



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

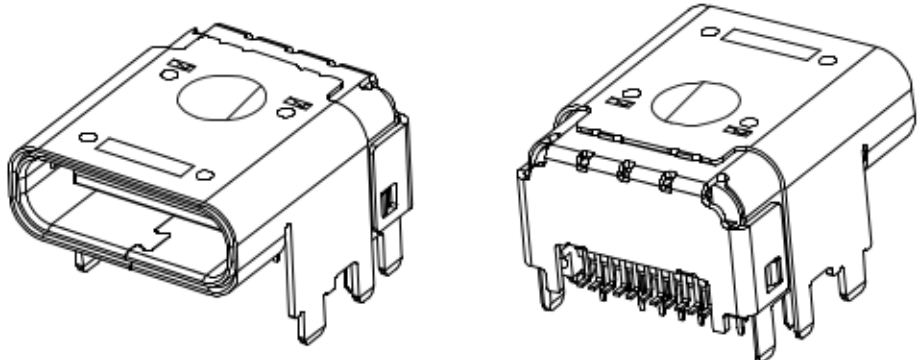
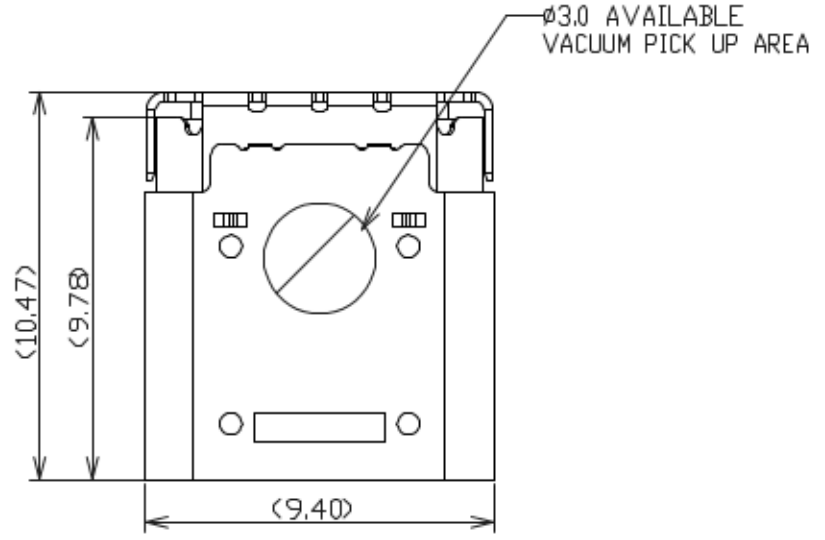
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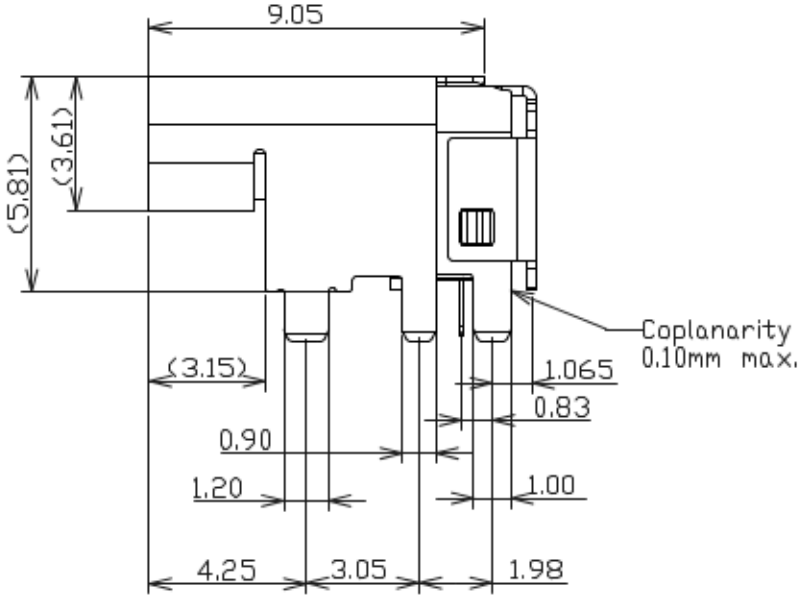
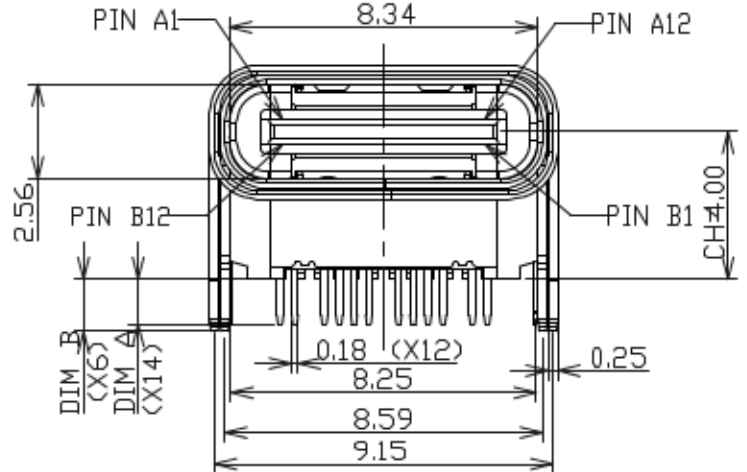
HALOGEN FREE

