APPLICABLE STANDARD				
RATING	OPERATING TEMPERATURE RANGE	-35 °C TO +85°C (NOTE1)	STORAGE TEMPERATURE RANGE	-10 °C TO +60°C (NOTE3)
	OPERATING HUMIDITY RANGE	20% TO 80% (NOTE2)	STORAGE HUMIDITY RANGE	40% TO 70% (NOTE3)
	APPLICABLE CONNECTOR	DF57H-3S-1.2C(##)	CURRENT	AWG 28 : 2 .0A AWG 30 : 1 .5A AWG 32 : 1.0A AWG 34 : 0.8A
	VOLTAGE	50 V AC/DC		

SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
CONSTRUCTION				
GENERAL EXAMINATION	VISUALLY AND BY MEASURING INSTRUMENT.	ACCORDING TO DRAWING.	X	X
MARKING	CONFIRMED VISUALLY.		X	X
ELECTRIC CHARACTERISTICS				
CONTACT RESISTANCE MILLIVOLT LEVEL METHOD	20mV MAX, 1mA (DC or 1000Hz).	10 mΩ MAX.	X	—
INSULATION RESISTANCE	100 V DC.	100 MΩ MIN.	X	—
VOLTAGE PROOF	500 V AC FOR 1 min.	NO FLASHOVER OR BREAKDOWN.	X	—
MECHANICAL CHARACTERISTICS				
MECHANICAL OPERATION	30 TIMES INSERTION AND EXTRACTION.	①CONTACT RESISTANCE: 20 mΩ MAX. ②NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—
CONTACT INSERTION AND EXTRACTION FORCES	IT TAKES OUT AND INSERTS WITH A CONFORMITY CONNECTOR.	①INSERTION FORCE : 20.0N MAX. ②EXTRACTION FORCE: 0.9N MIN.	X	—
VIBRATION	FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, AT 10 CYCLES FOR 3 DIRECTION.	①NO ELECTRICAL DISCONTINUITY OF 1 μs. ②NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—
SHOCK	490 m/s^2 DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.		X	—
ENVIRONMENTAL CHARACTERISTICS				
DAMP HEAT (STEADY STATE)	EXPOSED AT 40 ± 2℃ , 90 TO 95 %, 96 h. (AFTER LEAVING THE ROOM TEMPERATURE FOR 1～2h.)	①CONTACT RESISTANCE: 20 mΩ MAX. ②INSULATION RESISTANCE: 100 MΩ MIN. ③NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—
RAPID CHANGE OF TEMPERATURE	TEMPERATURE -55℃→ +85℃ TIME 30min→ 30min UNDER 5 CYCLES. (THE TRANSFERRING TIME OF THE TANK IS 2～3 min) (AFTER LEAVING THE ROOM TEMPERATURE FOR 1～2h.)	①CONTACT RESISTANCE: 20 mΩ MAX. ②INSULATION RESISTANCE: 100 MΩ MIN. ③NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—
RESISTANCE TO SOLDERING HEAT	1) REFLOW SOLDERING ≪REFLOW TIME≫ NUMBER OF REFLOW CYCLES : 2 CYCLES MAX. DURATION ABOVE 220 ℃, 60 sec. MAX. PEAK TEMPERATURE: 250℃ 10 sec. MAX. ≪PRE-HEAT TIME≫ PRE-HEAT TEMPERATURE(MIN) :150 ℃ PRE-HEAT TEMPERATURE(MAX) :180 ℃ PRE-HEAT TIME(MIN) : 90 sec. PRE-HEAT TIME(MAX) : 120 sec. 2) MANUAL SOLDERING SOLDERING IRON TEMPERATURE :350±10℃, SOLDERING TIME : 3sec. NO STRENGTH ON CONTACT.	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.	X	—
SOLDERABILITY	SOLDERING TEMPERATURE : 245°C DURATION OF IMMERSION :SOLDERING, FOR 5 sec.	NEW UNIFORM COATING OF SOLDER SHALL COVER MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED.	X	—

NOTE 1: INCLUDE THE TEMPERATURE RISING BY CURRENT.
NOTE2:NO CONDENSING
NOTE3:APPLY TO THE CONDITION OF LONG TERM STORAGE FOR UNUSED PRODUCTS BEFOR PCB ON BOARD, AFTER PCB BOARD , OPERATING TEMPERATURE AND HUMIDITTY RANGE IS APPLIED FOR INTERIM STRAGE DURING TRANSPORTATION.

