



(주)우주 일렉트로닉스
UJU ELECTRONICS CO., LTD

PRODUCT TYPE (제품 타입) :

BOARD TO BOARD

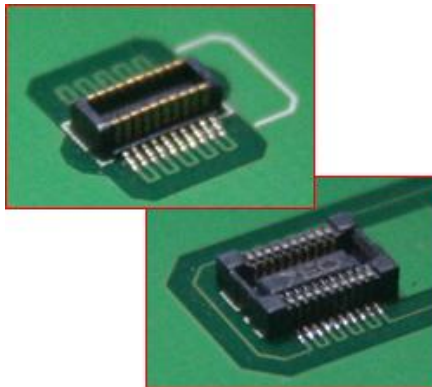


SERIES 0.4PITCH

0.4mm PITCH BOARD TO BOARD (H=1.5) CONNECTOR

(제품 승인원)
PRODUCT APPROVAL

Product image(제품 이미지)



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PRODUCT TYPE (제품 타입)	0.4mm PITCH BOARD TO BOARD H=1.5		
	Title (제품명)	PLUG (MALE)	BM040-I**B-N15
		RECEPTACLE (FEMALE)	BF040-I**B-N15
	Drafting (기안)	ISS. (작성)	CHK. (R&D) (검토)
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PRODUCT SPECIFICATION

LANGUAGE (언어)

English / Korean

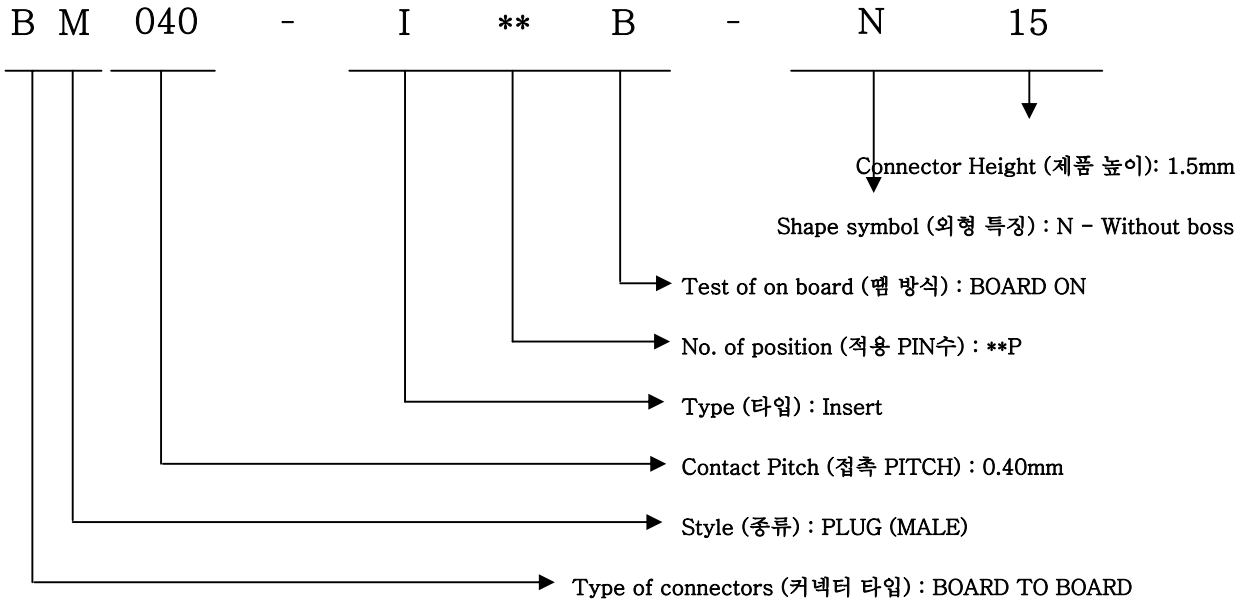
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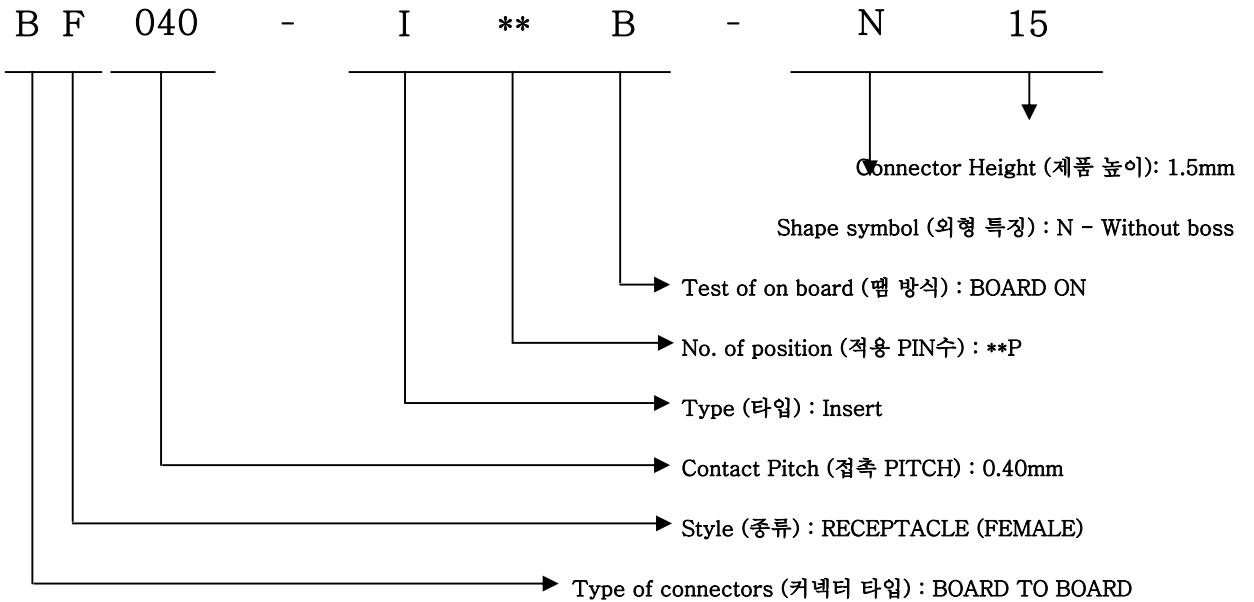
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3. TITLE (제품명)

1) PLUG (MALE)



2) RECEPTACLE (FEMALE)



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PRODUCT SPECIFICATION

LANGUAGE (언어)

English / Korean

4. SCOPE (적용 범위)

This specifies 0.4mm PITCH Board to Board Connector. The connector shall meet the performances specified here under condition with the plug(male) connector and receptacle(female) connector mates.

본 규격은 0.4mm PITCH Board to Board Connector 에 관한 것이며, Plug(Male) 과 Receptacle(female)이 결합된 상태에서 하기 조건과 같이 시험한다.

5. PRODUCT DESCRIPTION (제품 설명)

5.1 The BM040-I**B-N15 consists of one plastic base , ** contact terminals.

BM040-I**B-N15 는 1개의 플라스틱 베이스 , **개 터미널로 구성되어 있다.

The BF040-I**B-N15 consists of one plastic base , ** contact terminals.

BF040-I**B-N15 는 1개의 플라스틱 베이스 , ** 개 터미널로 구성되어 있다.

5.2 Materials, Plating and marking. (재질, 도금, 제작자)

ITEM (항목)	PART (부품)	MATERIAL (재질)	FINISH / PLATING (후처리)	VENDOR (공급자)
PLUG (MALE)	BASE INSULATOR	LCP	-	POLY PLASTICS
	CONTACT TERMINAL	C5210-H	CONTACT : Au over Nickel LEAD : Au flash over Nickel	NIKKO
RECEP' (FEMALE)	BASE INSULATOR	LCP	-	POLY PLASTICS
	CONTACT TERMINAL	BERYLLIUM COPPER	Nickel Barrier CONTACT : Au over Nickel LEAD : Au flash over Nickel	NGK

6. RELATED STANDARD (관련 규격)

MIL-STD-202 :

Test method for Electronic and Electrical Component Parts.

