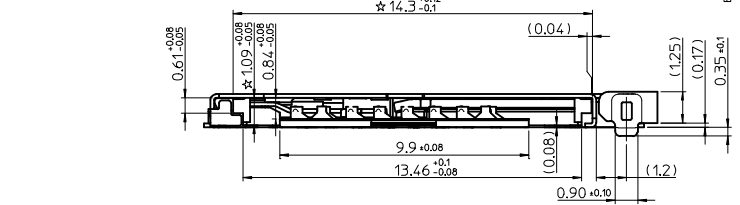
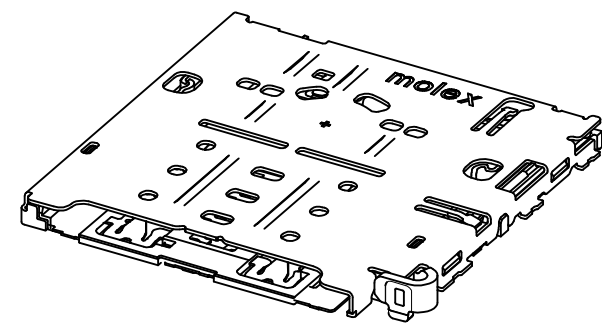
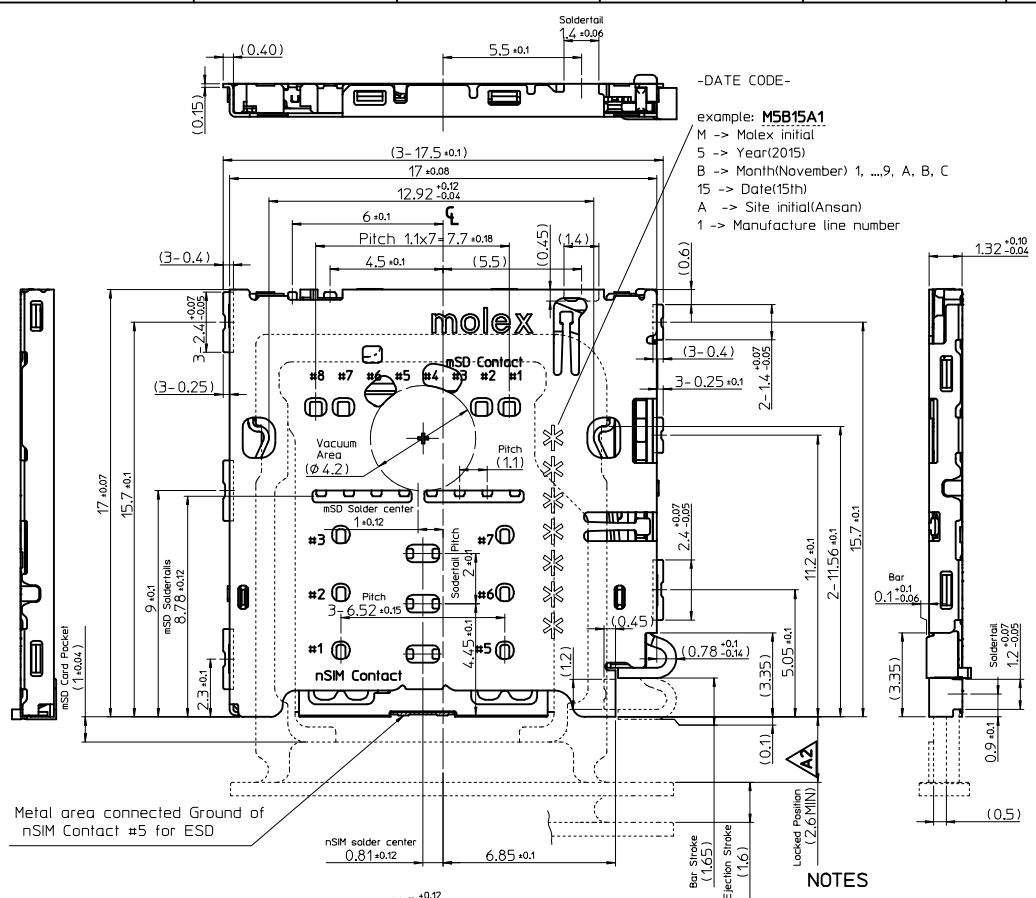


10 9 8 7 6 5 4 3 2 1

[Circuit diagram for Detection Switch of Card Tray]

Tray insertion condition	Tray detection switch	Circuit
Without Tray	Open	
Tray inserted	Close	



NOTES

1. MATERIALS: SEE TABLE
2. FINISHES: SEE TABLE
3. MATES WITH: microSD Card or nanoSIM(UICC 4FF) Card
4. PRODUCT SPECIFICATIONS: PS-104258-001
5. PACKING SPECIFICATIONS: SPK-104258-003
6. COPLANARITY OF SOLDER TAILS: 0.08mm MAX. BEFORE & AFTER 250°C REFLOW
7. REFERENCE CARD DIMENSIONS ARE WITH STANDARD DIMENSION CARD
8. CUSTOMER'S CTF DIMENSION(*) IS EQUAL TO MOLEX MAJOR QUALITY SYMBOL(▼)

104258-1411	1042581411
PART (ORDER NO.) MATERIAL NO.	

