

Product Specification

Number: L-KLS1-NGFF01-3.2-A-G1U

Name: PCI Express Connector

Customer: _____

Date: 2025-09-22



WWW.KLSELE.COM

NINGBO KLS ELECTRONIC CO; LTD

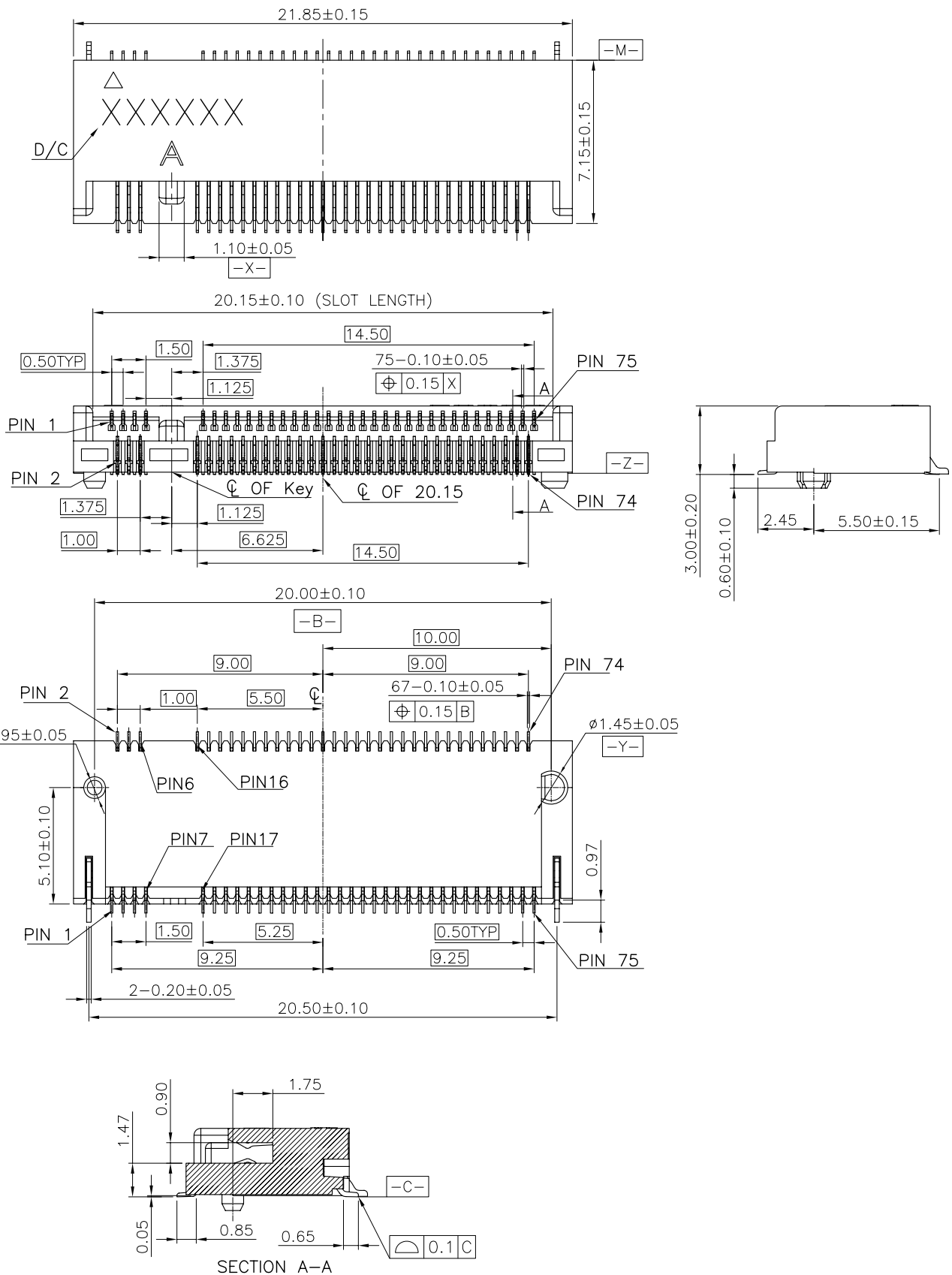
Tel : 0086-574-86828566

Fax : 0086-574-86824882

**ADD : NO. 8-1, RONGXIA RD. XIAPU SHANQIAN
INDUSTRIAL ZONE BEILUN NINGBO ZHEJIANG.**

Compi	Check	Review	Approva
Jenny	Jack.C		

Part name	PCI Express Connector	Date	2025-09-22
Part number	L-KLS1-NGFF01-3.2-A-G1U	Edition	V1
Department		Page	3 / 7