전자, 전기 부품의 시험 법

7. RATINGS (정격 사양)

ITEM (항목)	STANDARD DATA (정격)
Current Rating (허용 전류)	AC 0.5A , DC 0.5A / CONTACT
Voltage rating (정격 전압)	AC 50V , DC 50V / CONTACT
Temperature in operation (사용 온도)	-25℃ to +85 ℃
Temperature in preservation (보존 온도)	

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PRODUCT SPECIFICATION

LANGUAGE (언어)

English / Korean

8. PERFORMANCE (성능)

8.1 Mechanical Performance (기계적 성능)

ITEM (항목)	TEST METHOD (시험 방법)	SPECIFICATION (규격)
Appearance 외 관	Visual Inspection 육안 검사	No rust, contamination, damage nor deformation effecting on function. 기능상 유해한 부식,오염,흄, 변형등 없을 것
Appearance Dimension 외관치수		Refer to Drawings 첨부 도면에 준함
Insertion force & Separation force 삽입력 및 발거력	A connector shall be soldered on a board and inserted and separated at a speed of 25mm/min. 제품을 PCB board에 장착후, Male과 female을 분당 25mm/min 속도로 삽입, 발거후 측정 한다.	Insertion force : 0.981N (0.1Kgf)×N Max. N=pins Separation force : 0.0588N(0.006Kgf)×N Min. N=pins
Contact Retention force PIN 유지력	Load shall be applied on each pin at a speed of 25mm/min as shown below then pin retention force shall be measured. 각각의 핀에 25mm/min 의 속도로 하중을 화살표 방향으로 가하여 측정 한다.	1.50N min (153gf Min) 153gf 이상

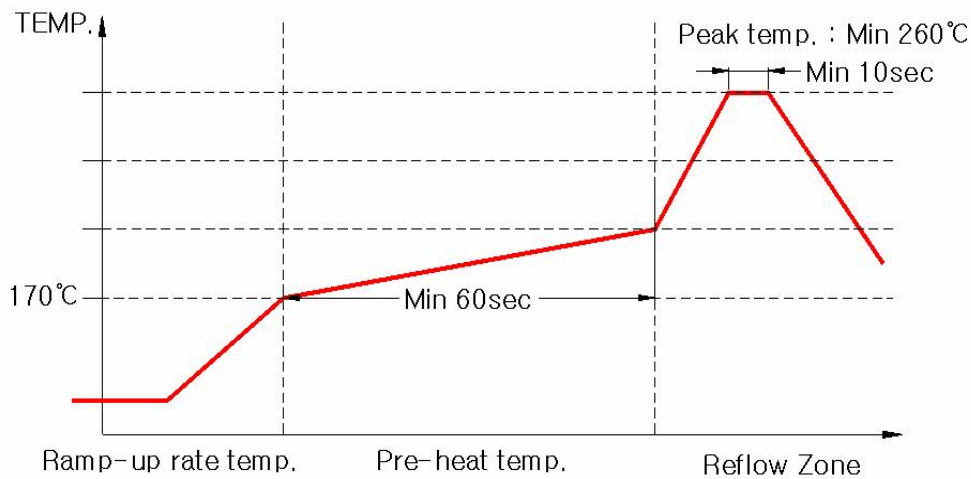
8.2 Physical Performance (물리적 성능)

ITEM (항목)	TEST METHOD (시험 방법)	SPECIFICATION (규격)
Durability 내구성 시험	Measured total withdrawal resistance after 30 cycle of total insertion and withdrawal operation 결합된 제품 삽입 및 분리 동작을 30회/분 실시후 접촉 저항을 측정 한다.	Contact resistance : 20mΩ Max 접촉 저항 : 20mΩ 이하
Vibration 내진동성	Current of 0.1A shall be applied during the testing The vibration shall be along each axis for the period of two hours with the maximum amplitude of 1.52mm and frequency of 10 to 55 to 10Hz/min according to MIL-STD-202 method 201 DC 100mA 통전상태에서 진폭1.52mm, 진동수10-55-10Hz 진동상태에서 X,Y,Z 방향으로 각각 2시간씩 진동시킨후 접촉저항 측정한다.	Appearance : No damage, loose part no crack Contact resistance : 20mΩ Max 외 관 : 이상 없을것. 접촉 저항 : 20mΩ 이하

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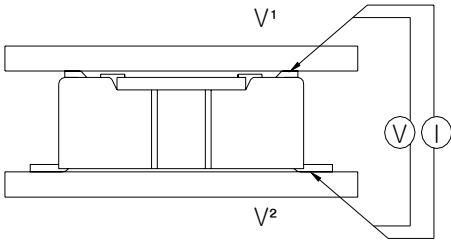
8.2 Physical Performance (물리적 성능)

ITEM (항목)	TEST METHOD (시험 방법)	SPECIFICATION (규격)
Solder ability 땀성	Immersion in Flux consisting of rosin 10% and methanol 90% for a period of 5 to 10 seconds Dip in molten solder consisting of Sn-Ag-Cu at 260°C plus or minus 5 degrees for 3 plus or minus 0.5 seconds FLUX (ROSIN10%,METHANOL 90%) 에 5~10초 동안 담근 후 Sn-Ag-Cu (온도 260°C±5°C) 에 3초±0.5초 동안 침전 시킨다.	More than 90% of area dipped in molten solder should be coated by solder. 침전부의 90%이상이 땀이 되어 있을 것.
Resistance to Soldering heat. 땀 내열성	REFLOW condition (Refer to Reflow) Reflow 조건 (Reflow 참조) 땀 내열성 시험은 하기의 그림과 같이 실시 한다.	No deformations and no damage should be observed 절연체 및 PIN의 변형 및 손상이없을것



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8.3 Electrical Performance (전기적 성능)

ITEM (항목)	TEST METHOD (시험 방법)	SPECIFICATION (규격)
Dielectric withstanding voltage 내전압	Measured between adjacent contacts. Test voltage : AC 250V Electrification time : 1min/5sec (Based upon MIL-STD-202 Method 301) 인접한 터미널간에 AC 250V 전압을 1분±5초간 인가 한다.	No flash over and no physical damage shall be observed. 절연 파괴 및 섬락이 없고 사용상 지장이 없을것.
Insulation resistance 절연 저항	Measured between adjacent contacts. Test voltage : DC 100V 1min±5sec (Based upon MIL-STD-202 Method 302 Condition B) 결합된 커넥터를 인접 터미널 및 터미널과 그라운드간에 DC 100V를 인가하여 측정 GKSEK.	Initial : 1,000MΩ Min 초기 : 1,000MΩ 이상
Low level contact resistance 접촉 저항	Under the condition below, low level contact resistance shall be measured between V ₁ and V ₂ by four-probe method. 하기와 같이 측정한다. 	20mΩ Max 20mΩ 이하

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BM040-I**B-N15 (PLUG -MALE)

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PRODUCT SPECIFICATION

LANGUAGE (언어)