NO.	PARTS NAME	MATERIALS	FINISHES
1	CONTACT TERMINAL(14P) SWITCH TERMINAL	COPPER ALLOY	CONTACT nSIM : GOLD 0.054µm MIN. OVER Pd-Ni 0.34µm MIN. CONTACT mSD & SWITCH : GOLD 0.054µm MIN Pd-Ni 0.21µm MIN. DETECTOR(COMMON) : GOLD 0.14µm MIN. SOLDERS : GOLD 0.034µm MIN. BASE : NICKEL 1.274µm MIN. (Pd-Ni IS PALLADIUM NICKEL)
2	COMMON (DETECTOR)	PHOSPHOR BRONZE	
3	SHELL	STAINLESS STEEL	NICKEL 1.274µm MIN.
4	HOUSING	LIQUID CRYSTAL POLYMER	BLACK COLOR, UL94V-0
5, 6	BAR, HINGE	STAINLESS STEEL	NONE
7, 8	LATCH LEFT/RIGHT	STAINLESS STEEL	NONE

REVISED (TRAY HANDLE)
 EC NO: KOR2017-0054
 2017/05/19
 DRWN: ICYANG
 CHKD: SHCHU
 2017/05/19
 APPR: YSKIM02
 2017/05/24

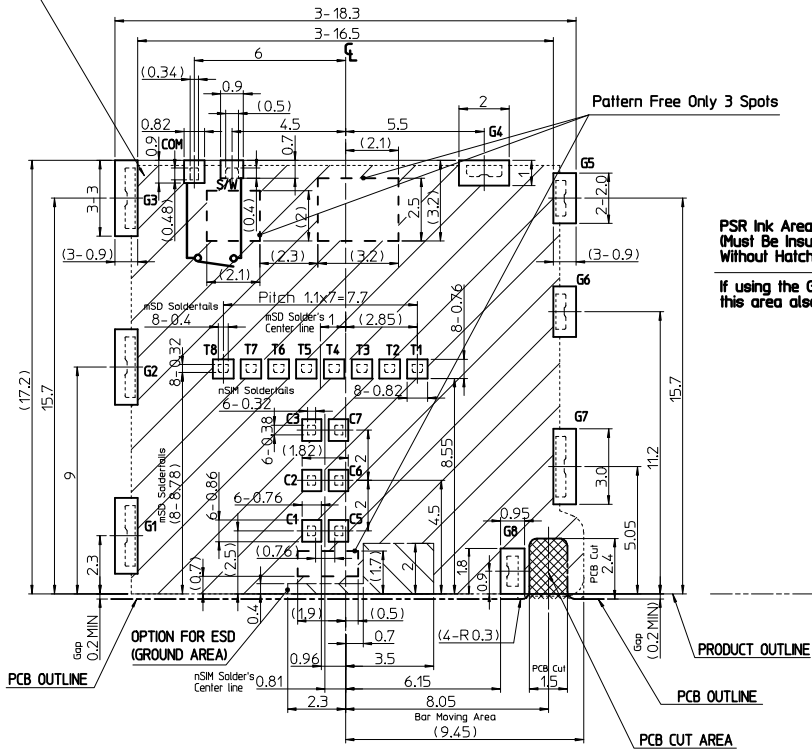
QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	
	mm	INCH
▼=3	4 PLACES ± ---	± ---
▽=0	3 PLACES ± 0.12	± ---
	2 PLACES ± 0.12	± ---
	1 PLACE ± 0.15	± ---
	0 PLACE ± 0.15	± ---
	ANGULAR ± 1 °	
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE		SCALE	DESIGN UNITS
MM ONLY		5/1	METRIC
DRAWN BY	DATE	TITLE	
ICYANG	2015/04/08	MSD/NSIM HYBRID SOCKET BAR-PUSH TRAY TYPE 1.32H 8P/6P	
CHECKED BY	DATE	molex	
SHCHU	2015/04/08		
APPROVED BY	DATE	SD-104258-001	
YSKIM02	2015/06/30	1 OF 5	
MATERIAL NO.		DOCUMENT NO.	
SEE TABLE		SEE TABLE	
SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
A3			

9 8 7 6 5 4 3 2 1

NO TRACE/NO VIA (NO PATTERN AREA);

ALL INNER SPACES OF A SOCKET MUST BE AVOID THE PATTERN (NO TRACE/NO VIA/NO SIGNAL/NO GROUND) EXCEPT, SOLDER PATTERN AND GROUND PATTERN, SPECIALLY 3 BOXES AVAILABLE FOR FREE BECAUSE, SOCKET'S BOTTOM SURFACES ARE MADE OF METAL INCLUDING CONTACT TERMINALS'S MOVING AREA



RECOMMENDED PCB LAYOUT [FRONT VIEW]

(TOLERANCE : ±0.05)

* This product has no C4, C8 Contact terminal

[nanoSIM CARD PIN-MAP]

PIN NO.	DESCRIPTION
C1	Vcc(Supply V)
C2	RST(Reset)
C3	CLK(Clock)
(C4)	None
C5	GND(Ground)
C6	Vpp(Program V)
C7	I/O
(C8)	None

*There is only one tray insertion/removal detection switch physically.

Therefore, After tray detecting, this product is necessary to detect the SIM or SD Card separately in software.

[microSD CARD PIN-MAP]

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

G1-G8	GROUND or NOT CONNECT
S/W	TRAY DETECTOR
COM	GND or COMMON

Hatching Areas are Pattern Prohibition (No Via/No Trace) Because of Contact terminals moving

Pattern Free Only 3 Spots

PSR Ink Area (Must Be Insulation Coating) Without Hatching or Solder Area

If using the G1-G8 as Ground, this area also can be the Ground instead PSR ink.

Pattern Free Only 3 Spots

Hatching Areas are Pattern Prohibition (No Via/No Trace)

If using the G1-G8 as Ground, these areas also can be as Ground instead of pattern prohibition areas.