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
△0	1				

REMARKS

Unless otherwise specified, refer to JIS C 5402.

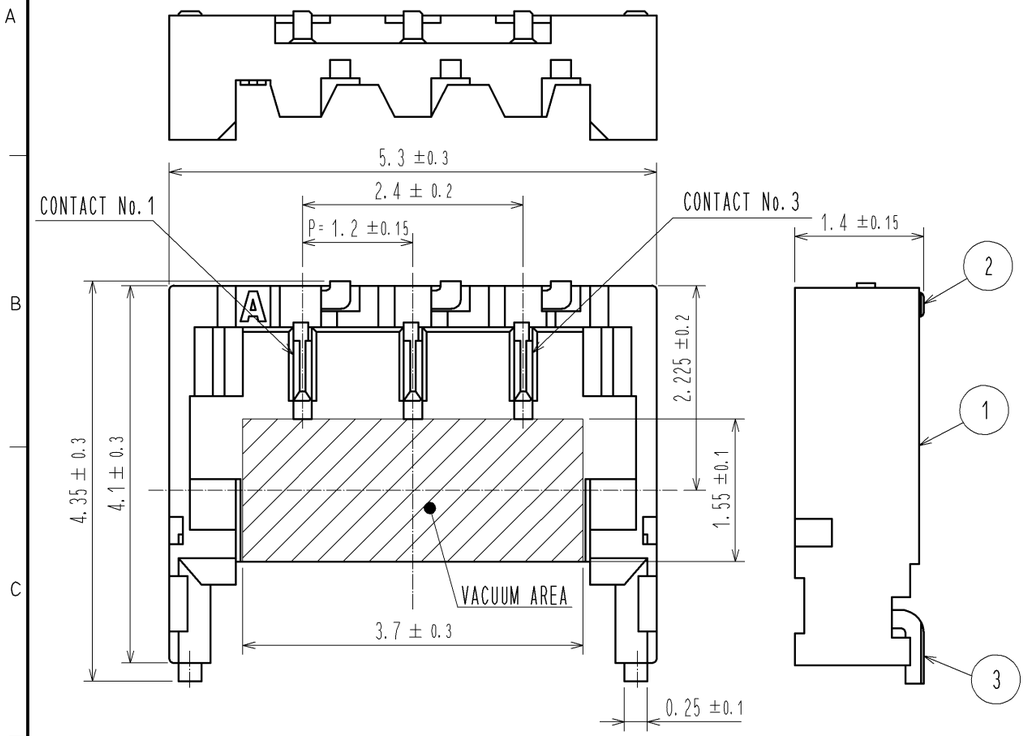
APPROVED	KI.AKIYAMA	12.02.21
CHECKED	HK.UMEHARA	12.02.21
DESIGNED	TS.KUMAZAWA	12.02.20
DRAWN	TS.KUMAZAWA	12.02.20

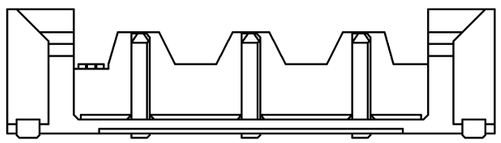
Note QT:Qualification Test AT:Assurance Test X:Applicable Test

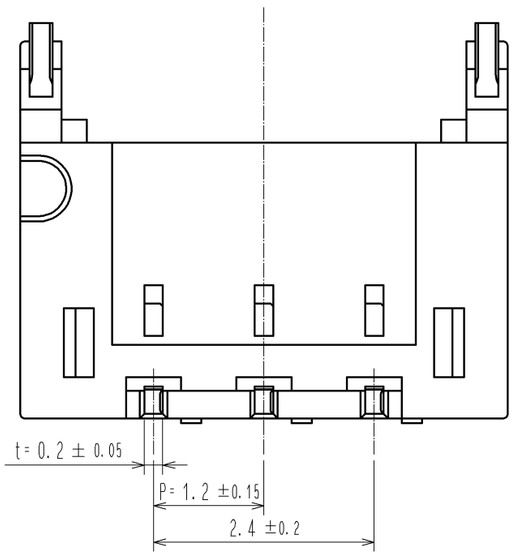
DRAWING NO. ELC4-343905-01

HRS	SPECIFICATION SHEET	PART NO.	DF57H-3P-1.2V(21)	
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL666-0105-0-21 △0	1/1