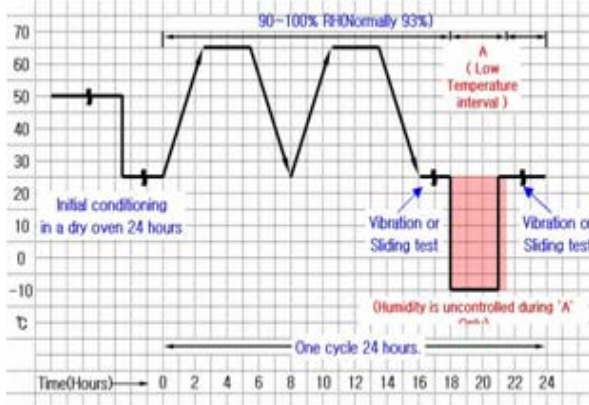
English / Korean

8.4 Environmental Performance (환경적 성능)

ITEM (항목)	TEST METHOD (시험 방법)	SPECIFICATION (규격)																														
Salt mist 염수분무 시험	Mated connector shall be exposed to salt solution spray of $5 \pm 1\%$ density at a temperature of $35^\circ\text{C} \pm 2^\circ\text{C}$ for 48hrs. A Salt water concentration $5 \pm 1\%$ Weight ambient air for 4hrs, insulation resistance & dielectric strength shall be checked. CONNECTOR를 아래 조건으로 시험후 흐르는 물에 세척후 상온에서 4hr 방치후에 특성을 측정한다. 조건 : 염수 농도 $5\% \pm 1\%$ 염수 분무 시간 $48\text{hr} \pm 4\text{hr}$ 시험 온도 $35^\circ\text{C} \pm 2^\circ\text{C}$	Appearance : No evident corrosion. 외 관 : 부식이나 이상 없을것.																														
Temperature cycling 열충격 시험	Mated connectors shall be subjected to 5 cycles under the following condition. <table border="1"> <tr> <td>STEP</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> <tr> <td>TEM'(°C)</td> <td>-55 ± 3</td> <td>$25 + 10, -0$</td> <td>85 ± 2</td> <td>$25 + 10, -5$</td> </tr> <tr> <td>Exposed time (MIN)</td> <td>30</td> <td>5</td> <td>30</td> <td>5</td> </tr> </table> Connector 를 결합한 상태에서 MIL-STD-202 Method 107 condition A 에 따라 5회 연속 시험을 실시한다. <table border="1"> <tr> <td>단계</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> <tr> <td>온도 (°C)</td> <td>-55 ± 3</td> <td>$25 + 10, -0$</td> <td>85 ± 2</td> <td>$25 + 10, -5$</td> </tr> <tr> <td>시간 (MIN)</td> <td>30</td> <td>5</td> <td>30</td> <td>5</td> </tr> </table>	STEP	1	2	3	4	TEM'(°C)	-55 ± 3	$25 + 10, -0$	85 ± 2	$25 + 10, -5$	Exposed time (MIN)	30	5	30	5	단계	1	2	3	4	온도 (°C)	-55 ± 3	$25 + 10, -0$	85 ± 2	$25 + 10, -5$	시간 (MIN)	30	5	30	5	Contact resistance : $20\text{m}\Omega$ Max 접촉 저항 : $20\text{m}\Omega$ 이하
STEP	1	2	3	4																												
TEM'(°C)	-55 ± 3	$25 + 10, -0$	85 ± 2	$25 + 10, -5$																												
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단계	1	2	3	4																												
온도 (°C)	-55 ± 3	$25 + 10, -0$	85 ± 2	$25 + 10, -5$																												
시간 (MIN)	30	5	30	5																												
High temperature (Life) 내고온성 시험	Leave in the chamber of Temperature 105°C for 96hr. Check insulation resistance and dielectric strength. 온도 105°C 에 96시간 보관한 다음 실온에서 1~2시간 방치 후 전기적 성능 측정 한다.	Contact resistance : $20\text{m}\Omega$ Max 접촉 저항 : $20\text{m}\Omega$ 이하																														

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8.4 Environmental Performance (환경적 성능)

ITEM (항목)	TEST METHOD (시험 방법)	SPECIFICATION (규격)
Moisture resistance (Temperature and humidity cycling) 온습도 사이클 시험	Mated connectors shall be subjected to 10 cycles under the following condition. 커넥터를 결합한 상태에서 아래 조건으로 10사이클 동안 방치 한다. 	Contact resistance : 20mΩ Max Dielectric strength : No flash over and no physical damage shall be observed. 접촉 저항 : 20mΩ 이하 내전압 : 이상 없을것.
Humidity (Normal condition) 내습성 시험	Mated connectors shall be left in the chamber of 40±2°C temperature and 90~95% humidity for 96hrs. After drying in ambient condition for 1 hours, measurement is done in accordance with MIL-STD-202, Method 103-B. CONNECTOR 를 결합한 상태에서 MIL-STD-202 METHOD 103 B 에 따라 시험을 행한 후 측정한다. 조건 : 시험조의 온도 40°C±2°C 상대 습도 90%~95% 시험 시간 96hr	Contact resistance : 20mΩ Max Insulation resistance : 100MΩ Min Dielectric strength : No flash over and no physical damage shall be observed. 접촉 저항 : 20mΩ 이하 절연 저항 : 100MΩ 이상 내전압 : 이상 없을것

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PRODUCT SPECIFICATION

LANGUAGE (언어)

English / Korean

9. Precautions & Product store condition & packing specification (주의사항, 저장 조건, 포장 규격)

- 9.1 Precautions for using (사용상 주의 사항)
- 1) Please do not apply excessive force or shock when using this product.
(제품 사용시 무리한 충격을 가하지 마십시오.)
 - 2) Please do not drop the product while moving. (이동중 낙하 금지입니다.)
 - 3) Please do not heap up too many products in reel package condition. (Reel 상태로 다단적재 금지입니다.)
 - 4) The product movement must be done in normal package condition.
(제품 이동은 포장된 상태로만 실시해 주십시오.)
- 9.2 Product storage condition (제품 저장 조건)
- 1) The serviceable duration for each conditions. (각 조건별 사용가능 기간)
 - MOLD (사출) : 1 year from it is made (제조일로 부터 1년 이내)
 - PRESS (단자) : 1 year from it is made (제조일로 부터 1년 이내)
 - Assembly (조립) : 1 year from it is made (제조일로 부터 1년 이내)
 - Packing (포장) : 1 year from it is made (제조일로 부터 1년 이내)
 - 2) Storage temperature (보관 온도) : 15~35℃
Please avoid storing the product for a long time in the abnormal temperature.
(상온 이외의 온도에서 장기 보관 피해 주십시오.)
 - 3) Storage humidity (보관 습도) : 65%RH
- 9.3 Packing condition (포장 조건)
- 1) BM040-I**B-N15 (PLUG - MALE)
 - Inner packing (내부 포장) : BOBBIN - Φ380
 - Outer packing (외곽 포장) : Paper BOX (종이 BOX) - 405 × 395 × 185mm
 - 2) BF040-I**B-N15 (RECEPTACLE - FEMALE)
 - Inner packing (내부 포장) : BOBBIN - Φ380
 - Outer packing (외곽 포장) : Paper BOX (종이 BOX) - 405 × 395 × 185mm
- 9.4 Quantity (포장 수량)
- 1) BM040-I**B-N15 (PLUG-MALE) : 2,000ea / 1 Reel
 - 2) BF040-I**B-N15 (RECEPTACLE - FEMALE) : 2,000ea / 1 Reel
- 9.5 Packing Method (포장 방법)
- See packing drawing (포장사양 도면을 참조)
- 9.6 Marking list (필수 표기 항목)
- 1) Manufacture's logo (제조사 로고)
 - 2) Title & Part Number (제품명 & 제품 번호)
 - 3) Quantity (제품 수량)
 - 4) Date Code (생산 일자)
 - 5) Other agreed substances between manufacturer and customer (기타 제조자와 고객 사이에 협정된 내용)

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10. Precautions & Operation (주의 사항 및 작업 방법)

The mating and separating connectors without soldering on PCB can cause damages for contact, insulator and terminals.

(PCB board에 땀되지 않았을 때 커넥터의 결합과 분리는 contact와 절연물의 손상과 terminals의 변형을 야기합니다.)

The product must be soldered on the PCB before using or testing. (사용 또는 시험전에 반드시 PCB board에 땀을 해야 합니다.)

Mated connectors must not be used for supporting the weight of PCB by itself. Please use other support materials.

(결합된 커넥터들에 의해 PCB의 무게가 지탱되지 않아야 합니다. 별도의 기구물에 의하여 PCB를 지탱하도록 권장합니다.)

Please do not twist the connector when mating and separating it, and do not move the connector rubbing with the edge part for positioning. (결합 및 분리시 비틀거나 모서리로 문지르면서 장착을 하지 마십시오.)

To prevent the deformation and damage in the connector leads soldered, please apply equal forces on the PCB (the opposite side of soldered connectors) along the total length or width.

(땀한 끝단에 손상이나 변형이 없도록 하기 위하여 커넥터 전체 길이 혹은 폭에 걸쳐 힘을 균등하게 적용하여 조립해 주십시오.)

Please be very carefull for mating and separating when the connector is soldered on the felxible substance.

