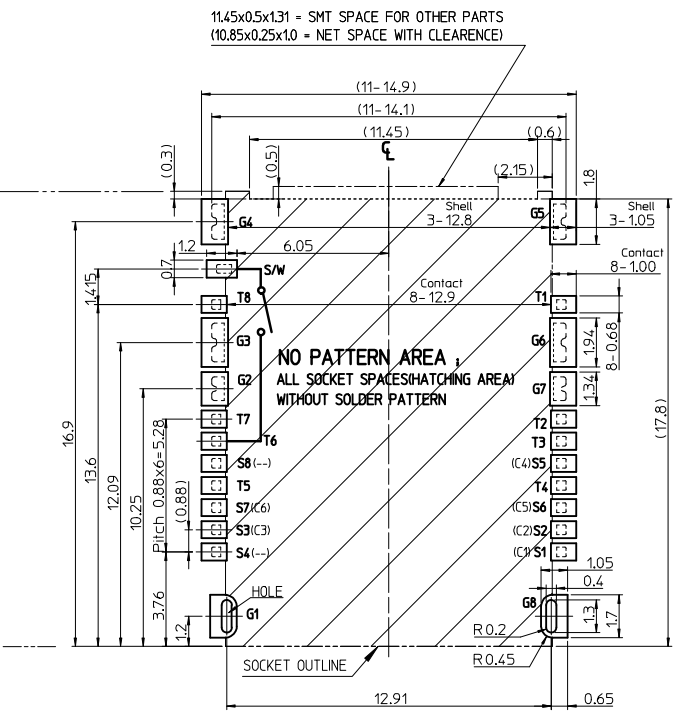
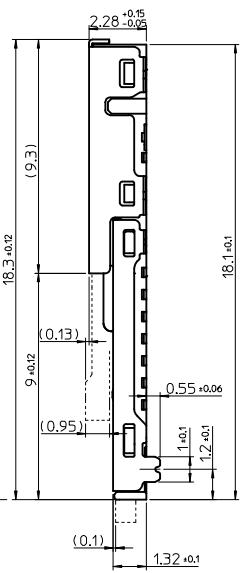
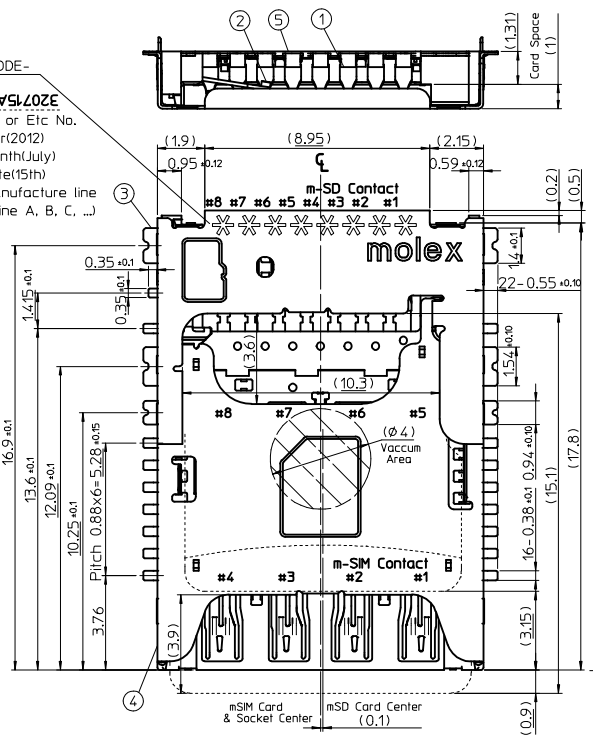


-DATE CODE-
 example: **VSL00ZE**
 3 -> M/C or Etc No.
 2 -> Year(2012)
 07 -> Month(July)
 15 -> Date(15th)
 A -> Manufacture line
 (Line A, B, C, ...)