Ground or No Pattern(No via/No trace)

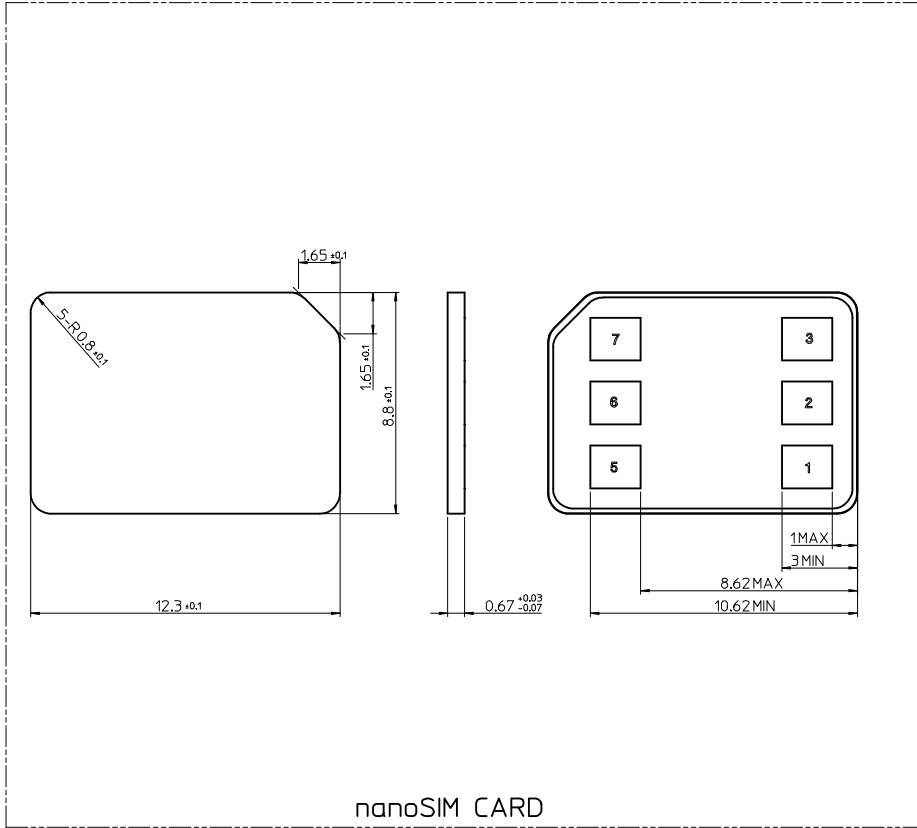
SPECIAL PCB LAYOUT FOR CUSTOMER REQUEST [FRONT VIEW]

MINIMIZING THE NO(PROHIBITED) PATTERN AREA

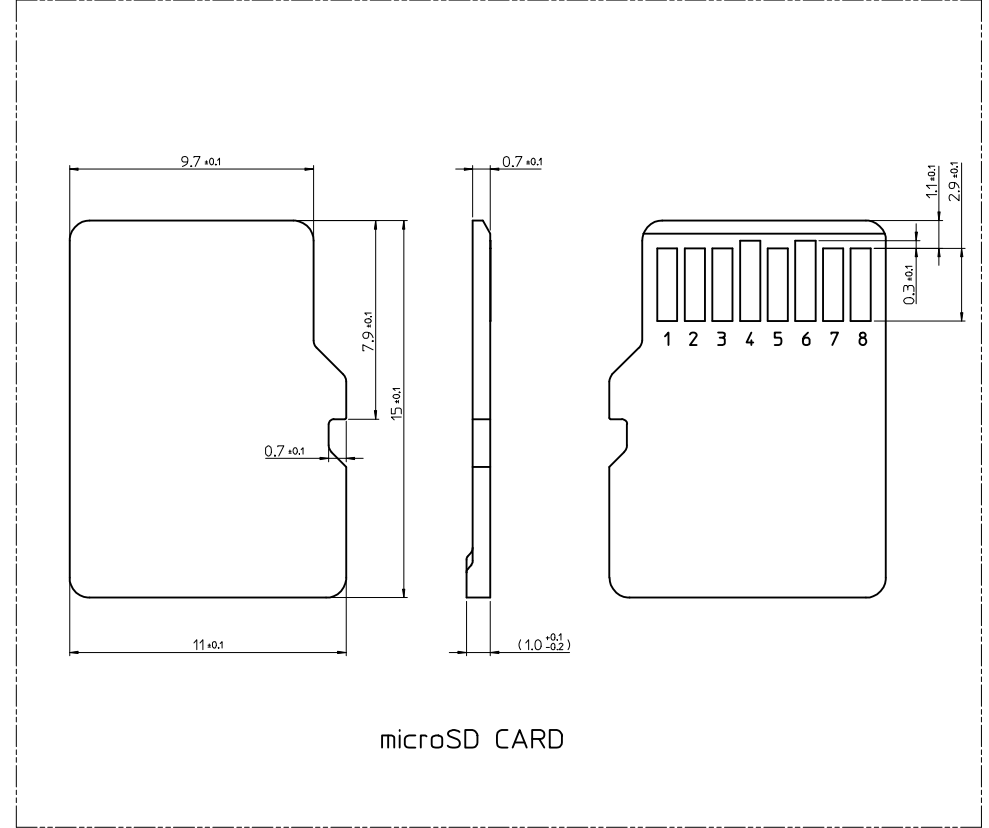
(TOLERANCE : ±0.05)

QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION		
	mm	INCH	MM ONLY		5/1	METRIC			
	4 PLACES	± ---	± ---	DRAWN BY	DATE	TITLE			
	3 PLACES	± 0.12	± ---	ICYANG	2015/04/08	MSD/NSIM HYBRID SOCKET			
	2 PLACES	± 0.12	± ---	CHECKED BY	DATE	BAR-PUSH TRAY TYPE 1.32H			
	1 PLACE	± 0.15	± ---	SHCHU	2015/04/08	8P/6P			
	0 PLACE	± 0.15	± ---	APPROVED BY	DATE	molex			
	ANGULAR ± 1 °			YSK1M02	2015/06/30	DOCUMENT NO.			
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			MATERIAL NO.		SEE SHEET1		SHEET NO.	
				SIZE		SD-104258-001		2 OF 5	
				THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

REFERENCE CARDS DRAWING



nanoSIM CARD



microSD CARD

[Reference Standards]