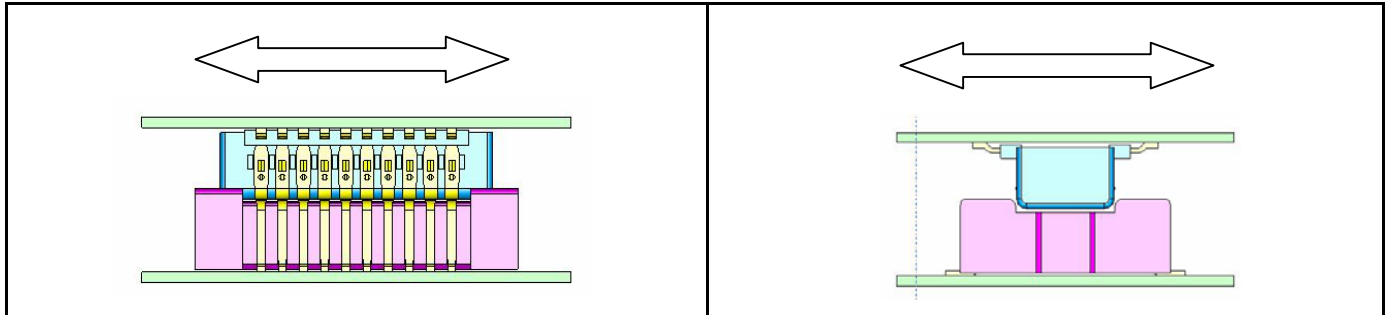
(커넥터가 견고하지 않은 (유연한) 물질에 땀이 되어있을 경우, 결합 / 분리시 최대한의 주의를 요합니다.)

Slight fade of the insulation substance do not affects to the function or strength of connector.

(절연 물질에 경미한 변색은 커넥터의 기능 혹은 재질 강도에 영향을 주지 않습니다.)

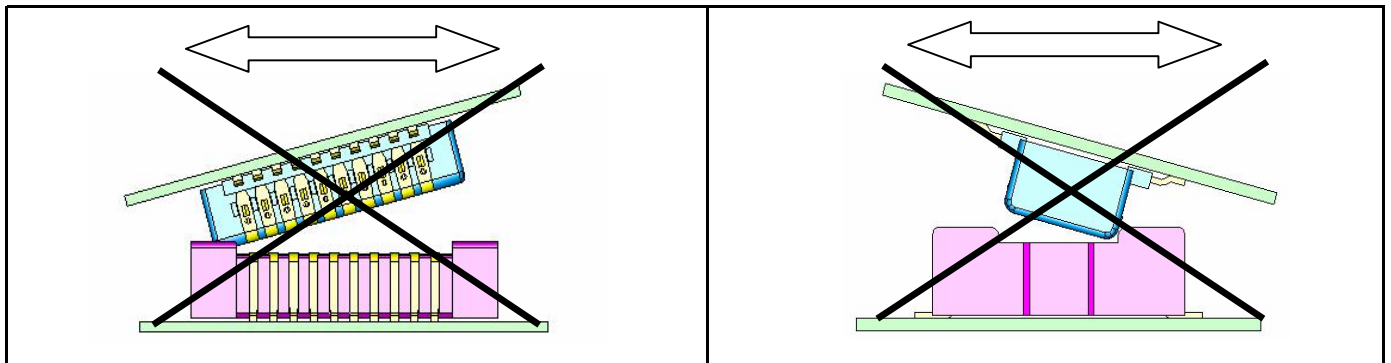
▶ Precautions for inserting connector (삽입시 주의 사항)

10.1 Please hold each connector parallel for positioning (위치를 잡을 때 각각의 커넥터들을 평행하게 유지하십시오.)



10.2 Please don't try to mate connectors by using one edge of side .

(한 쪽 끝 혹은 면을 이용하여 커넥터들을 결합하려 시도하지 마십시오.)

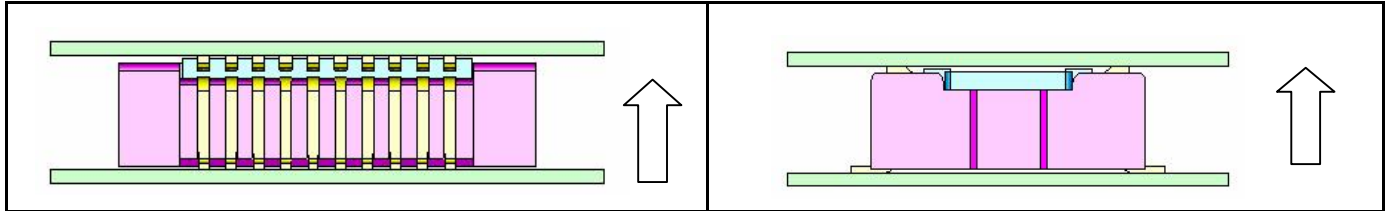


REV	TITLE	SHEET
C	BM040-I**B-N15 (PLUG -MALE) BF040-I**B-N15 (RECEPTACLE-FEMALE)	11 OF 12

▶ Precautions for separating (발거시 주의 사항)

10.3 Please hold each connector parallel during the separating operation. This condition can prevent the damage of the terminals and the base crash of the connector.

(발거시 양쪽 board의 평행을 유지하면서 발거하도록 합니다. 상기 조건은 분리하는 동안 전체적으로 균일한 높이를 유지함으로써 터미널 변형, Base파손 등으로 부터 커넥터를 지켜줍니다.)

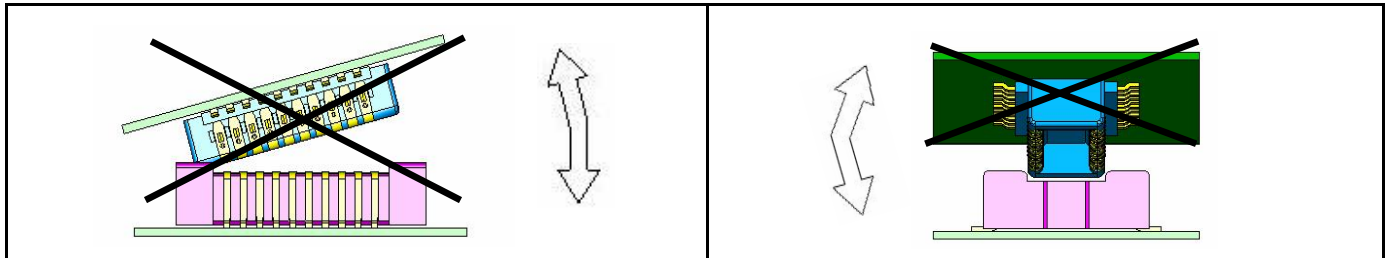


10.4 However, in order to use these procedure, the connector must be efficiently fixed on the robust circuit board.

(그러나 이러한 절차를 이용하기 위해서 커넥터는 견고한 회로 기판에 효율적으로 고정되어져야 합니다.)

Otherwise, the deformation of board during these working can cause the damage of solder joint or connect itself.

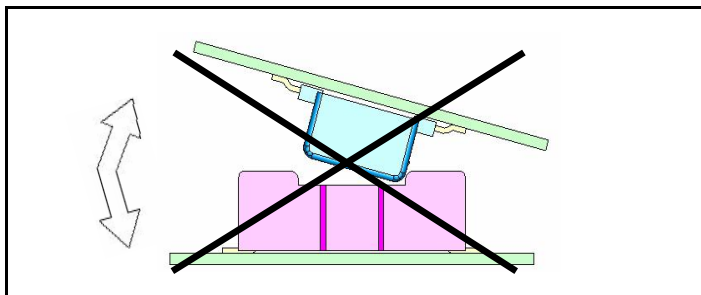
(그렇지 않을 경우 삽입, 발거시 댄 이음새 또는 커넥터 자체가 손상될 수 있습니다.)



10.5 As illustrated in the figure below, connector can be damaged when it is separated by one side inclination method.

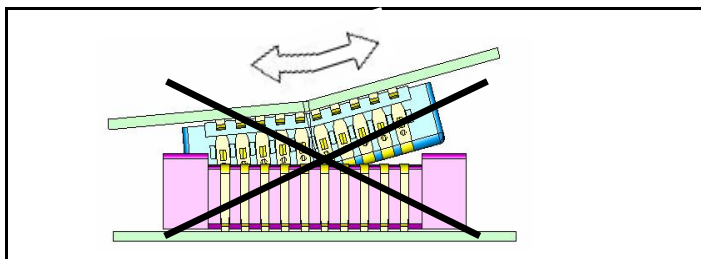
so, please don't remove connectors methods like this.