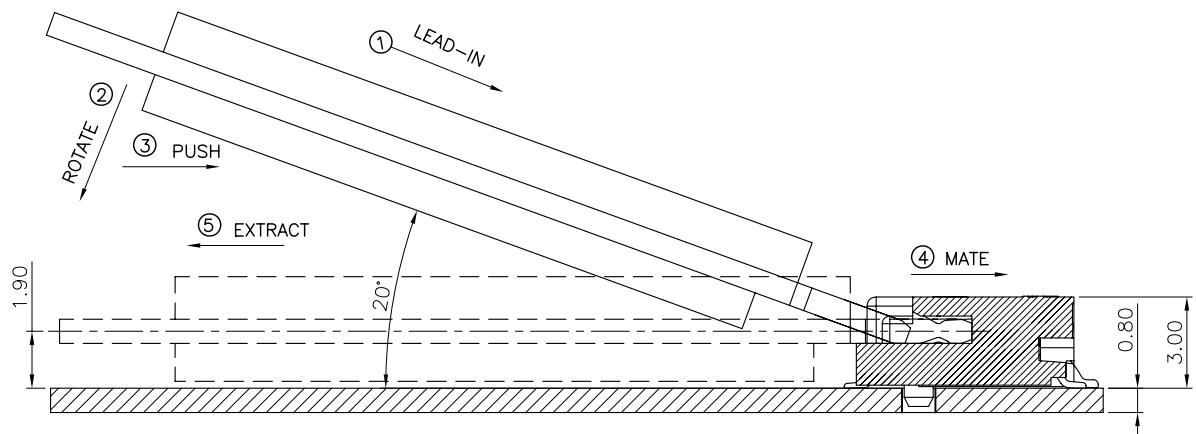
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NOTES:

1. MATERIAL SPECIFICATION:
 - 1-1. HOUSING: LCP+40%GF, UL94V-0, COLOR: BLACK.
 - 1-2. CONTACT:PHOSPHOR-COPPER.
 - 1-3. SMT TAB: COPPER ALLOY.
2. PLATING SPECIFICATION:
 - 2-1. CONTACT:
 - 50u" MIN.NICKEL UNDER PLATING OVER ALL.
 - G/F PLATING ON SOLDER AREA.
 - GOLD PLATING ON CONTACT AREA:SEE TABLE
 - 2-2. SMT TAB:
 - 50u" MIN. NICKEL UNDER PLATING OVER ALL .
 - 100u" MIN. MATTE TIN PLATING ON SOLDER AREA.
3. HF COMPLIANT,ROHS COMPLIANT.
4. DATE CODE: XXXXXX

WEEK
 YEAR
5. MECHANICAL PERFORMANCE:
 - 5-1. DURABILITY: SEE TABLE
6. ELECTRICAL PERFORMANCE:
 - 6-1. CURRENT: 0.5A PER PIN.
 - 6-2. LLCR: INITIAL 55mΩ MAX. ; FINAL ΔLLCR=20mΩ MAX..
7. IR REFLOW:

THE TEMPERATURE SHALL BE 260±5°C MAINTAINING 10±1 SECONDS.