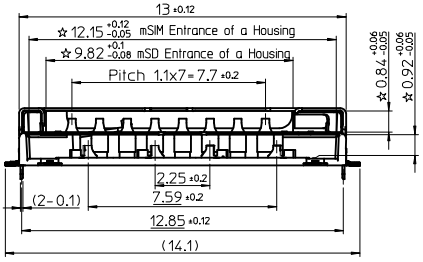
RECOMMENDED PCB LAYOUT [FRONT VIEW]
 (TOLERANCE : ±0.05)

[microSIM CARD PIN-MAP]

8P	6P	DESCRIPTION
S1	C1	Vcc(Supply V)
S2	C2	RST(Reset)
S3	C3	CLK(Clock)
S4	--	Reserved
S5	C4	GND
S6	C5	Vpp(Program V)
S7	C6	I/O
S8	--	Reserved
G1-G8		GND

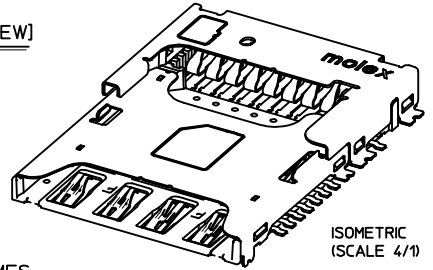
[microSD CARD PIN-MAP]

PIN NO.	DESCRIPTION
T1	DAT2
T2	CD/DAT3 ²
T3	CMD
T4	V _{DD}
T5	CLK
T6	V _{SS} (GND)
T7	DAT0
T8	DAT1
S/W	CARD DETECTOR



NOTES

1. MATERIALS: SEE TABLE
2. FINISHES: SEE TABLE
3. MATES WITH
 - UPPER: microSD Card
 - LOWER: Micro SIM(UICC) Card
4. PRODUCT SPECIFICATIONS: PS-104168-001
5. PACKING SPECIFICATIONS: SPK-104168-001
6. COPLANARITY OF SOLDER TAILS: 0.08mm MAX. BEFORE & AFTER 260°C REFLOW 3TIMES
7. REFERENCE CARD DIMENSIONS ARE WITH STANDARD DIMENSION CARD
8. CUSTOMER'S CTF DIMENSION(☆) IS EQUAL TO MOLEX MAJOR QUALITY SYMBOL(▼)



[Circuit diagram for Detection Switch of microSD card]

Card insertion condition	Card detect switch	Circuit mSD #pin	Circuit Switch terminal
Without Card	Open	---	---
Card insertion	Close	---	---

NO.	PARTS NAME	MATERIALS	FINISHES
1	CONTACT TERMINAL(16P)	COPPER ALLOY	CONTACT mSIM : GOLD 0.05μm MIN. OVER Pd-Ni 0.3μm MIN. CONTACT mSD : GOLD 0.05μm MIN Pd-Ni 0.24μm MIN. SWITCH : GOLD 0.14μm MIN. (Pd-Ni IS PALLADIUM NICKEL) SOLDERS : GOLD 0.03μm MIN. BASE : NICKEL 127μm MIN.
2	SWITCH TERMINAL	PHOSPHOR BRONZE	
3	microSD SHELL	STAINLESS STEEL	SEMI BRIGHT NICKEL 127μm MIN.
4	microSIM SHELL	STAINLESS STEEL	SEMI BRIGHT NICKEL 127μm MIN.
5	HOUSING	LIQUID CRYSTAL POLYMER	NATURAL(IVORY) COLOR, UL94V-0

RELEASED
 EC NO: KOR2015-0002
 DRW: NKG/IM 2014/07/15
 CHK: D/S/CHU
 APPR: YSK/IMO2 2014/12/09

QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)
▼=4	4 PLACES ± --- ± ---
▽=0	3 PLACES ± 0.12 ± ---
	2 PLACES ± 0.12 ± ---
	1 PLACE ± 0.15 ± ---
	0 PLACE ± --- ± ---
	ANGULAR ± 1 °
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