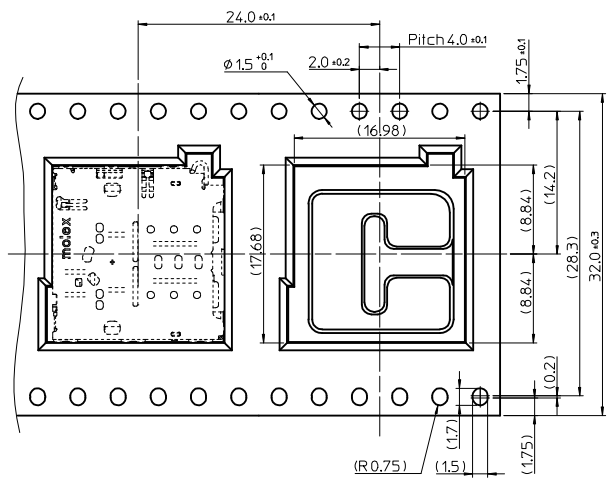
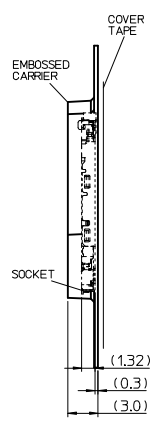
-. microSD Card Specification Addendum Version 4.00

-. ETSI TS 102 221 V12.0.0, Smart Cards; UICC-Terminal interface, Physical and logical characteristics

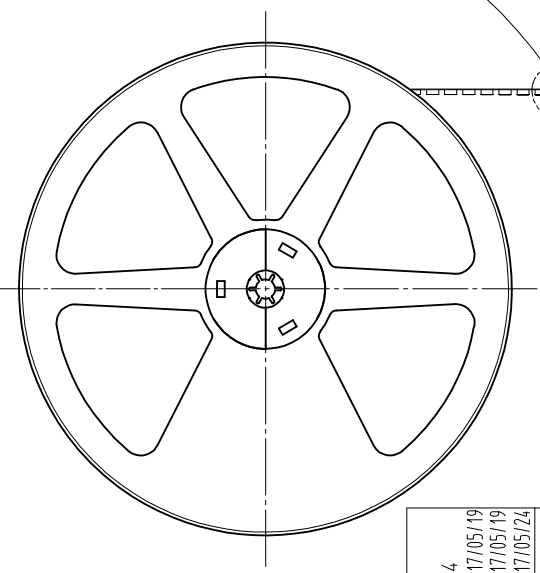
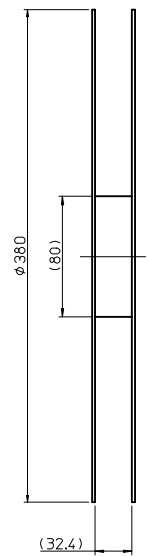
SEE SHEET1 IEC NO: KOR2017-0054 DRWN: ICYANG CHKD: SHCHU APPR: YSKIM02	REV DESCRIPTION 2017/05/19 2017/05/19 2017/05/24	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
		▽=0 ∇=0	mm INCH	MM ONLY	5/1	METRIC		
			4 PLACES ± --- ± --- 3 PLACES ± 0.12 ± --- 2 PLACES ± 0.12 ± --- 1 PLACE ± 0.15 ± --- 0 PLACE ± 0.15 ± ---	DRAWN BY DATE ICYANG 2015/04/08	TITLE	MSD/NSIM HYBRID SOCKET BAR-PUSH TRAY TYPE 1.32H 8P/6P		
			ANGULAR ± 1 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	CHECKED BY DATE SHCHU 2015/04/08				
A2		APPROVED BY DATE YSKIM02 2015/06/30	MATERIAL NO.	DOCUMENT NO.	SHEET NO.			
			SEE SHEET1		SD-104258-001	4 OF 5		

molex

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



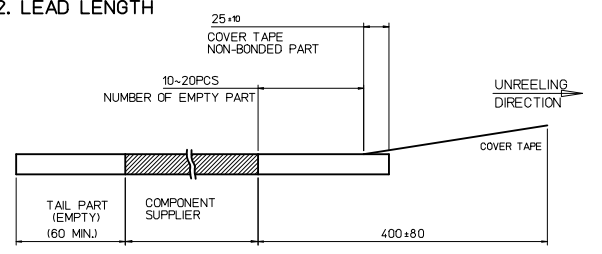
TOP VIEW OF EMBOSSED CARRIER



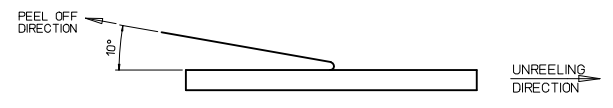
UNREELING OF PRODUCTS DIRECTION

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.)