HOW TO MATE AND EXTRACT
 =====

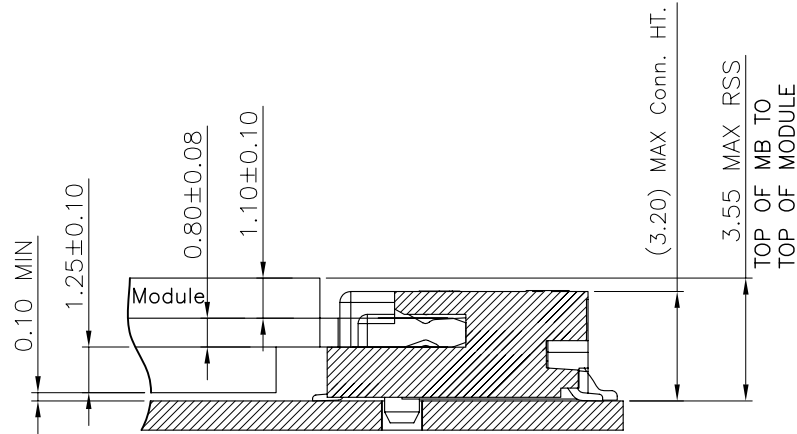
MATE: ① —————> ④

EXTRACT: ⑤

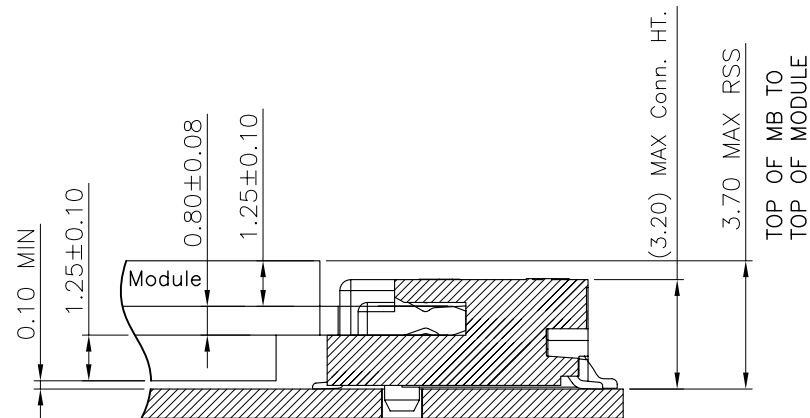
NOTE:Mating force will generate from step 3 to step 4.

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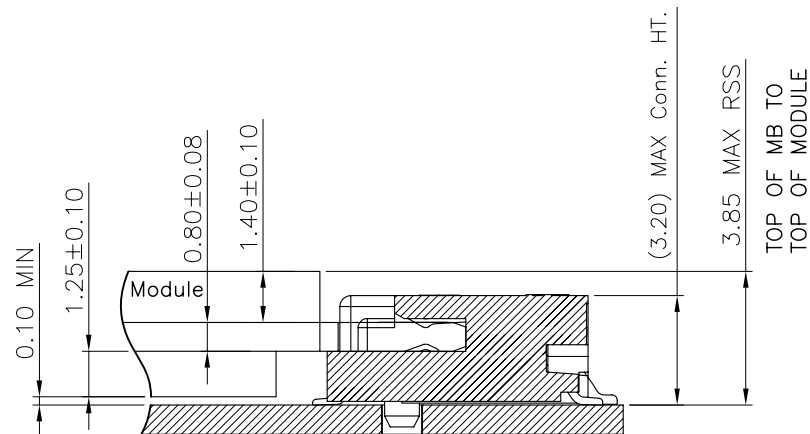
Assembly stack height schematic diagram