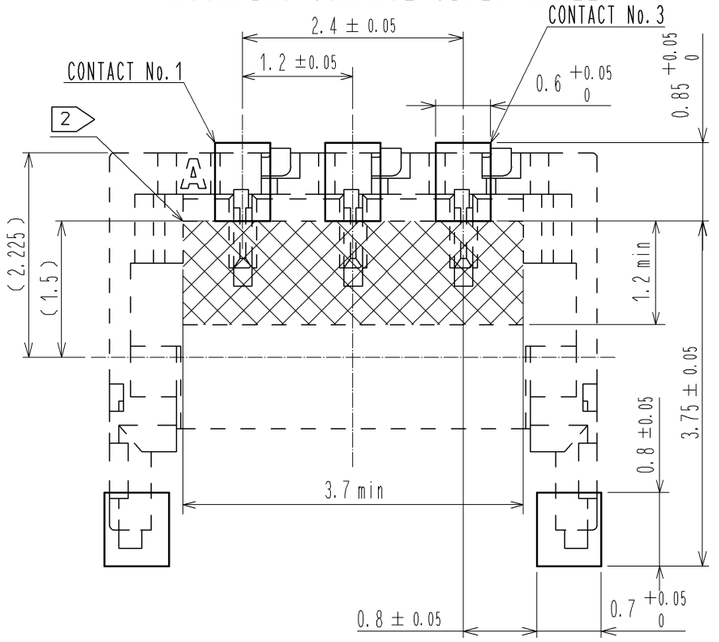
FORM HD0011-2-1



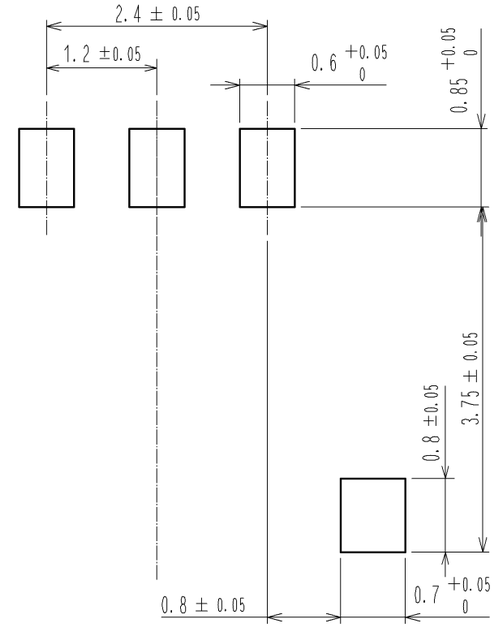




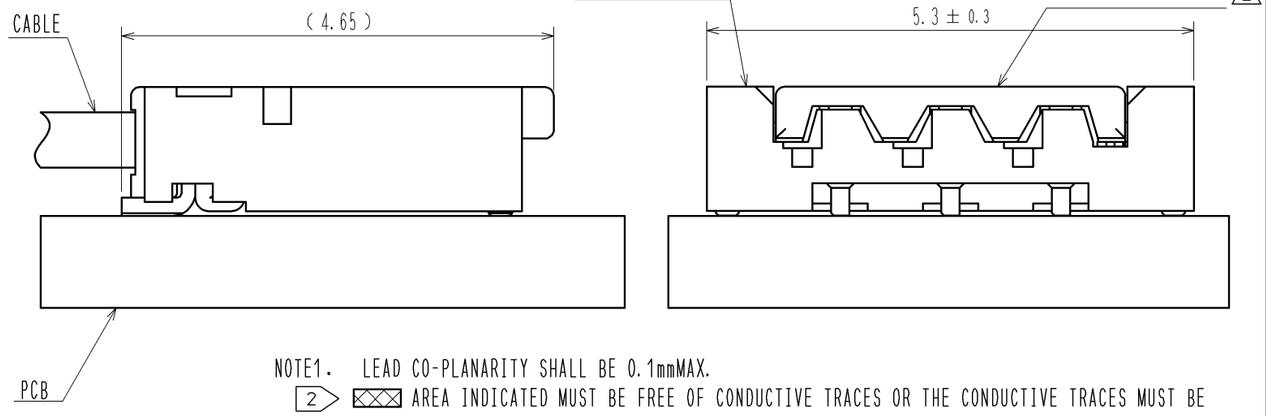
RECOMMENDED PCB LAYOUT (MOUNTING SURFACE SIDE) (FREE)