REV.	EC#	DESCRIPTION	DATE	DRAWN	CHECKED	APPROVED
X1	SZECR14457-04	NEW RELEASE	09/18/15'	Alr.Chen	Alan.Tsal	

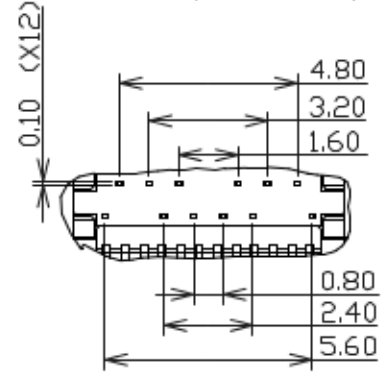
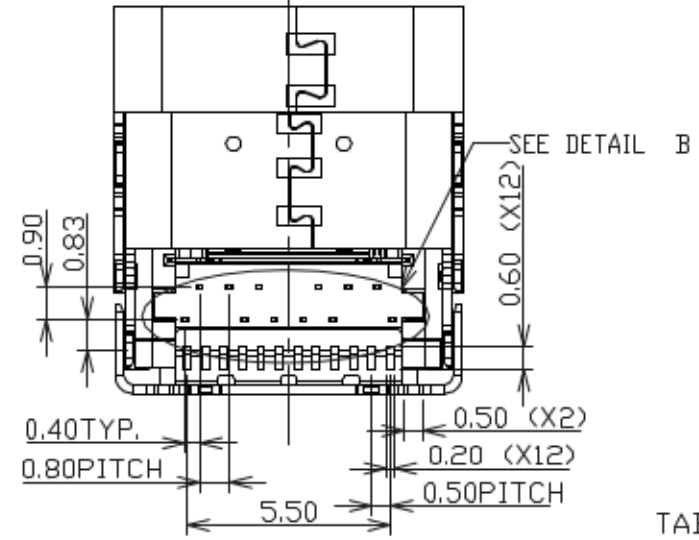


PRODUCT NUMBERING CODE  
 C-ARA1 - A K X X X  
 ① ② ③ ④ ⑤ ⑥

- CONNECTOR TYPE:  
ARA1: USB TYPE-C FULL FEATURE CONN. RECEPTACLE - TOP MOUNT TYPE
- NO. OF POSITION:  
A: 24 POSITIONS.
- COLOR OF INSULATOR:  
K: BLACK.
- PLATING OF CONTACT:  
1: GOLD FLASH ON CONTACT AREA.  
5: Au 30u" PLATING ON CONTACT AREA
- PLATING OF FRONT SHELL  
1: SOLDERING NICKEL
- OTHER & PACKAGE  
0: SHELL HOLD DOWN 1.4mm & CONTACT 1.2mm  
1: SHELL HOLD DOWN 1.8mm & CONTACT 1.6mm  
2: SHELL HOLD DOWN 1.4mm & CONTACT 1.4mm  
5: SHELL HOLD DOWN 1.8mm & CONTACT 1.2mm



Coplanarity  
0.10mm max.