(아래 도식에 묘사된것처럼, 편측으로 기울여 발거할 경우 커넥터가 손상될 수 있으므로 편측으로 기울여 발거하지 말아 주십시오)



10.6 When the connector is not fixed on robust FPC, the failure of careful work can cause the fracture of connector.

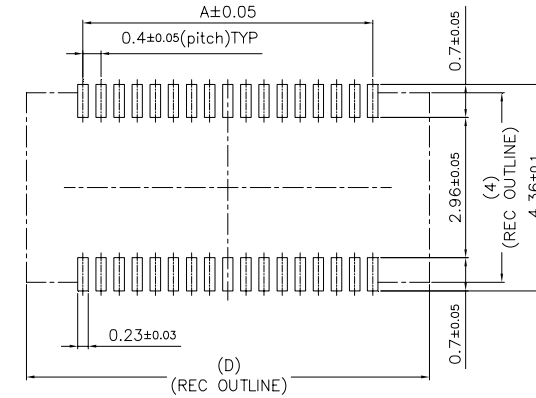
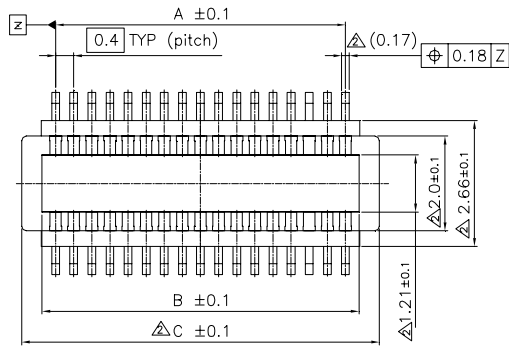
(견고하지 않은 FPC에 고정된 커넥터 분리시 조심스럽게 취급하지 않을 경우 커넥터가 파손될 수도 있습니다.)



REV	TITLE	SHEET
C	BM040-I**B-N15 (PLUG -MALE) BF040-I**B-N15 (RECEPTACLE-FEMALE)	12 OF 12

11. Product drawing (제품도면)

No.	REVISION	CHK'D/DATE	DRA'G
△	SERIES 90PIN 추가 - USER 요청	2007/01/15	S.H.P
△	USER 요청 이원화 관련 SPEC 변경 및 PCB 수정 / 평탄도 스펙 변경 Max 0.1 → 0.08	2008/06/25	J.H.P

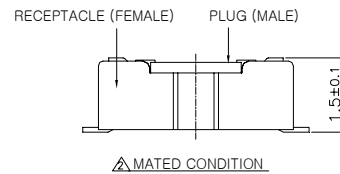
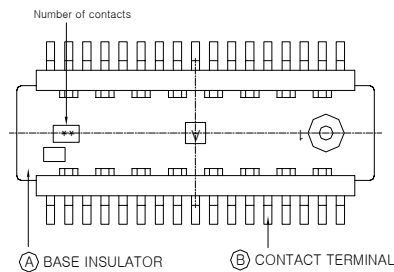
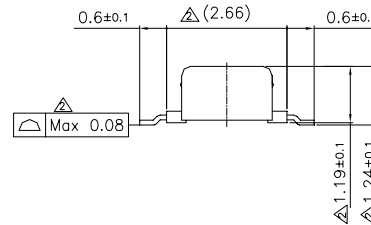
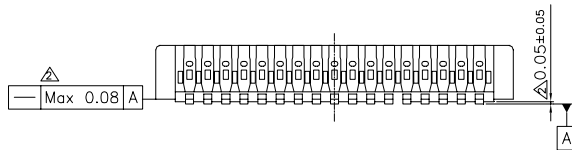


△ APPLICABLE P.C.B DIMENSION

【TABLE】

NO	DESCRIPTION	MATERIAL	FINISH
A	BASE INSULATOR	LCP	BLACK COLOR
B	CONTACT TERMINAL	PHOS-BRONZE t:0.100mm	CONTACT AREA - Au over Nickel NOT CONTACT AREA - Au flash

PINS	POSITION			
	A	B	C	△ D
16	2.8	3.4	4.3	5.3
18	3.2	3.8	4.7	5.7
20	3.6	4.2	5.1	6.1
24	4.4	5.0	5.9	6.9
30	5.6	6.2	7.1	8.1
34	6.4	7.0	7.9	8.9
40	7.6	8.2	9.1	10.1
50	9.6	10.2	11.1	12.1
54	10.4	11.0	11.9	12.9
60	11.6	12.2	13.1	14.1
△ 90	17.6	18.2	19.1	20.1

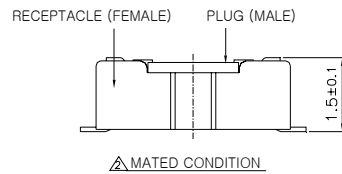
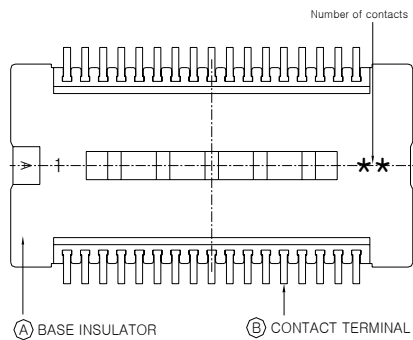
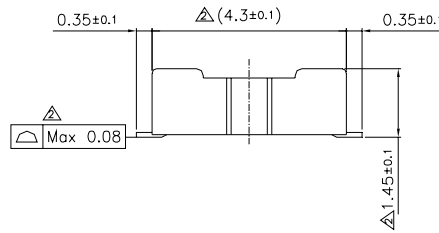
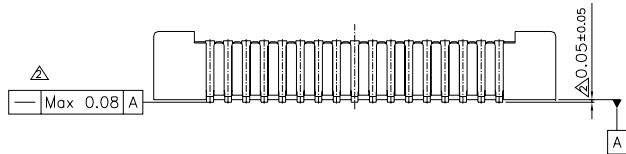
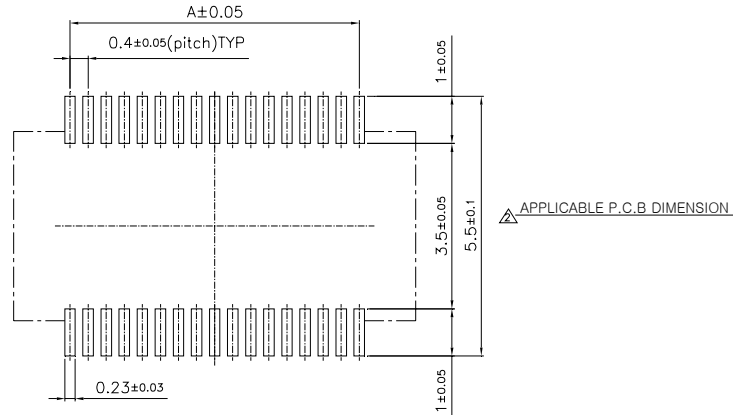
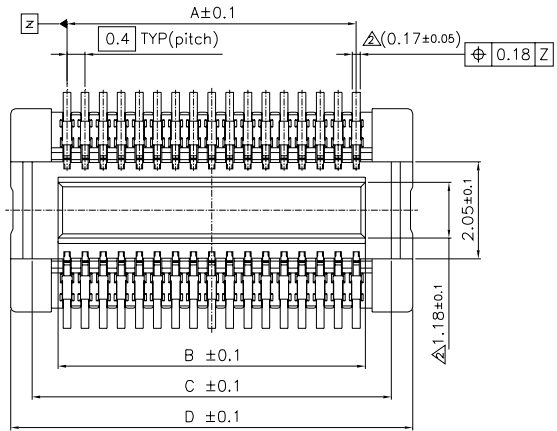


NOTE

- 제품 기능 및 성능에 유해한 BURR, 변형, 흠, 이물질 등이 없을 것.
- LEAD CO-PLANARITY : Max 0.08mm △
(단, 60P 이상의 PIN수는 평탄도 Max 0.1mm 관리 할것.)
- TITLE → ** number of PINS