RECOMMENDED METAL MASK (FREE) TICKNESS : 0.1mm



MATING FIGURE (FREE)



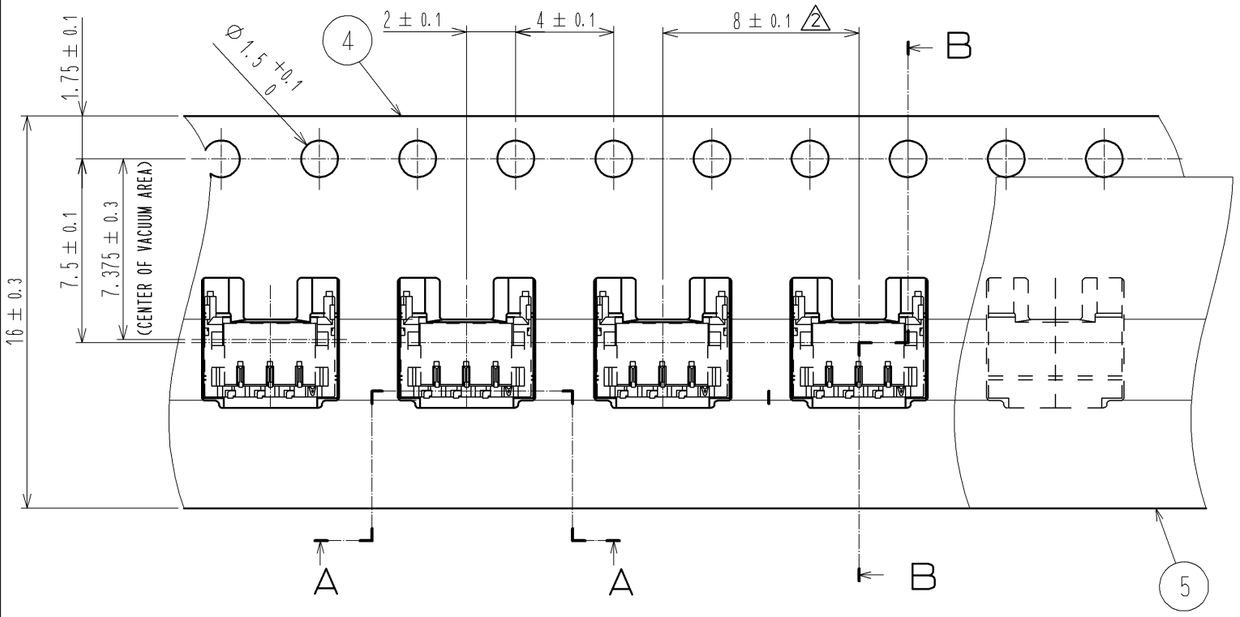
NOTE1. LEAD CO-PLANARITY SHALL BE 0.1mmMAX.
2 AREA INDICATED MUST BE FREE OF CONDUCTIVE TRACES OR THE CONDUCTIVE TRACES MUST BE COVERED BY RESISUT FILM.

NO.	MATERIAL	FINISH , REMARKS	NO.	MATERIAL	FINISH , REMARKS
3	BRASS	SURFACE:TIN PLATING 1μmMIN UNDER PLATING: NICKEL PLATING 0.5μmMIN			
2	BRASS	SURFACE:TIN PLATING 1μmMIN UNDER PLATING: NICKEL PLATING 0.5μmMIN	6	PS	REEL, BLACK
			5	POLYESTER	CLEAR(COVER TAPE)
1	LCP	UL94V-0, BLACK	4	PS	CLEAR (EMBOSSED CARIER TAPE)

UNITS	SCALE		COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
mm	FREE	2	2	DIS-H-007104	TS. KUMAZAWA	HK. UMEHARA	12.08.06