DETAIL B  
SCALE 5:1

PART NUMBER	DIM A	DIM B
C-ARA1-AK510	1.20mm	1.40mm
C-ARA1-AK511	1.60mm	1.80mm
C-ARA1-AK512	1.40mm	1.40mm
C-ARA1-AK515	1.20mm	1.80mm

TABLE A:

PIN NO.	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
SIGNAL NAME	GND	SSTXp1	SSTXn1	VBUS	CC1	Dp1	Dn1	SBU1	VBUS	SSRXn2	SSRXp2	GND
PIN NO.	B12	B11	B10	B9	B8	B7	B6	B5	B4	B3	B2	B1
SIGNAL NAME	GND	SSRXp1	SSRXn1	VBUS	SBU2	Dn1	Dp1	CC2	VBUS	SSTXn2	SSTXp2	GND

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6	EMI RING	2	~	METAL / Ni PLATED
5	GROUND PLATE	1	~	METAL / NI PLATED
4	OUTER SHELL	1	~	METAL / NI PLATED
3	SHELL	1	~	METAL / NI PLATED
2	CONTACT	24	~	COPPER ALLOY / Au PLATED
1	HALF PRODUCT	3	~	HI-TEMP G.F., UL94V-0

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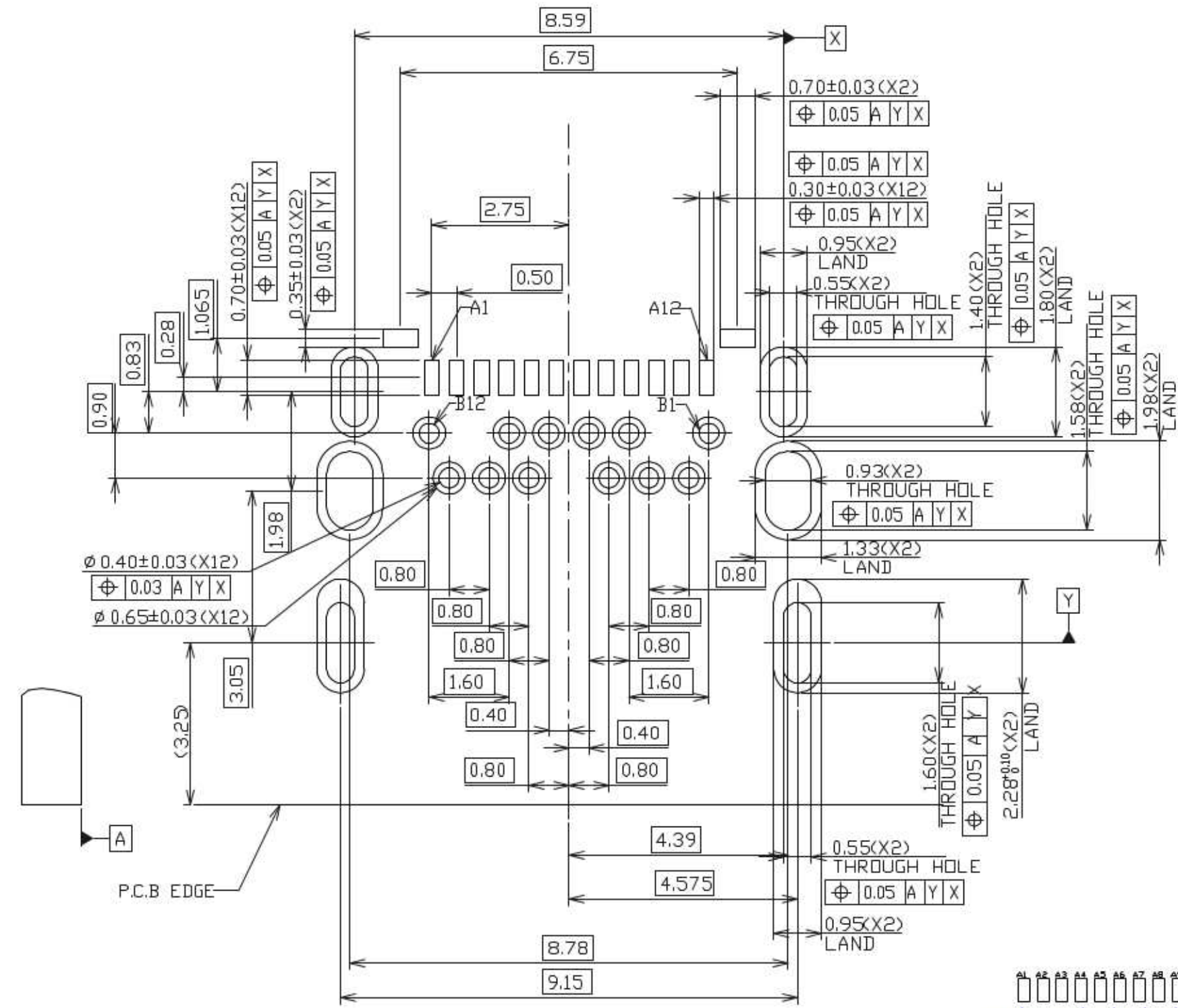
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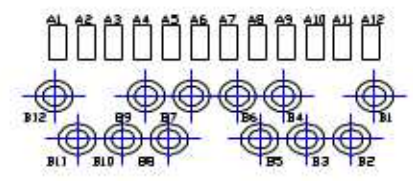
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HALOGEN FREE