DATE	2004/05/20	SCALE	10/1	(주)우주 일렉트로닉스 UJU Electronics co.,Ltd.
MATERIAL	SEE TABLE	REVISION No.	□	
FINISH	SEE TABLE	TITLE	BM040-I**B-N15 <small>(H=1.5mm 0.4 PITCH B TO B PLUG(MALE) CONN)</small>	
GENERAL TOLERANCE	0 ±0.20 0.0 ±0.15 0.00 ±0.10	DRAWING	DESIGN	CHECK
		J.H.PARK	J.H.PARK	D.H.KIM
			B.R.KIM	
				TRIGONOMETRY
				UNIT
				SIZE
				mm
				A3
				SAVED FILE NAME
				BM040-I**B-N15-C01.DWG

No.	REVISION	CHK'D/DATE	DRA'G
△	SERIES 90PIN 추가 - USER 요청	2007/01/15	S.H.P
△	USER 요청 이원화 관련 SPEC' 변경 및 PCB 수정 / 평탄도 스펙 변경 Max 0.1 → 0.08	2008/06/25	J.H.P



NOTE

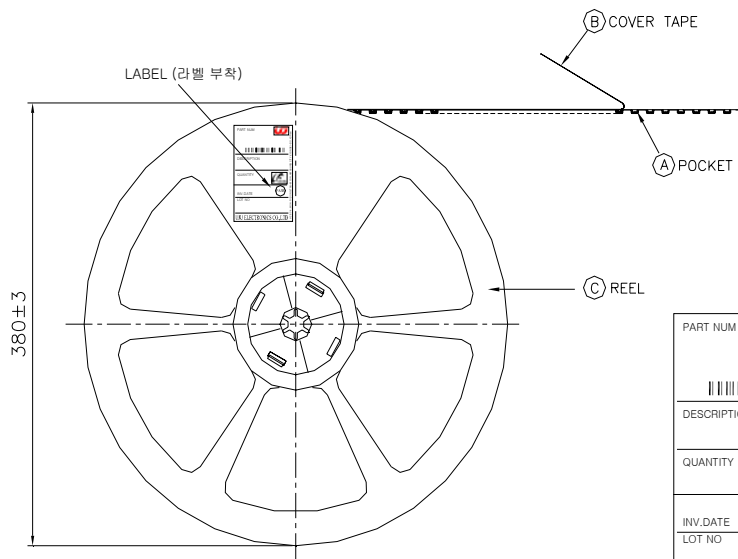
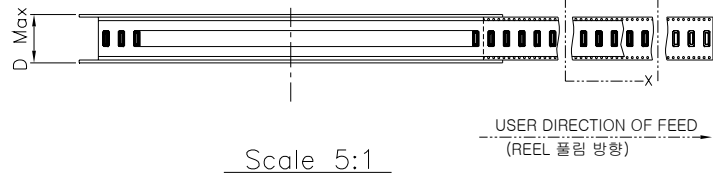
- 제품 기능 및 성능에 유해한 BURR, 변형, 흠, 이물질 등이 없을 것.
- LEAD CO-PLANARITY : Max 0.08mm △
(단, 60P 이상의 PIN수는 평탄도 Max 0.1mm 관리 할것.)
- TITLE → ** number of PINS

[TABLE]

NO	DESCRIPTION	MATERIAL	FINISH			
A	BASE INSULATOR	LCP	BLACK COLOR			
B	CONTACT TERMINAL	BERYLLIUM COPPER t:0.100mm	Nickel Barrier CONTACT AREA : Au over Nickel LEAD AREA : Au flash			
PINS	POSITION					
	A	B	C	D		
16	2.8	3.2	4.35	5.3		
18	3.2	3.6	4.75	5.7		
20	3.6	4.0	5.15	6.1		
24	4.4	4.8	5.95	6.9		
30	5.6	6.0	7.15	8.1		
34	6.4	6.8	7.95	8.9		
40	7.6	8.0	9.15	10.1		
50	9.6	10.0	11.15	12.1		
54	10.4	10.8	11.95	12.9		
60	11.6	12.0	13.15	14.1		
△ 90	17.6	18.0	19.15	20.1		

DATE	2004/04/07	SCALE	10/1	(주)우주일렉트로닉스 UJU Electronics co., Ltd.
MATERIAL	SEE TABLE	REVISION No.	10/1	
FINISH	SEE TABLE	REVISION No.	10/1	TITLE
GENERAL TOLERANCE	0 :±0.20 0.0 :±0.15 0.00 :±0.10	APPROVAL	TRIGONOMETRY	BF040-I**B-N15 <small>(H=1.5mm 0.4 PITCH B TO B RECEPTACLE(FEMALE) CONV)</small>
DRAWING	DESIGN	CHECK	APPROVAL	UNIT: mm SIZE: A3
J.H.PARK	J.H.PARK	D.H.KIM	B.R.KIM	SAVED FILE NAME: BF040-I**B-N15-C01.DWG

12. Packing drawing (포장도면)

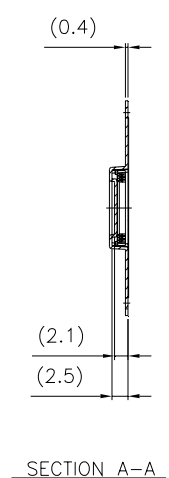


PART NUM	
DESCRIPTION	
QUANTITY	
INV. DATE	
LOT NO	
UJU ELECTRONICS CO.,LTD	

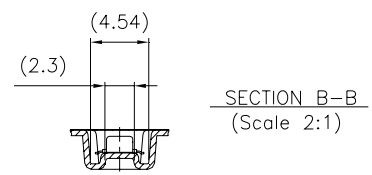
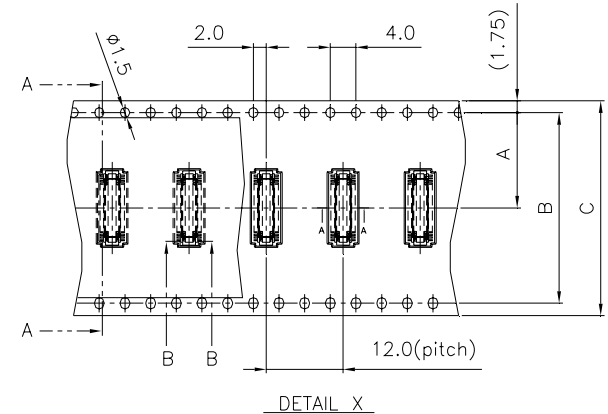
【REEL LABEL】

【TABLE】

NAME	(A) POCKET	(B) COVER TAPE	(C) REEL
MATERIAL	PS	PET	HIPS



No.	REVISION	CHK'D/DATE	DRA'G
△-		-	-



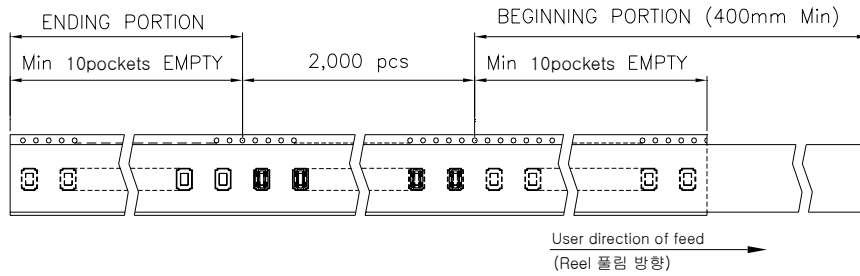
【DIMENSION TABLE】

PINS	POSITION	A	B	C	D
16		11.5	-	24	30.4
18		11.5	-	24	30.4
20		11.5	-	24	30.4
24		11.5	-	24	30.4
30		11.5	-	24	30.4
34		11.5	-	24	30.4
40		11.5	-	24	30.4
50		14.2	28.4	32	38.4
54		14.2	28.4	32	38.4
60		14.2	28.4	32	38.4
90		14.2	28.4	32	38.4

DATE	2007/06/12	SCALE	1/1	(주)우주 일렉트로닉스 UJU Electronics co.,Ltd.
MATERIAL	SEE TABLE	REVISION No.	가	
FINISH	SEE TABLE	TITLE	BM040-I**B-*15 (0.4mm PITCH BOARD TO BOARD 'E' TYPE MALE)	
GENERAL TOLERANCE	0.0 ±0.40 0.00 ±0.30 ANGULAR ±1°	DRAWING	DESIGN	APPROVAL
		J.H.PARK	-	S.K.KWON
				B.R.KIM
				TRIGONOMETRY
				UNIT mm
				SIZE A4
				SAVED FILE NAME
				BM040-I**B-*15-W01.DWG