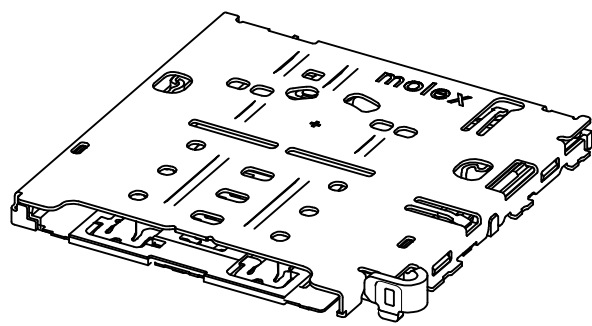
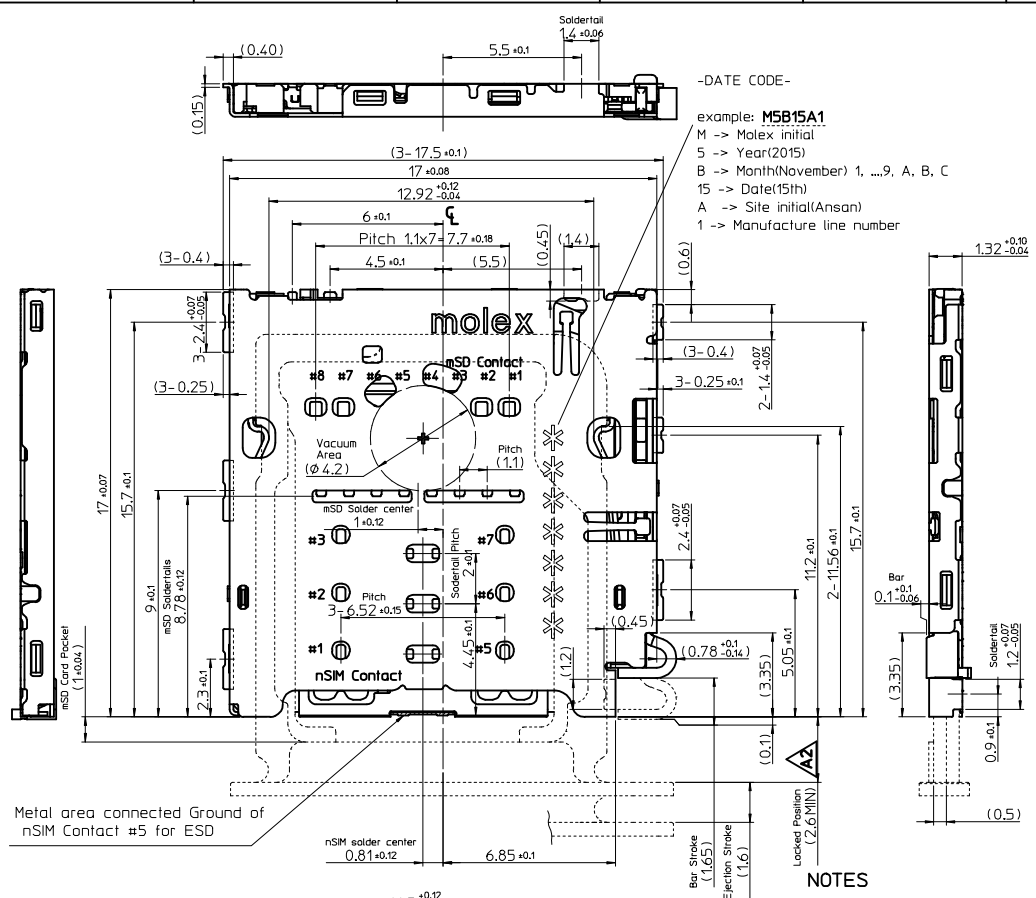
4. MATERIALS OF EMBOSSED CARRIER AND COVER TAPE : PET(POLYETHYLEN TEREPHTHALATE)

SEE SHEET1 EC NO: KOR2017-0054 DRWN: ICYANG 2017/05/19 CHKD: SHCHU 2017/05/19 APPR: YSKIM02 2017/05/24	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE 2/1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
			mm	INCH	DRAWN BY ICYANG	DATE 2015/04/08	TITLE MSD/NSIM HYBRID SOCKET BAR-PUSH TRAY TYPE 1.32H 8P/6P	
		4 PLACES	± ---	± ---	CHECKED BY SHCHU	DATE 2015/04/08	molex	
		3 PLACES	± 0.12	± ---	APPROVED BY YSKIM02	DATE 2015/06/30		
		2 PLACES	± 0.12	± ---	MATERIAL NO. SEE SHEET1	DOCUMENT NO. SD-104258-001		
1 PLACE	± 0.15	± ---	ANGULAR ± 1 °		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
0 PLACE	± 0.15	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS					

10 9 8 7 6 5 4 3 2 1

[Circuit diagram for Detection Switch of Card Tray]

Tray insertion condition	Tray detection switch	Circuit
Without Tray	Open	
Tray inserted	Close	



example: **MSB15A1**
M -> Molex initial
S -> Year(2015)
B -> Month(November) 1, ...,9, A, B, C
15 -> Date(15th)
A -> Site initial(Ansan)
1 -> Manufacture line number

NOTES

1. MATERIALS: SEE TABLE
2. FINISHES: SEE TABLE
3. MATES WITH: microSD Card or nanoSIM(UICC 4FF) Card
4. PRODUCT SPECIFICATIONS: PS-104258-001
5. PACKING SPECIFICATIONS: SPK-104258-003
6. COPLANARITY OF SOLDER TAILS: 0.08mm MAX. BEFORE & AFTER 250°C REFLOW
7. REFERENCE CARD DIMENSIONS ARE WITH STANDARD DIMENSION CARD
8. CUSTOMER'S CTF DIMENSION(*) IS EQUAL TO MOLEX MAJOR QUALITY SYMBOL(▼)

104258-1411	1042581411
PART (ORDER NO.)	MATERIAL NO.

NO.	PARTS NAME	MATERIALS	FINISHES
1	CONTACT TERMINAL(14P) SWITCH TERMINAL	COPPER ALLOY	CONTACT nSIM : GOLD 0.054µm MIN. OVER Pd-Ni 0.34µm MIN. CONTACT MSD & SWITCH : GOLD 0.054µm MIN Pd-Ni 0.21µm MIN. DETECTOR(COMMON) : GOLD 0.14µm MIN. SOLDERS : GOLD 0.034µm MIN. BASE : NICKEL 1.274µm MIN. (Pd-Ni IS PALLADIUM NICKEL)
2	COMMON (DETECTOR)	PHOSPHOR BRONZE	
3	SHELL	STAINLESS STEEL	NICKEL 1.274µm MIN.
4	HOUSING	LIQUID CRYSTAL POLYMER	BLACK COLOR, UL94V-0
5, 6	BAR, HINGE	STAINLESS STEEL	NONE
7, 8	LATCH LEFT/RIGHT	STAINLESS STEEL	NONE