A  
B  
C  
D  
E  
F



RECOMMENDED PCB LAYOUT  
THICKNESS IS 1.0mm  
TOLERANCE ± 0.05



- NOTES:
- 1.0. ELECTRICAL CHARACTERISTICS:
    - 1.1. LOW LEVEL CONTACT RESISTANCE: INITIAL:40mΩ FOR ALL CONTACT MAX. AFTER : 50mΩ FOR ALL CONTACT MAX.
    - 1.2. DIELECTRIC WITHSTANDING VOLTAGE: 100 VAC FOR 1 MINUTE SEA LEVEL.
    - 1.3. INSULATION RESISTANCE: 100MΩ MIN.
    - 1.4.CURRENT RATING: VBUS AND GND CONTACTS RATED AT 1.25A EA., PARALLELED FOR A TOTAL OF 5A.
  - 2.0. MECHANICAL CHARACTERISTICS:
    - 2.1. INSERTION FORCE: 5 ~ 20N MAX
    - 2.2. EXTRACTION FORCE: DURABILITY 1~1000 CYCLES 8N MIN, 20 N MAX. DURABILITY 1001~10000 CYCLES 6N MIN, 20 N MAX.
    - 2.3. DURABILITY : 10,000 CYCLES
    - 3.0 OPERATING TEMPERATURE: -40°C TO +85°

TOLERANCES UNLESS OTHERWISE SPECIFIED	DRAWN	DATE	CnC Tech, LLC
GENERAL X .30.38 XX .30.25 XXX .30.05	AVEN	03/23/15'	
ANGLES X° ±30° X° ±20° XX° ±10°	DESIGN	DATE	TITLE
SCALE 7:1	AVEN	03/23/15'	USB TYPE- C FULL FEATURE CONN. RECEPTACLE - TOP MOUNT TYPE
SHEET 2 OF 2	CHECKED	DATE	SERIES
UNIT mm	ROGER	03/23/15'	NARA1 SERIES
	APPROVED	DATE	SIZE A3
	ROGER	03/23/15'	DWG NO. C-NARA1-00-03
			REV. X1