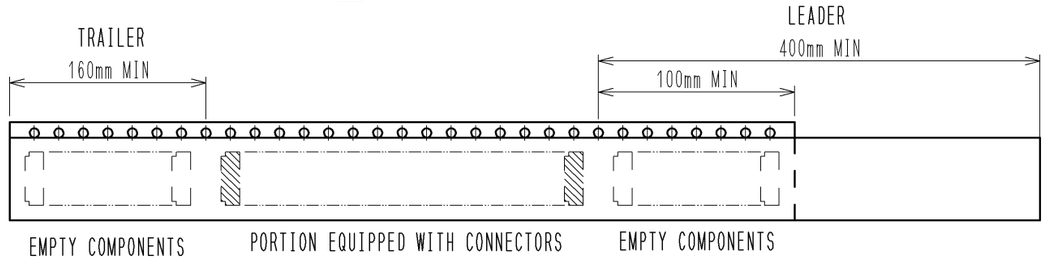
HIROSE ELECTRIC CO., LTD.

APPROVED	KI. AKIYAMA	12.02.21	DRAWING NO. EDC3-343905-01
CHECED	HK. UMEHARA	12.02.21	PART NO. DF57H-3P-1.2V(21)
DESIGNED	TS. KUMAZAWA	12.02.21	
DRAWN	TS. KUMAZAWA	12.02.21	CODE NO. CL666-0105-0-21 2 1/3



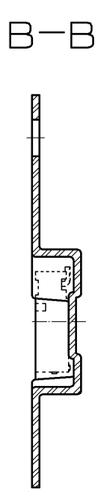
DIRECTION OF UNREELING

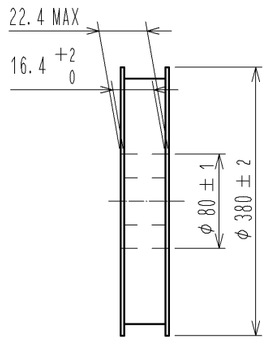
4 TAPING (FREE)

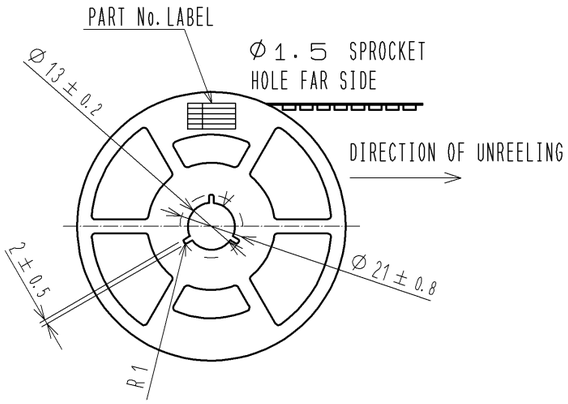


注3. 1 REEL : 5000 CONNECTORS
4 REEL TO JIS C 0806.(PACKAGING OF COMPONENTS FOR AUTOMATIC HANDLING)
5. THE DIMENSIONS IN PARENTHESES ARE FOR REFERENCE.

STYLE AND DIMENSION OF REEL (FREE)





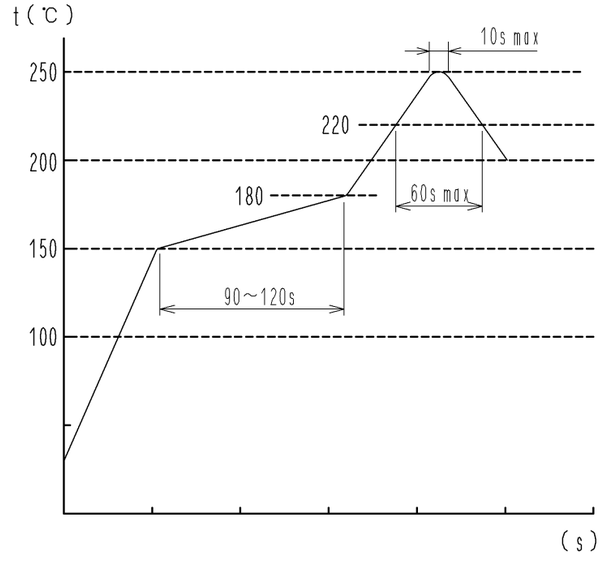


DETAIL OF PART No. LABEL

生産月日	年 月 日
図 番	CL666-0105-0-21
品 名	DF57H-3P-1.2V(21)
納入数量	5000 KO
納入者	ヒロセ電機(株)

SUPPLIER
QUANTITY
PART No.
CODE No.
DATE OF MANUFACTURED

REFLOW TEMPERATURE PROFILE USING LEAD-FREE SOLDER PASTE (REFERENCE)



NUMBER OF REFLOW CYCLES 2 CYCLES MAX.
THE TEMPERATURE IS MEASURED IN THE TERMINAL LEAD PART.