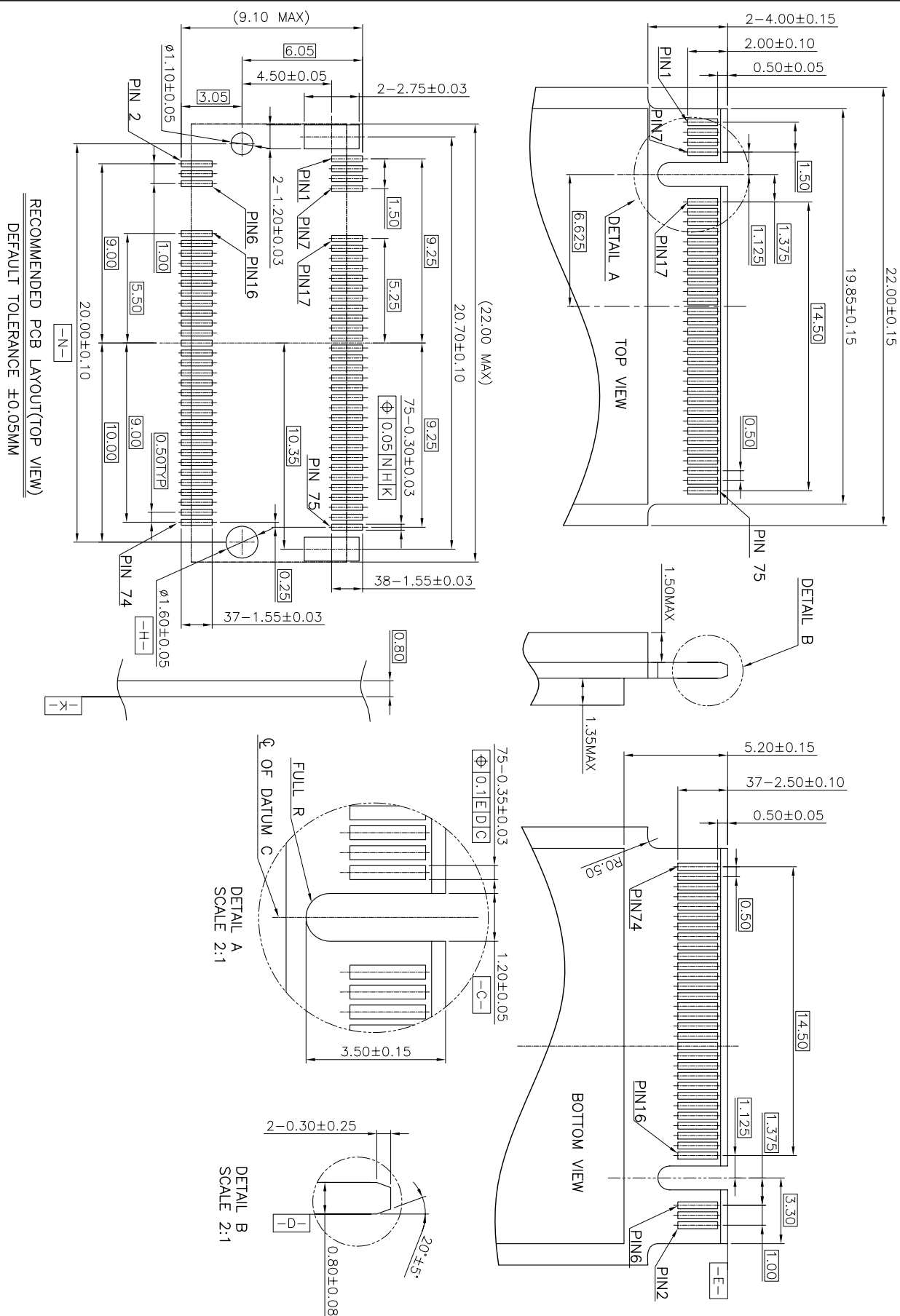
Stack-up Top Mount Double Sided Module
for 1.20 max top-side component height