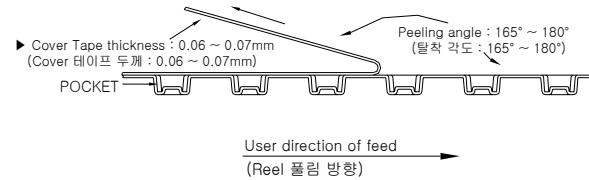
No.	REVISION	CHK'D/DATE	DRA'G
△	-	-	-

【 REFERENCE 1 (참조 1) 】

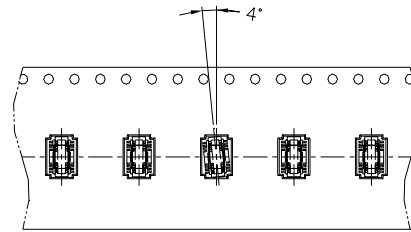


【 REFERENCE 1 (참조 1) 】

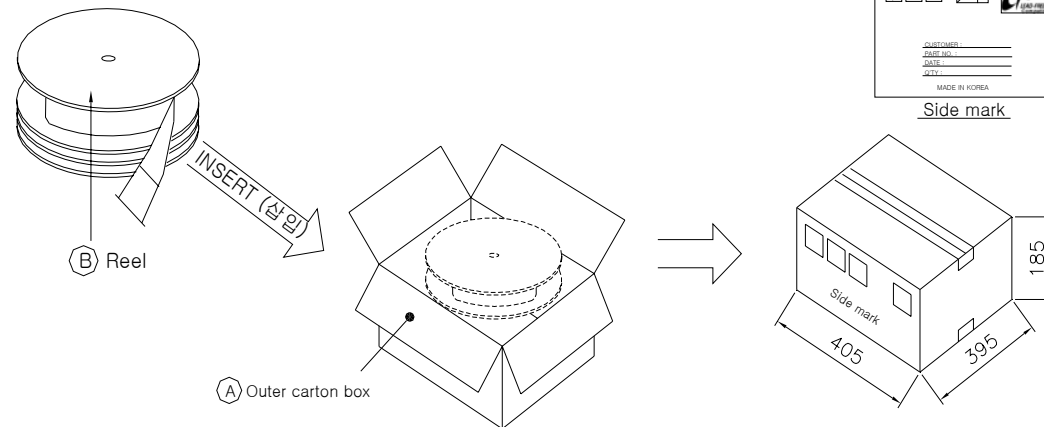
- ▶ Peel strength of cover tape : 10~70gf (Cover 테이프 탈착강도 : 10~70gf)
- ▶ Peeling speed : 300mm/minute (탈착 속도 : 300mm/분)



【 REFERENCE 2 (참조 2) 】



【 OUTER PACKING 】



◆ Emboss tape specification (포장 사양)

【 REFERENCE 1 】 (참조 1)

- Quantity : 2,000pcs / 1 Reel (수량 : 2,000pcs / 릴)
- Beginning portion - Empty 10pockets min
Ending portion - Empty 10pockets min.
(Reel 앞에서 10pockets 이상 , 뒤에서 10pockets 이상 비울것)
- Peel strength of cover tape : 10~70gf (Cover 테이프 탈착강도 : 10~70gf)
- Peeling speed : 300mm/minute (탈착 속도 : 300mm/분)
- Peeling angle : 165° ~ 180° (탈착 각도 : 165° ~ 180°)
- Cover Tape thickness : 0.06 ~ 0.07mm (Cover 테이프 두께 : 0.06 ~ 0.07mm)

【 REFERENCE 2 】 (참조 2)

- Product angle in pocket would be tilt : 4.0° (Emboss 내 부품 뒤틀림각도 : 4.0°)

<< NOTE >>

- Reel 2,000ea packing. (1Reel 2,000ea 포장)
- Outer box packing (외곽 포장)
 - ▷ 16p~40p : 2,000ea × 5reel = 10,000ea
 - ▷ 50p~90p : 2,000ea × 4reel = 8,000ea
- Horizontal packing (Reel)
- Outer carton box size (외곽 포장 치수) : 405(width) × 395(length) × 185(height)
- Reel - Adhesive of label.(Label 부착)
- Outer box (외곽 포장 박스) - Lead free mark & box label (Lead free 마크 & 라벨 부착)

품 명 (ITEM)	
규 격 (SPECIFICATION)	
수 량 (QUANTITY)	
P / O NO.	
공급자 (SUPPLIER)	Uju Electronics co.,Ltd.
S P E C NO.	
L O T NO.	
제조일 (The date of manufac-ture)	
유효일(date) of the validity	

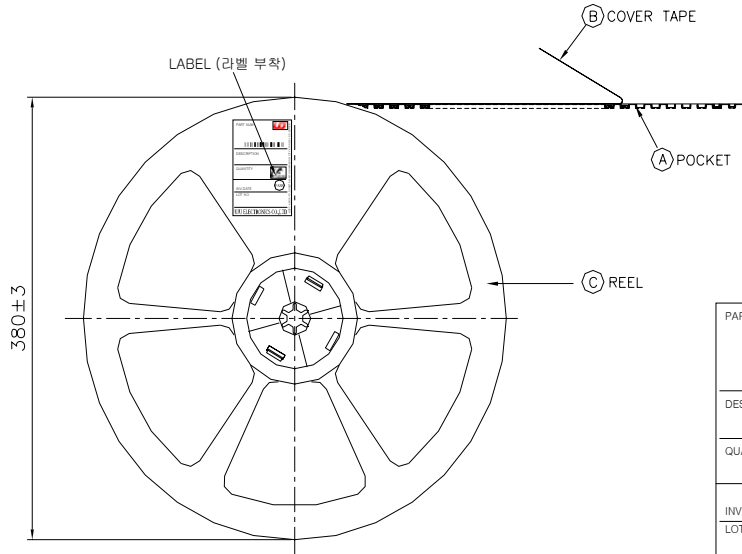
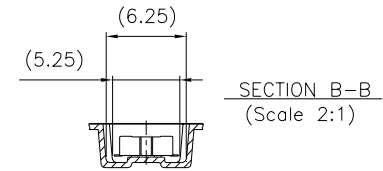
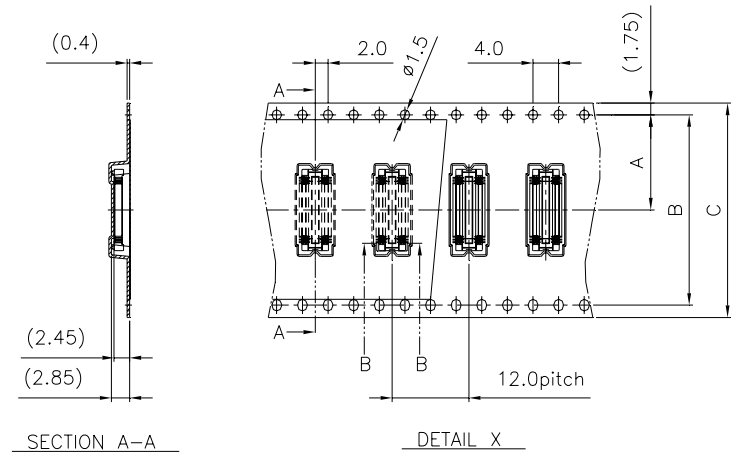
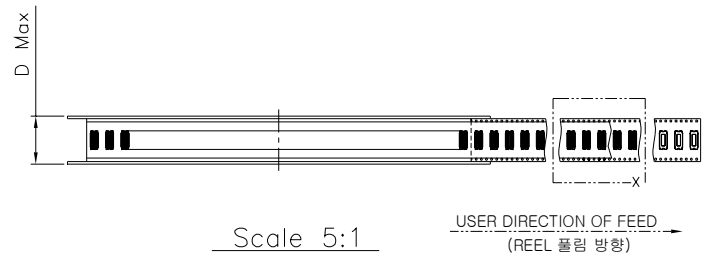
【TABLE】