REVISED (TRAY HANDLE)
EC NO: KOR2017-0054
2017/05/19
DRWN: ICYANG
CHKD: SHCHU
APPR: YSKIM02
2017/05/19
2017/05/24

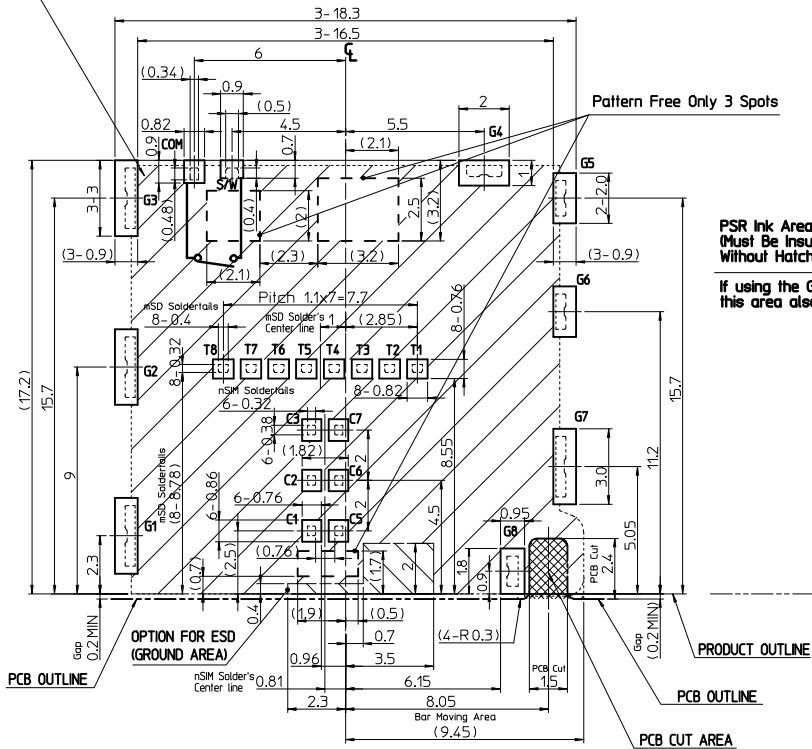
QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	mm	INCH	MM ONLY		5/1	METRIC	
▼=3	4 PLACES	± ---	± ---	DRAWN BY	DATE	TITLE	MSD/NSIM HYBRID SOCKET BAR-PUSH TRAY TYPE 1.32H 8P/6P
▽=0	3 PLACES	± 0.12	± ---	ICYANG	2015/04/08		
	2 PLACES	± 0.12	± ---	CHECKED BY	DATE		
	1 PLACE	± 0.15	± ---	SHCHU	2015/04/08		
	0 PLACE	± 0.15	± ---	APPROVED BY	DATE		
	ANGULAR ± 1 °		MATERIAL NO.		DOCUMENT NO.		SHEET NO.
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		SD-104258-001		1 OF 5

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

9 8 7 6 5 4 3 2 1

NO TRACE/NO VIA (NO PATTERN AREA);

ALL INNER SPACES OF A SOCKET MUST BE AVOID THE PATTERN (NO TRACE/NO VIA/NO SIGNAL/NO GROUND) EXCEPT, SOLDER PATTERN AND GROUND PATTERN, SPECIALLY 3 BOXES AVAILABLE FOR FREE BECAUSE, SOCKET'S BOTTOM SURFACES ARE MADE OF METAL INCLUDING CONTACT TERMINALS'S MOVING AREA



RECOMMENDED PCB LAYOUT [FRONT VIEW]

(TOLERANCE : ±0.05)

* This product has no C4, C8 Contact terminal

[nanoSIM CARD PIN-MAP]

PIN NO.	DESCRIPTION
C1	Vcc(Supply V)
C2	RST(Reset)
C3	CLK(Clock)
(C4)	None
C5	GND(Ground)
C6	Vpp(Program V)
C7	I/O
(C8)	None

*There is only one tray insertion/removal detection switch physically.

Therefore, After tray detecting, this product is necessary to detect the SIM or SD Card separately in software.

[microSD CARD PIN-MAP]

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

G1-G8	GROUND or NOT CONNECT
S/W	TRAY DETECTOR
COM	GND or COMMON

Hatching Areas are Pattern Prohibition (No Via/No Trace) Because of Contact terminals moving

Pattern Free Only 3 Spots

PSR Ink Area (Must Be Insulation Coating) Without Hatching or Solder Area

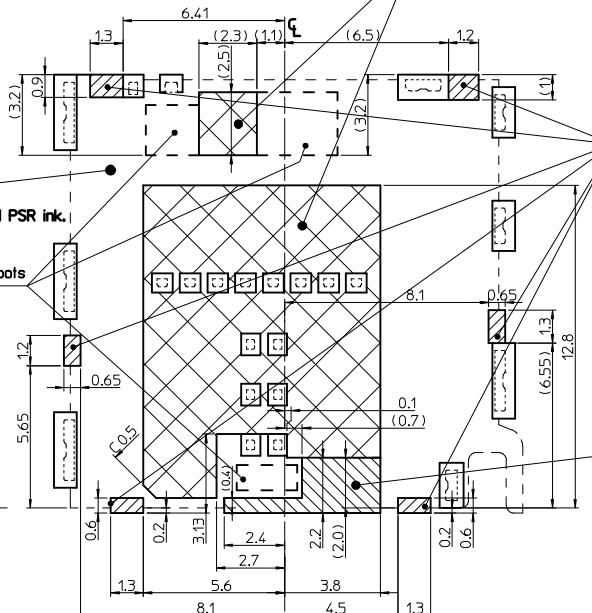
If using the G1-G8 as Ground, this area also can be the Ground instead PSR ink.

Pattern Free Only 3 Spots

Hatching Areas are Pattern Prohibition (No Via/No Trace)

If using the G1-G8 as Ground, these areas also can be as Ground instead of pattern prohibition areas.