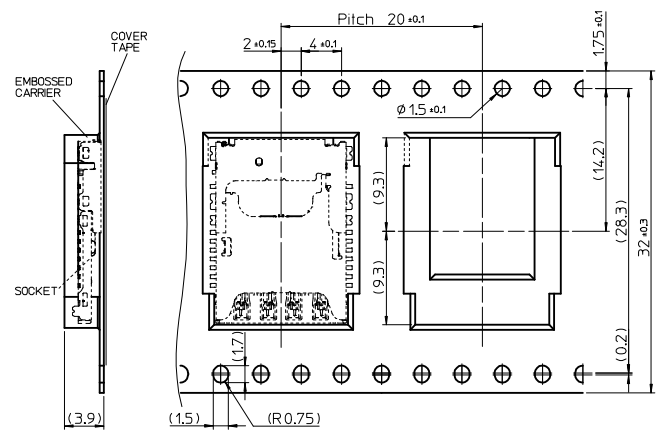
DIMENSION STYLE	SCALE	DESIGN UNITS
MM ONLY	5:1	METRIC

TITLE: COMBO 2.28H PUSH-PULL MICROSD/MICROSIM 8P/8P FOR ADAPTER

molex

DOCUMENT NO. SD-104168-004 SHEET NO. 1 OF 2

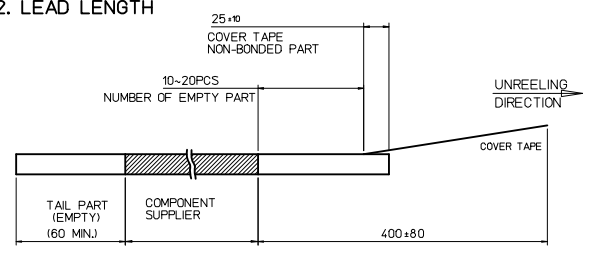
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION



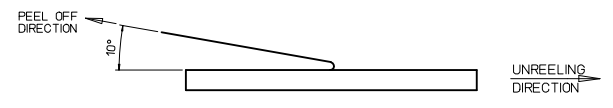
TOP VIEW OF EMBOSSED CARRIER

NOTES

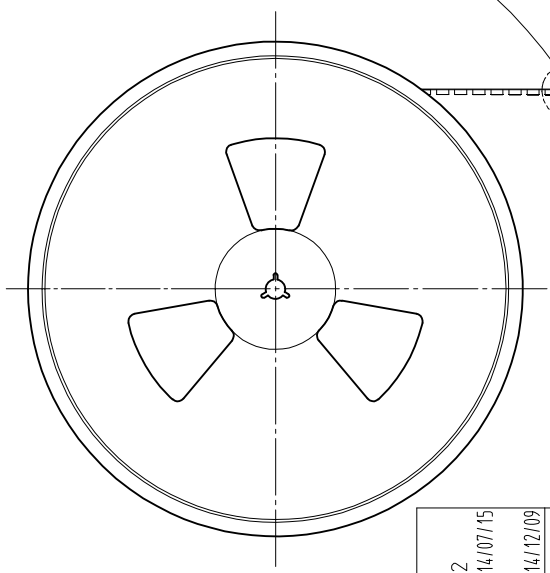
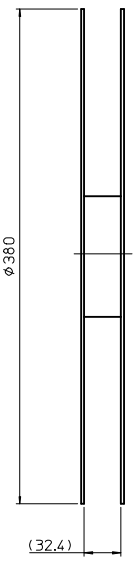
- 1. QUANTITY OF PRODUCTS : 1,200 PCS / 1 REEL
- 2. LEAD LENGTH



- 3. PEELING OFF FORCE OF COVER TAPE : 0.1N~0.59N(10.2~60gf)
(PEELING DIRECTION AS BELOW)
- PEELING OFF SPEED : 300mm/Min.(Ref.)



- 4. MATERIALS OF EMBOSSED CARRIER AND COVER TAPE :
PET(POLYETHYLEN TEREPHTHALATE)



SEE SHEET1 EC NO: KOR2015-0002 DRW:EGKIM 2014/07/15 CHKD:SHCHU APPR:YSKIM02 2014/12/09	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	▽=0 ▽=0	mm INCH	MM ONLY	2/1	METRIC		
		4 PLACES ± --- ± --- 3 PLACES ± 0.12 ± --- 2 PLACES ± 0.12 ± --- 1 PLACE ± 0.15 ± --- 0 PLACE ± --- ± ---	DRAWN BY DATE EGKIM 2014/07/15	TITLE	COMBO 2.28H PUSH-PULL MICROSD/MICROSIM 8P/8P FOR ADAPTER		
		ANGULAR ± 1 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	CHECKED BY DATE SHCHU 2014/07/15	APPROVED BY DATE YSKIM02 2014/12/09	molex		
A	REV	MATERIAL NO.	SIZE	DOCUMENT NO.	SHEET NO.		
		SEE SHEET1	A3	SD-104168-004	2 OF 2		
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							