NO.	NAME	MATERIAL
A	Outer carton box	Corrugated cardboard (골판지)
B	Reel	HIPS

【 OUTER BOX LABEL 】

DATE	2007/06/12	SCALE	N/S	(주)우주 일렉트로닉스 UJU Electronics co.,Ltd.	
MATERIAL	SEE TABLE	REVISION No.	가	TITLE	BM040-I**B-*15 (0.4mm PITCH BOARD TO BOARD 'E' TYPE MALE)
FINISH	-	APPROVAL		TRIGONOMETRY	
GENERAL TOLERANCE:		DESIGN	J.H.PARK	UNIT	mm
		CHECK	S.K.KWON	SIZE	A4
		APPROVAL	B.R.KIM	SAVED FILE NAME	BM040-I**B-*15-W02.DWG

No.	REVISION	CHK'D/DATE	DRA'G
△		-	-



PART NUM	
DESCRIPTION	
QUANTITY	
INV. DATE	
LOT NO	
UJU ELECTRONICS CO.,LTD	

【REEL LABEL】

【TABLE】

NAME	(A) POCKET	(B) COVER TAPE	(C) REEL
MATERIAL	PS	PET	HIPS

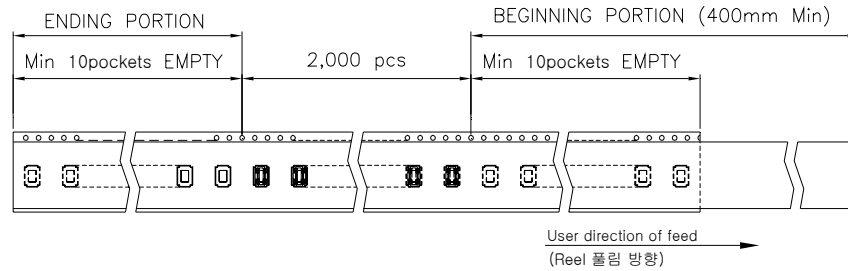
【DIMENSION TABLE】

PINS	POSITION	A	B	C	D
16		11.5	-	24	30.4
18		11.5	-	24	30.4
20		11.5	-	24	30.4
24		11.5	-	24	30.4
30		11.5	-	24	30.4
34		11.5	-	24	30.4
40		11.5	-	24	30.4
50		14.2	28.4	32	38.4
54		14.2	28.4	32	38.4
60		14.2	28.4	32	38.4
90		14.2	28.4	32	38.4

DATE	2007/06/12	SCALE	1/1	(주)우주일렉트로닉스 UJU Electronics co.,Ltd.
MATERIAL	SEE TABLE	REVISION No.	가	
FINISH	SEE TABLE	TITLE	BF040-1**B-*15 (0.4mm PITCH BOARD TO BOARD 'E' TYPE FEMALE)	
GENERAL TOLERANCE	0.0 ±0.40 0.00 ±0.30 ANGULAR ±5°	APPROVAL	TRIGONOMETRY	UNIT mm SIZE A4
DRAWING	DESIGN	CHECK	APPROVAL	SAVED FILE NAME
J.H.PARK	-	S.K.KWON	B.R.KIM	BF040-1**B-*15-W01.DWG

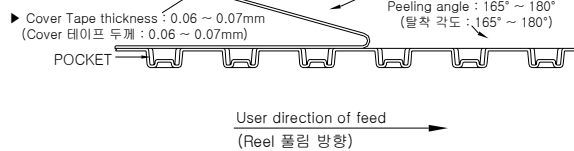
No.	REVISION	CHK'D/DATE	DRA'G
△		-	-

【 REFERENCE 1 (참조 1)】

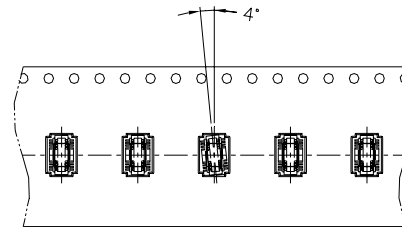


【 REFERENCE 1 (참조 1)】

- ▶ Peel strength of cover tape : 10~70gf (Cover 테이프 탈착강도 : 10~70gf)
- ▶ Peeling speed : 300mm/minute (탈착 속도 : 300mm/분)



【 REFERENCE 2 (참조 2)】



◆ Emboss tape specification (포장 사양)

【REFERENCE 1】 (참조 1)

- Quantity : 2,000pcs / 1 Reel (수량 : 2,000pcs / 릴)
- Beginning portion - Empty 10pockets min
Ending portion - Empty 10pockets min.
(Reel 앞에서 10pockets 이상, 뒤에서 10pockets 이상 비울것)
- Peel strength of cover tape : 10~70gf (Cover 테이프 탈착강도 : 10~70gf)
- Peeling speed : 300mm/minute (탈착 속도 : 300mm/분)
- Peeling angle : 165° ~ 180° (탈착 각도 : 165° ~ 180°)
- Cover Tape thickness : 0.06 ~ 0.07mm (Cover 테이프 두께 : 0.06 ~ 0.07mm)

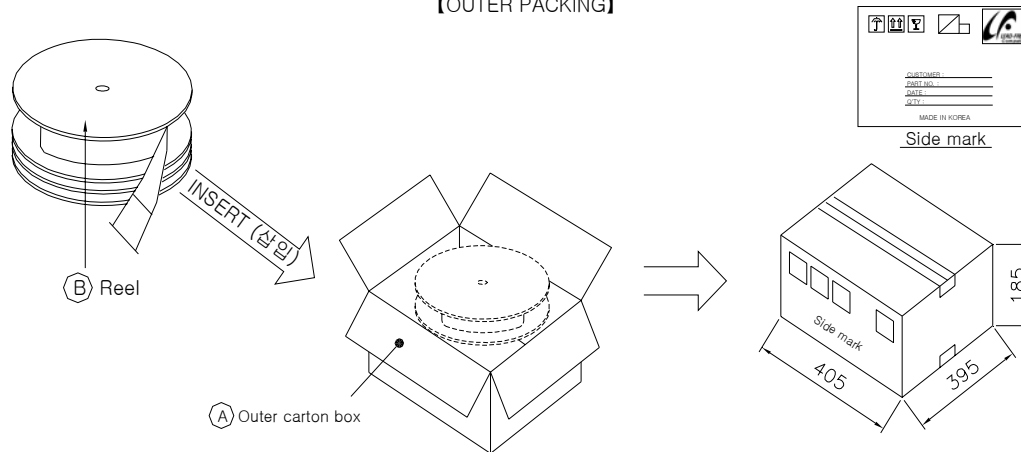
【REFERENCE 2】 (참조 2)

- Product angle in pocket would be tilt : 4.0° (Emboss 내 부품 뒤롤림각도: 4.0°)

<< NOTE >>

- Reel 2,000ea packing. (1Reel 2,000ea 포장)
- Outer box packing (외곽 포장)
 - ▷ 16p~40p : 2,000ea × 5reel = 10,000ea
 - ▷ 50p~90p : 2,000ea × 4reel = 8,000ea
- Horizontal packing (Reel)
- Outer carton box size (외곽 포장 치수) : 405(width) × 395(length) × 185(height)
- Reel - Adhesive of label. (Label 부착)
- Outer box (외곽 포장 박스) - Lead free mark & box label (Lead free 마크 & 라벨 부착)

【 OUTER PACKING】



품 명 (ITEM)	
규 격 (SPECIFICATION)	
수 량 (QUANTITY)	
P / O NO.	
공급자 (SUPPLIER)	Uju Electronics co., Ltd.
S P E C NO.	
L O T NO.	
제조일 (The date of manufac-ture)	
유효일 (date) of the validity	

【TABLE】

NO.	NAME	MATERIAL
A	Outer carton box	Corrugated cardboard (골판지)
B	Reel	HIPS

【 OUTER BOX LABEL】

DATE	2007/06/12	SCALE	N/S	(주)우주일렉트로닉스 UJU Electronics co., Ltd.	
MATERIAL	SEE TABLE	REVISION No.	가	TITLE	BF040-I**B-*15
FINISH	-	GENERAL TOLERANCE	X	(0.4mm PITCH BOARD TO BOARD 'E' TYPE FEMALE)	
DRAWING	DESIGN	CHECK	APPROVAL	TRIGONOMETRY	UNIT / SIZE
J.H.PARK	-	S.K.KWON	B.R.KIM		mm / A4
SAVED FILE NAME				BF040-I**B-*15-W02.DWG	