ADDITIONAL FACTORS, SUCH AS SOLDER PASTE TYPE, PCB SIZE AND OTHER MOUNTED COMPONENTS COULD AFFECT THE PROFILE. THEREFORE, A THOROUGH EVALUATION OF MOUNTING CONDITION IS REQUIRED PRIOR TO PRODUCTION. TEMPERATURE IS MEASURED AT CONTACT LEAD.

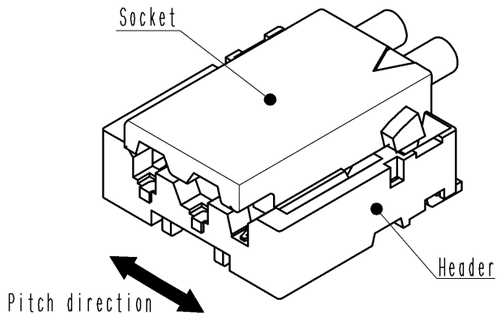
DRAWING NO.	EDC3-343905-01
PART NO.	DF57H-3P-1.2V(21)
CODE NO.	CL666-0105-0-21

2/3

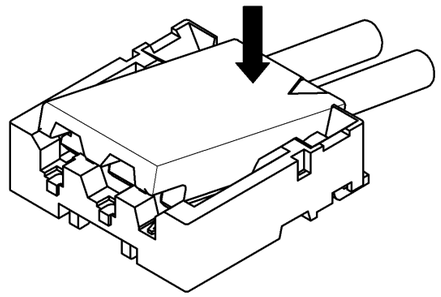
DF57 Series Mating / Unmating Operation Instruction (For DF57 series)

Mating

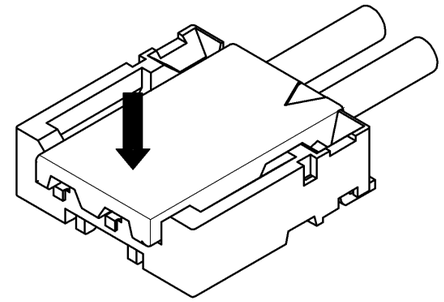
①By positioning the convexity of the socket sides to the header concavity, align the centers of the socket and the header in pitch direftion.



②Slightly press the socket down at cable side to tilted angle.

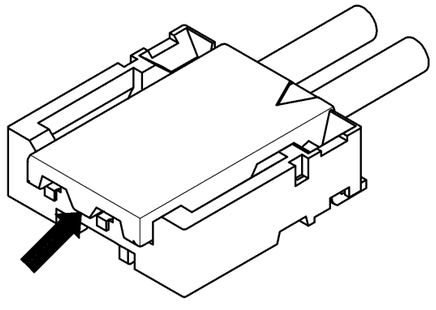


③Press down at the lever side with stabilizing t he cable side to insert. Mating completes.

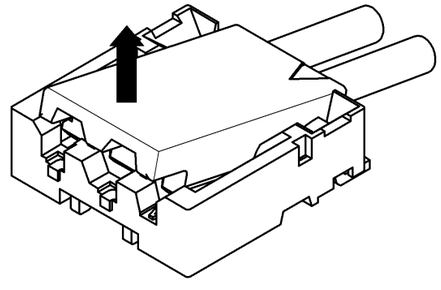


Unmating

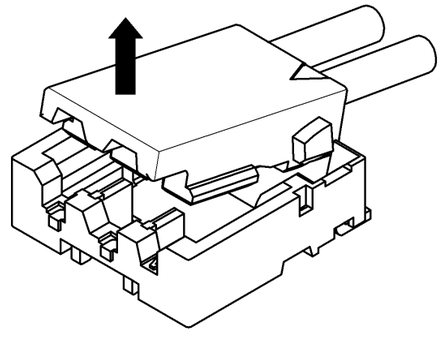
①Hook the lever with finger nail.



②Lift up to the upper difrection and friction lock is released.



③Lift up to the upper direction and positive lock is released. Removal completes.



HRS	DRAWING NO.	EDC3-343905-01
	PART NO.	DF57H-3P-1.2V(21)
	CODE NO.	CL666-0105-0-21