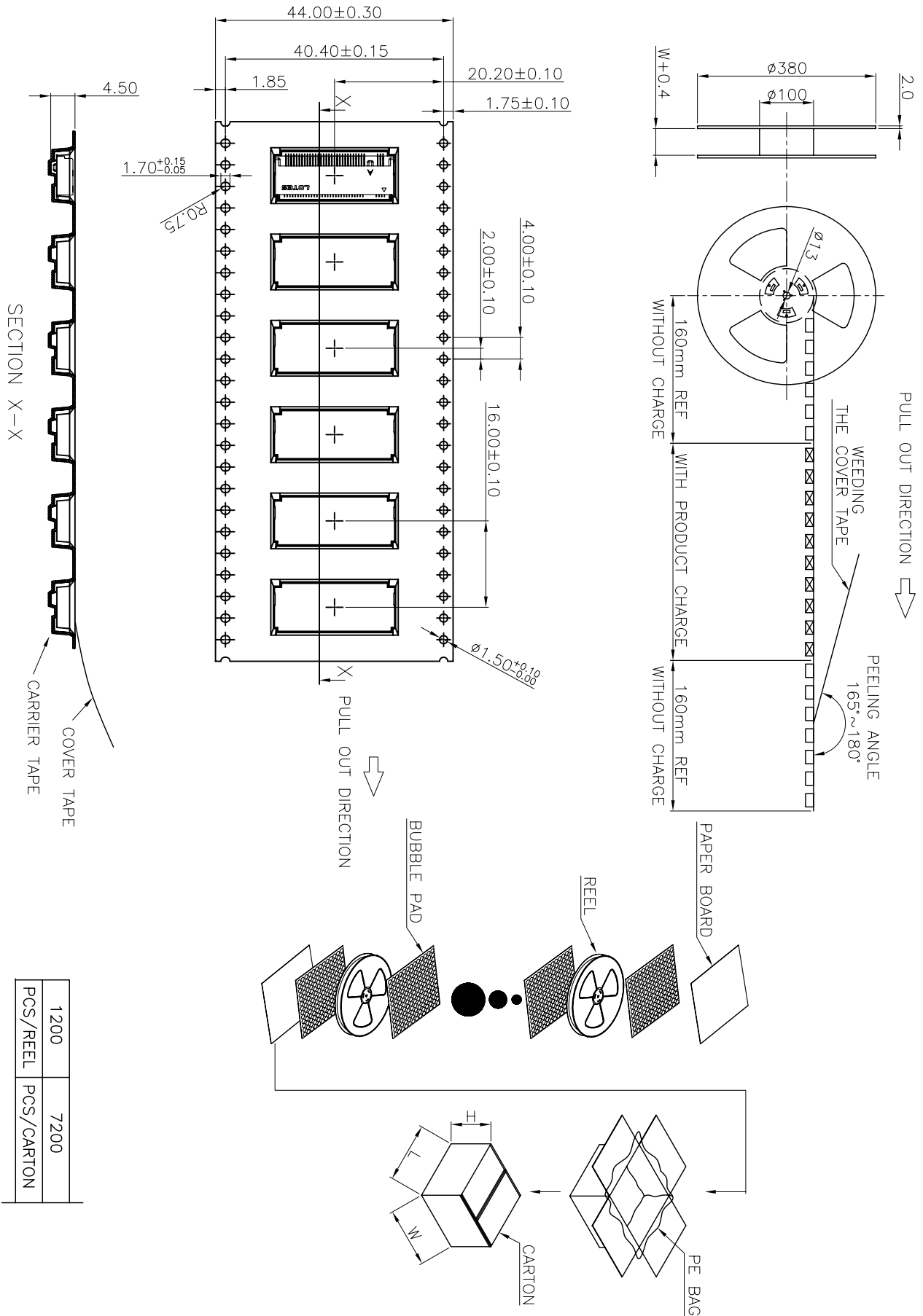
Stack-up Top Mount Double Sided Module
for 1.35 max top-side component height

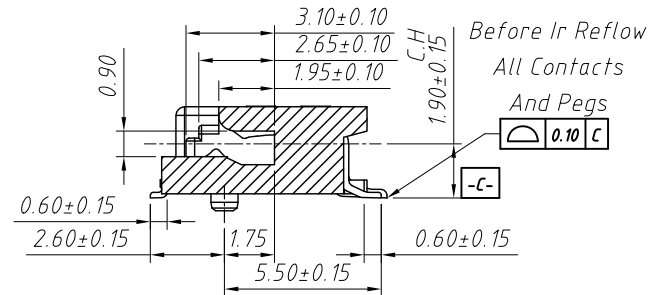


Stack-up Top Mount Double Sided Module
for 1.5 max top-side component height



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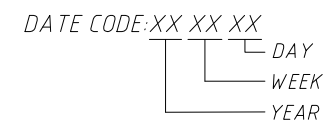
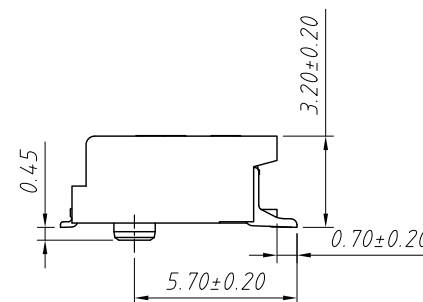