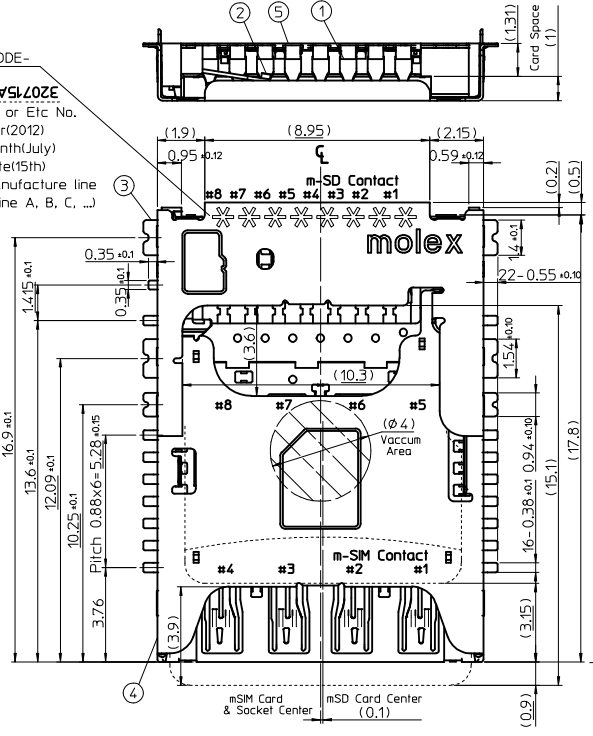
10 9 8 7 6 5 4 3 2 1

F

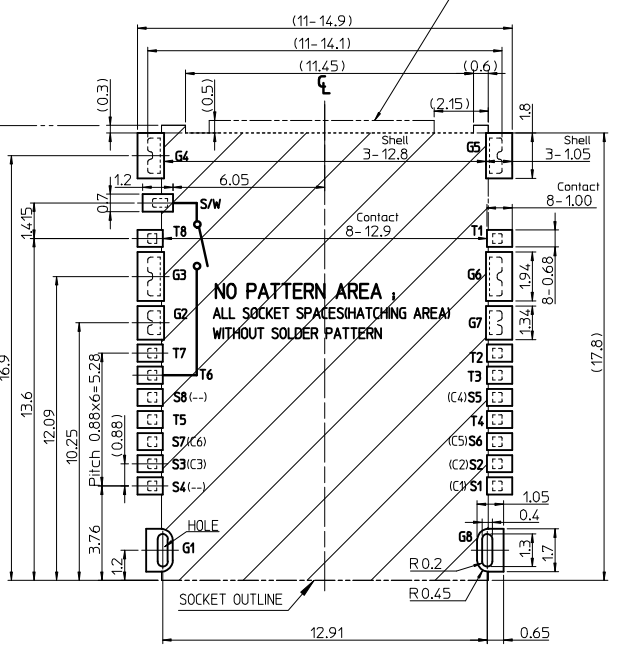
F

-DATE CODE-

example: **VS1402E**
 3 → M/C or Etc No.
 2 → Year(2012)
 07 → Month(July)
 15 → Date(15th)
 A → Manufacture line
 (Line A, B, C, ...)

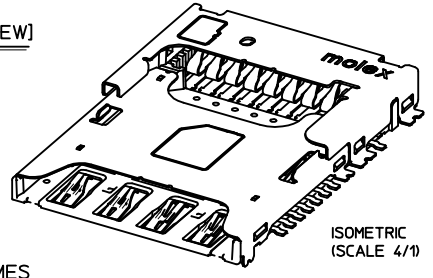


11.45x0.5x1.31 = SMT SPACE FOR OTHER PARTS
 (10.85x0.25x1.0 = NET SPACE WITH CLEARANCE)



RECOMMENDED PCB LAYOUT [FRONT VIEW]

(TOLERANCE : ±0.05)