Ground or No Pattern(No via/No trace)



SPECIAL PCB LAYOUT FOR CUSTOMER REQUEST [FRONT VIEW]

MINIMIZING THE NO(PROHIBITED) PATTERN AREA

(TOLERANCE : ±0.05)

[nanoSIM CARD PIN-MAP]

PIN NO.	DESCRIPTION
C1	Vcc(Supply V)
C2	RST(Reset)
C3	CLK(Clock)
(C4)	None
C5	GND(Ground)
C6	Vpp(Program V)
C7	I/O
(C8)	None

[microSD CARD PIN-MAP]

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

G1-G8	GROUND or NOT CONNECT
S/W	TRAY DETECTOR
COM	GND or COMMON

SEE SHEET1	DESCRIPTION
EC NO: KOR2017-0054	
DRWN: ICYANG	
CHKD: SHCHU	
APPR: YSK1M02	
DATE: 2017/05/19	
DATE: 2017/05/19	
DATE: 2017/05/24	
REV	
A2	

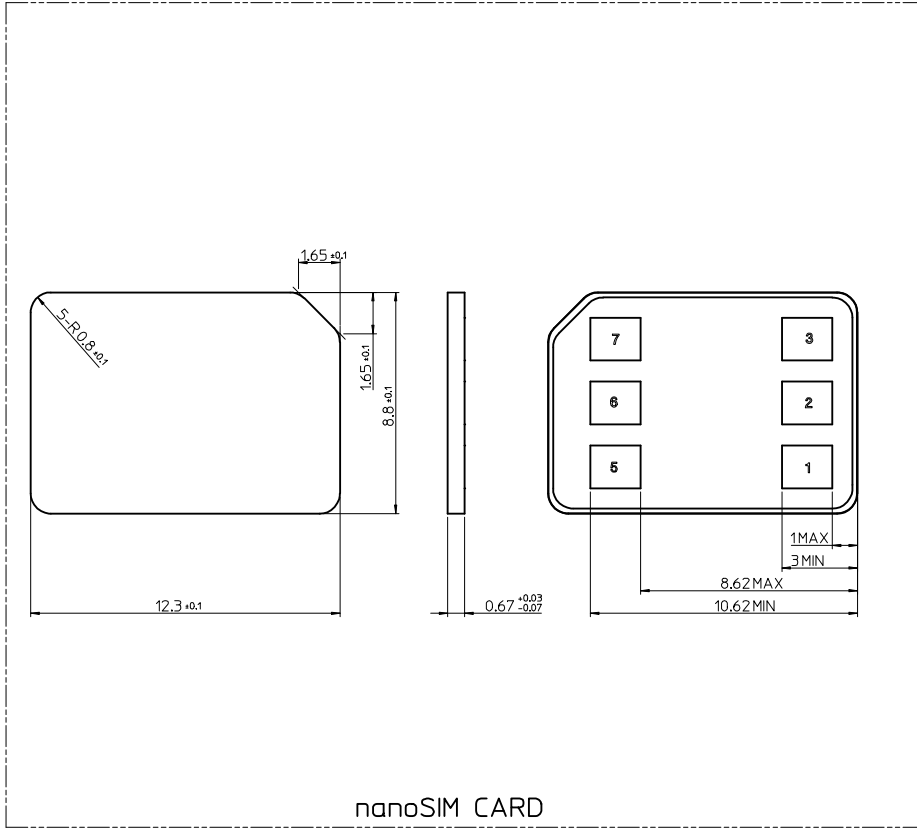
QUALITY SYMBOLS	DESCRIPTION
	=0
	=0

GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	
	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± 0.12	± ---
2 PLACES	± 0.12	± ---
1 PLACE	± 0.15	± ---
0 PLACE	± 0.15	± ---
ANGULAR ± 1 °		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		

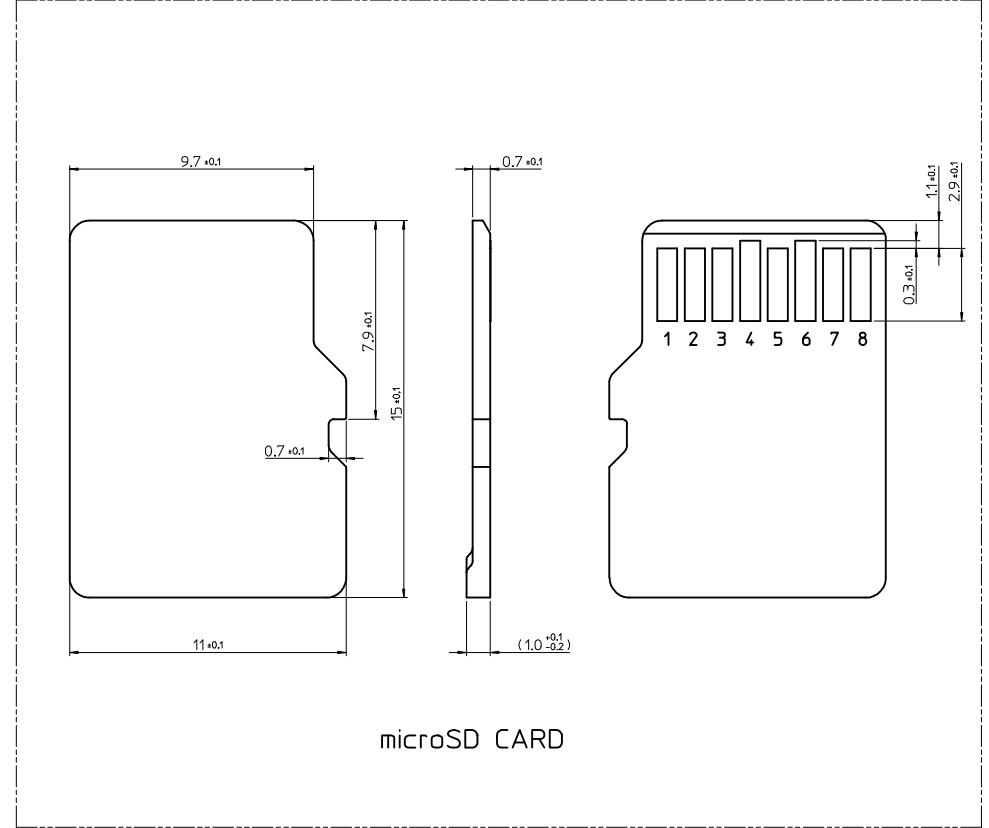
DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
MM ONLY		5/1	METRIC	
DRAWN BY	DATE	TITLE		
ICYANG	2015/04/08	MSD/NSIM HYBRID SOCKET		
CHECKED BY	DATE	BAR-PUSH TRAY TYPE 1.32H		
SHCHU	2015/04/08	8P/6P		
APPROVED BY	DATE	molex		
YSK1M02	2015/06/30			
MATERIAL NO.		DOCUMENT NO.	SHEET NO.	
SEE SHEET1		SD-104258-001	2 OF 5	
SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
A3				