Finished: Rosh 2.0 And HF Compliant

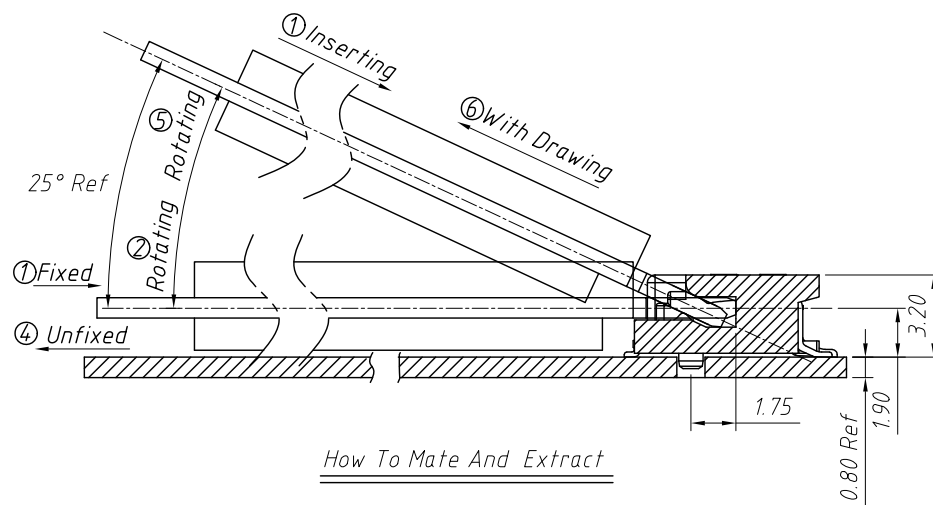
Operating Temperature: $-40^{\circ}\text{C} \sim 80^{\circ}\text{C}$

Insulation Resistance: 500M Ω Min @500V DC



GXU-Xu"Gold Plated

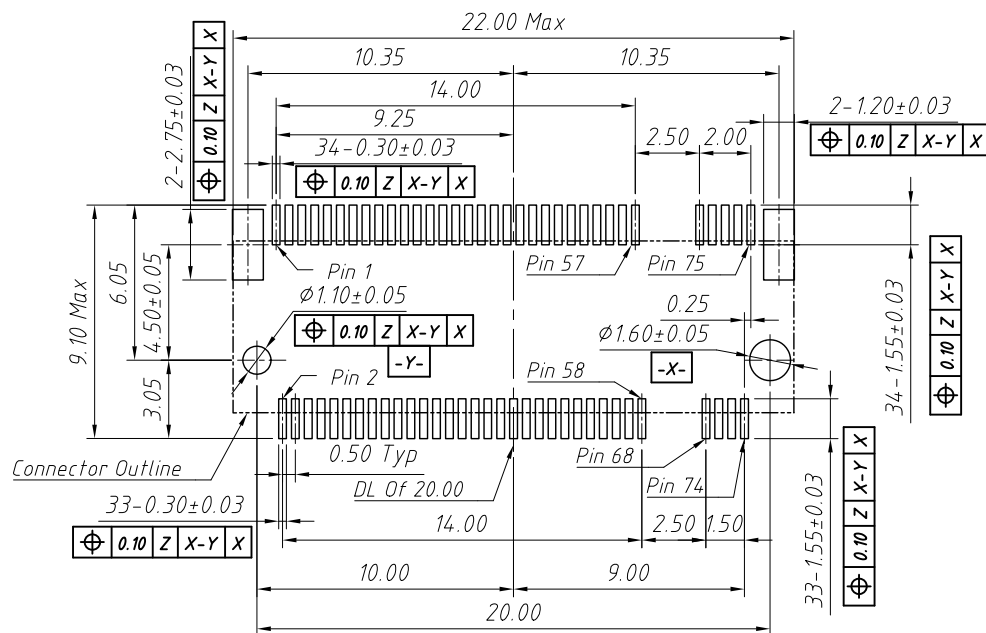
ANGLE TOLERANCE		PROJECTION		Description:	
±3°				M.2 NGFF Connectors	
GENERAL TOLERANCE		UNITS	mm	KLS P/N:	L-KLS1-NGFF01-3.2-M-xxx
x.x	±0.30	SHEET SIZE	A4	1/3	 NingBo KLS ELECTRONIC CO.,LTD.
x.xx	±0.20	Draw:	WuHao	2026-07-15	
x.xxx	±0.10	Check:	Daniel	2026-07-15	



