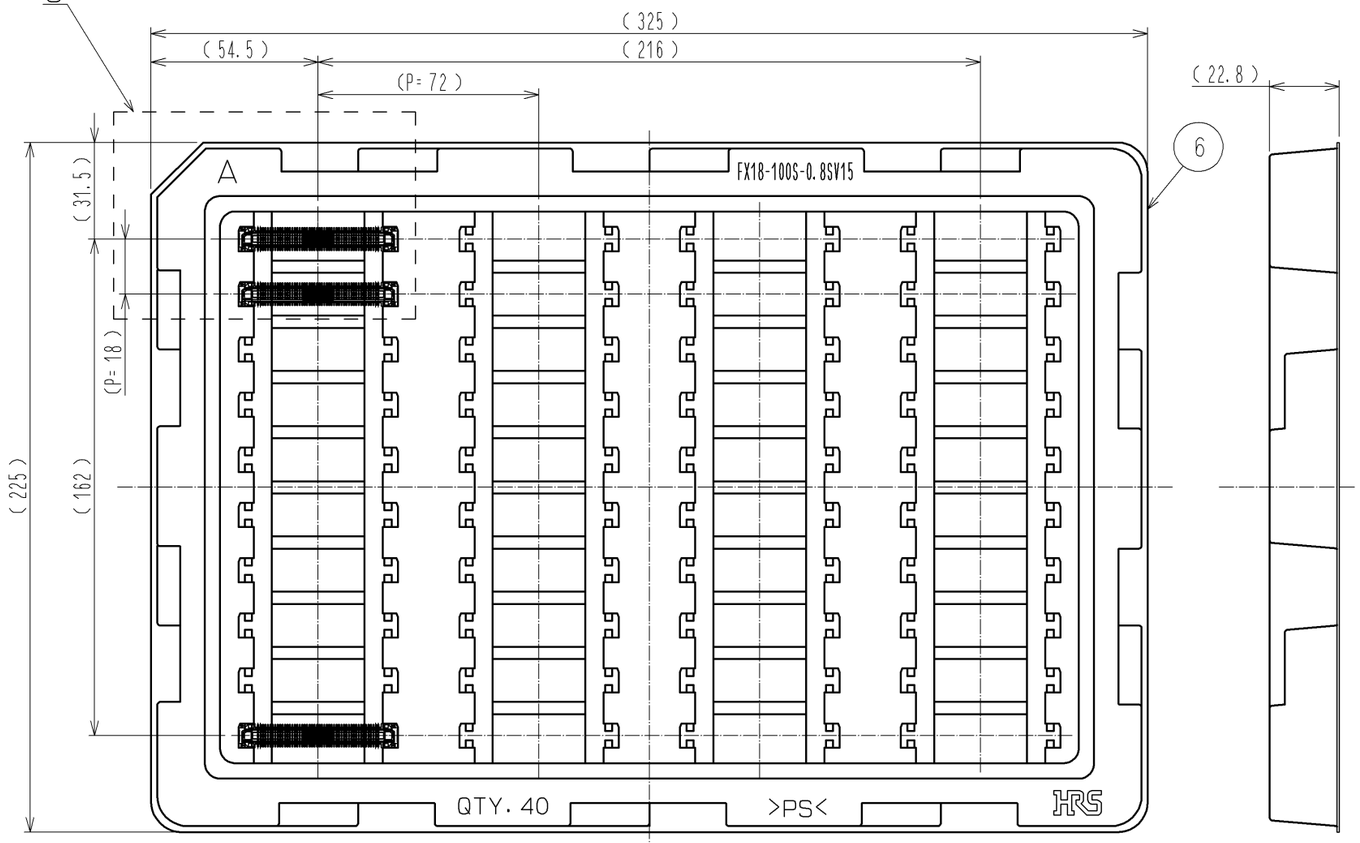


8 CONFIGURATION OF MF CONTACT A

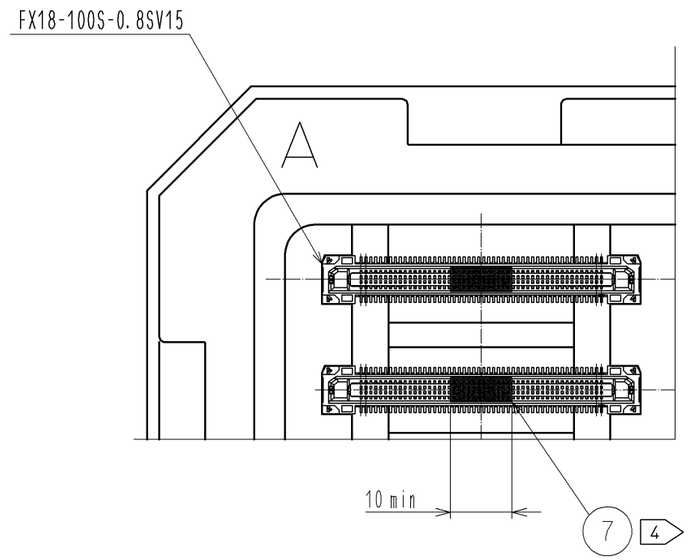


NOTE 8 SOLDERING LEAD OF MF CONTACT A SPLITS INTO TWO POLES.
BE SURE TO CONNECT TO THE SAME CIRCUIT.

5 DRAWING FOR PACKING(1:2)



C(1:1)



HRS	DRAWING NO.	EDC3-343465-00
	PART NO.	FX18-100S-0.8SV15
	CODE NO.	CL579-0036-7-00
		△ 2/2