[microSIM CARD PIN-MAP]		
8P	6P	DESCRIPTION
S1	C1	Vcc(Supply V)
S2	C2	RST(Reset)
S3	C3	CLK(Clock)
S4	--	Reserved
S5	C4	GND
S6	C5	Vpp(Program V)
S7	C6	I/O
S8	--	Reserved
G1-G8		GND

[microSD CARD PIN-MAP]	
PIN NO.	DESCRIPTION
T1	DAT2
T2	CD/DAT3 ²
T3	CMD
T4	V _{pp}
T5	CLK
T6	V _{SS} (GND)
T7	DAT0
T8	DAT1
S/W	CARD DETECTOR

NOTES

- MATERIALS: SEE TABLE
- FINISHES: SEE TABLE
- MATES WITH
 - UPPER: microSD Card
 - LOWER: Micro SIM(UICC) Card
- PRODUCT SPECIFICATIONS: PS-104168-001
- PACKING SPECIFICATIONS: SPK-104168-001
- COPLANARITY OF SOLDER TAILS: 0.08mm MAX. BEFORE & AFTER 260°C REFLOW 3TIMES
- REFERENCE CARD DIMENSIONS ARE WITH STANDARD DIMENSION CARD
- CUSTOMER'S CTF DIMENSION(φ) IS EQUAL TO MOLEX MAJOR QUALITY SYMBOL(▼)

[Circuit diagram for Detection Switch of microSD card]

Card insertion condition	Card detect switch	Circuit mSD #8pin	Circuit Switch terminal
Without Card	Open		
Card insertion	Close		

NO.	PARTS NAME	MATERIALS	FINISHES
1	CONTACT TERMINAL(16P)	COPPER ALLOY	CONTACT mSIM : GOLD 0.05μm MIN. OVER Pd-Ni 0.3μm MIN. CONTACT mSD : GOLD 0.05μm MIN Pd-Ni 0.24μm MIN. SWITCH : GOLD 0.14μm MIN. (Pd-Ni IS PALLADIUM NICKEL) SOLDERS : GOLD 0.03μm MIN. BASE : NICKEL 127μm MIN.
2	SWITCH TERMINAL	PHOSPHOR BRONZE	
3	microSD SHELL	STAINLESS STEEL	SEMI BRIGHT NICKEL 127μm MIN.
4	microSIM SHELL	STAINLESS STEEL	SEMI BRIGHT NICKEL 127μm MIN.
5	HOUSING	LIQUID CRYSTAL POLYMER	NATURAL(IVORY) COLOR, UL94V-0

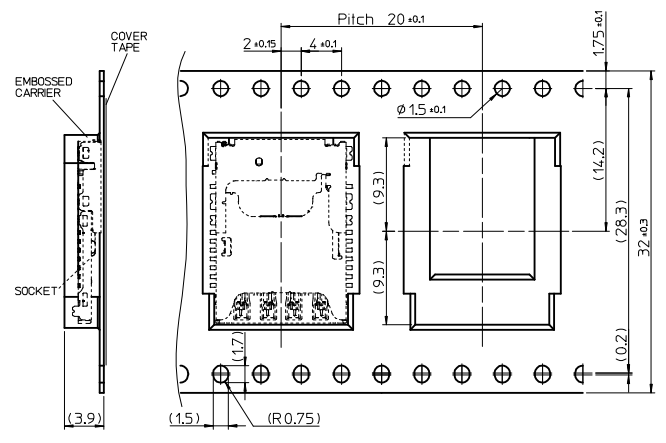
RELEASED
 EC NO: KOR2015-0002
 DRAWING: IM 2014/07/15
 CHK'D: SHCHU
 APPR: YSKI M02 2014/12/09

QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	
	mm	INCH	MM ONLY		5:1	METRIC	
▼=4	4 PLACES ± 0.12	± 0.005	DRAWN BY	DATE	TITLE		
▽=0	3 PLACES ± 0.12	± 0.005	EGKIM	2014/07/15	COMBO 2.28H PUSH-PULL MICROSD/MICROSIM 8P/8P FOR ADAPTER		
	2 PLACES ± 0.12	± 0.005	CHECKED BY	DATE			
	1 PLACE ± 0.15	± 0.005	SHCHU	2014/07/15	molex		
	0 PLACE ± 0.15	± 0.005	APPROVED BY	DATE			
	ANGULAR ± 1°		YSKI M02	2014/12/09	MATERIAL NO.	DOCUMENT NO.	SHEET NO.
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		SD-104168-004		1 OF 2