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
5/1	METRIC	
TITLE		
MSD/NSIM HYBRID SOCKET		
BAR-PUSH TRAY TYPE 1.32H		
8P/6P		
molex		
MATERIAL NO.		DOCUMENT NO.
SEE SHEET1		SD-104258-001
SIZE		SHEET NO.
A3		2 OF 5
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

REFERENCE CARDS DRAWING



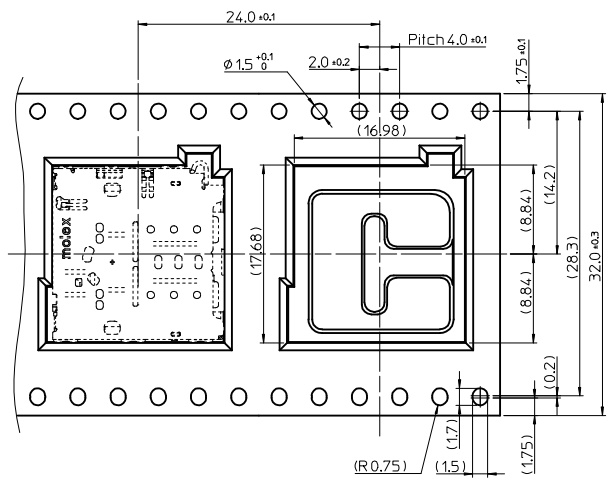
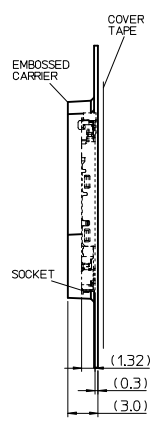
nanoSIM CARD



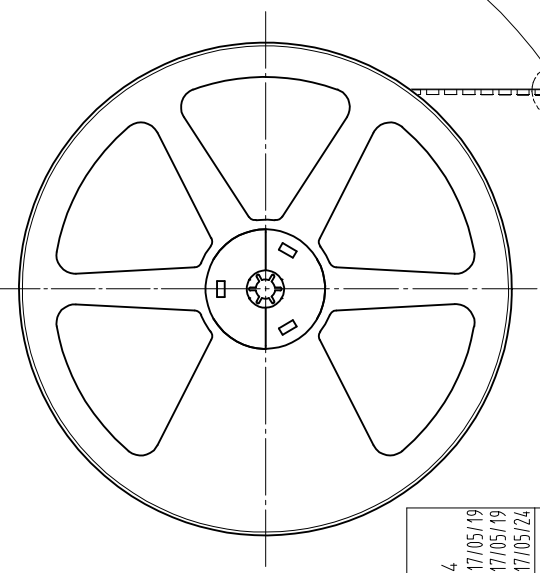
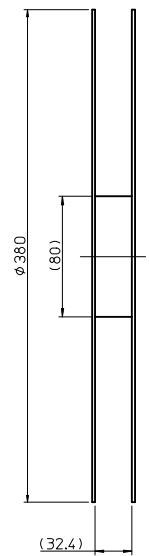
microSD CARD

[Reference Standards]
 -. microSD Card Specification Addendum Version 4.00
 -. ETSI TS 102 221 V12.0.0, Smart Cards; UICC-Terminal interface; Physical and logical characteristics

SEE SHEET1 IEC NO: KOR2017-0054 DRWN: ICYANG CHKD: SHCHU APPR: YSKIM02	REV DESCRIPTION 2017/05/19 2017/05/19 2017/05/24	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
		▽=0 ∇=0	mm INCH	MM ONLY	5/1	METRIC	
			4 PLACES ± --- ± --- 3 PLACES ± 0.12 ± --- 2 PLACES ± 0.12 ± --- 1 PLACE ± 0.15 ± --- 0 PLACE ± 0.15 ± ---	DRAWN BY DATE ICYANG 2015/04/08	TITLE MSD/NSIM HYBRID SOCKET BAR-PUSH TRAY TYPE 1.32H 8P/6P		
		ANGULAR ± 1 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	CHECKED BY DATE SHCHU 2015/04/08	molex			
SEE SHEET1	APPROVED BY DATE YSKIM02 2015/06/30	MATERIAL NO.	DOCUMENT NO.			SHEET NO.	
A2				SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		



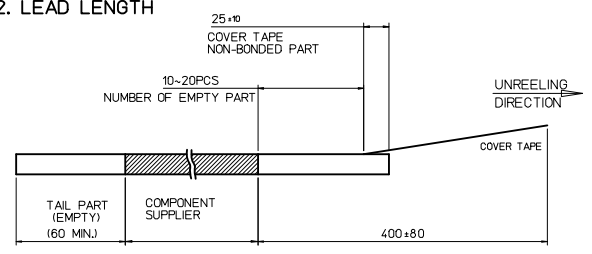
TOP VIEW OF EMBOSSED CARRIER



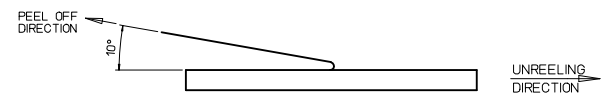
UNREELING OF PRODUCTS DIRECTION

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: KOR2017-0054 DRWN: ICYANG 2017/05/19 CHKD: SHCHU 2017/05/19 APPR: YSK1M02 2017/05/24	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
				MM ONLY	2/1	METRIC		
							TITLE	
							MSD/NSIM HYBRID SOCKET BAR-PUSH TRAY TYPE 1.32H 8P/6P	
							molex	
A2	DESCRIPTION	ANGULAR ± 1 °		MATERIAL NO.	DOCUMENT NO.	SHEET NO.		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHEET1	SD-104258-001	5 OF 5		
				THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				