How To Mate And Extract

Mate: ① $\longrightarrow$ ④

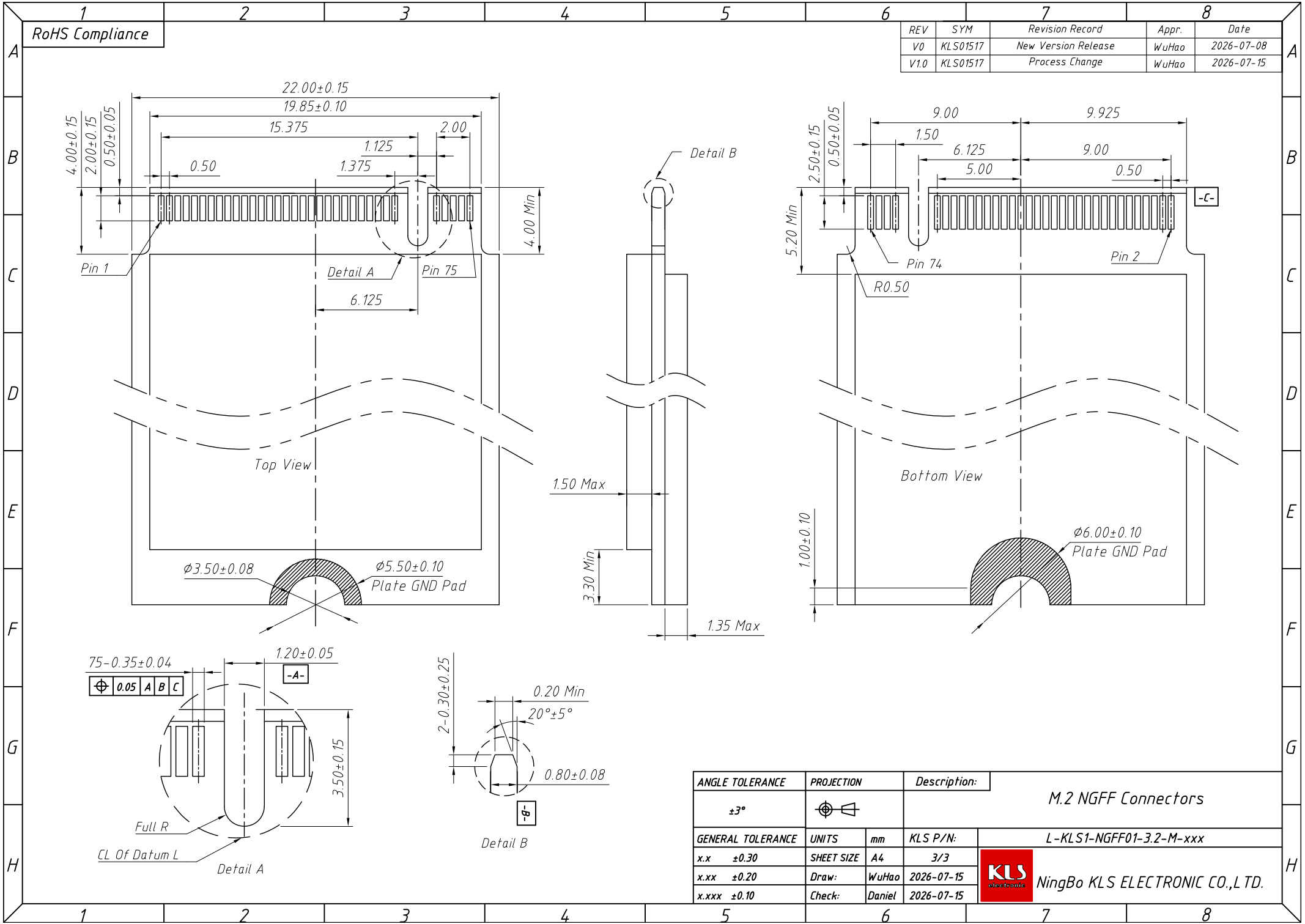
Unmate: ④ $\longrightarrow$ ⑥



Recommended PCB Layout

Tolerance: $\pm 0.05\text{mm}$

ANGLE TOLERANCE		PROJECTION		Description:		
±3°				M.2 NGFF Connectors		
GENERAL TOLERANCE		UNITS	mm			KLS P/N:
x.x	±0.30	SHEET SIZE	A4			2/3
x.xx	±0.20	Draw:	WuHao			2026-07-15
x.xxx	±0.10	Check:	Daniel	2026-07-15	NingBo KLS ELECTRONIC CO.,LTD.	



ANGLE TOLERANCE		PROJECTION	Description:	
±3°			M.2 NGFF Connectors	
GENERAL TOLERANCE		UNITS	mm	KLS P/N:
x.x ±0.30		SHEET SIZE	A4	3/3
x.xx ±0.20		Draw:	WuHao	2026-07-15
x.xxx ±0.10		Check:	Daniel	2026-07-15

NingBo KLS ELECTRONIC CO.,L TD.