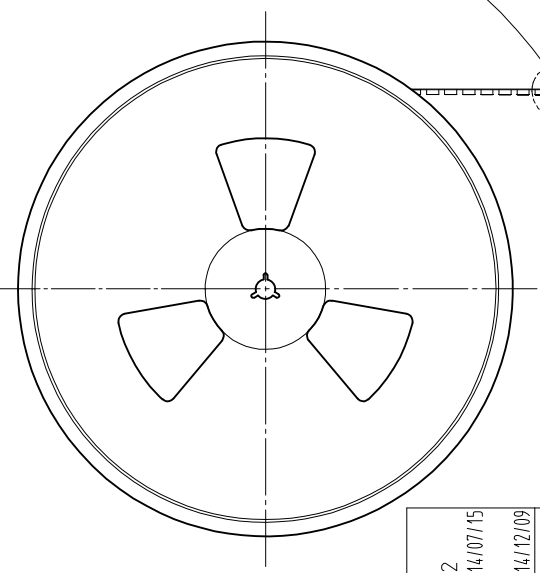
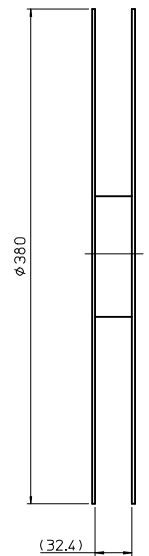
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fb_frame_A3_P_AM_T Rev. G 2012/01/11

9 8 7 6 5 4 3 2 1



TOP VIEW OF EMBOSSED CARRIER

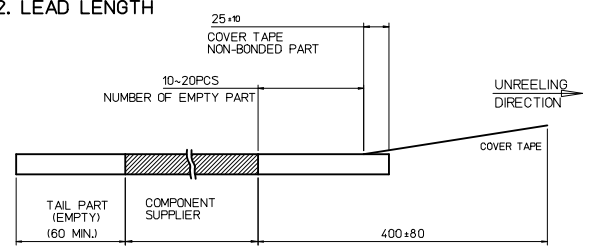


UNREELING OF PRODUCTS DIRECTION

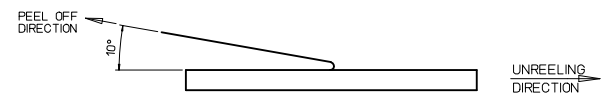
NOTES

1. QUANTITY OF PRODUCTS : 1,200 PCS / 1 REEL

2. LEAD LENGTH



3. PEELING OFF FORCE OF COVER TAPE : 0.1N~0.59N(10.2~60gf)
(PEELING DIRECTION AS BELOW)
- PEELING OFF SPEED : 300mm/Min.(Ref.)



4. MATERIALS OF EMBOSSED CARRIER AND COVER TAPE :
PET(POLYETHYLEN TEREPHTHALATE)

SEE SHEET1 EC NO: KOR2015-0002 DRW:EGKIM 2014/07/15 CHKD:SHCHU APPR:YSKIM02 2014/12/09	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE MM ONLY	SCALE 2/1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	▽=0	mm INCH	DRAWN BY DATE EGKIM 2014/07/15	TITLE	COMBO 2.28H PUSH-PULL MICROSD/MICROSIM 8P/8P FOR ADAPTER		
	▽=0	4 PLACES ± --- ± --- 3 PLACES ± 0.12 ± --- 2 PLACES ± 0.12 ± --- 1 PLACE ± 0.15 ± --- 0 PLACE ± --- ± ---	CHECKED BY DATE SHCHU 2014/07/15	APPROVED BY DATE YSKIM02 2014/12/09	molex		
	ANGULAR ± 1 °	MATERIAL NO.	DOCUMENT NO.	SHEET NO.			
A	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE SHEET1	SD-104168-004		2 OF 2		
REV	DESCRIPTION	SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				