

1 2 3 4 5 6 7 8 9 10

A

B

C

D

E

F

A

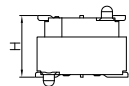
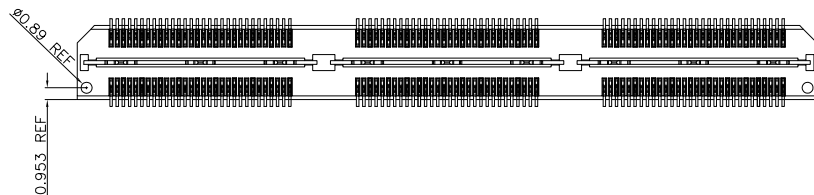
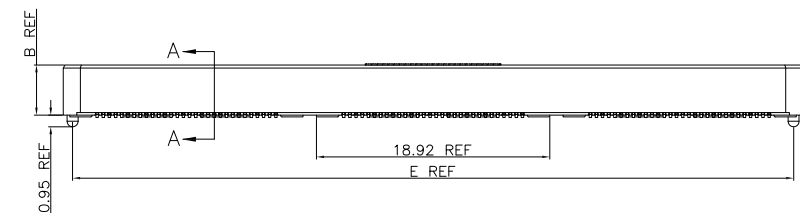
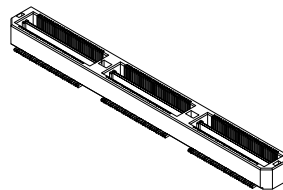
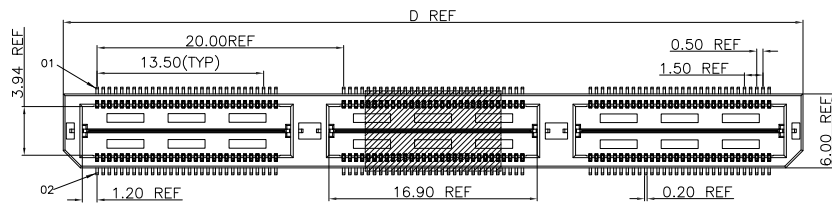
B

C

D

E

F



Mating Height

**Material and Plating:**

Housing: LCP, UL94V-0, Black.  
 Signal Contacts : Phosphor Bronze.  
 Gold Plated on Contact Area and 80u" Min Tin Plated on Solder Tail over nickel 50u" Min .  
 Ground Contacts : Brass.  
 Gold Plated on Contact Area and 80u" Min Tin Plated on Solder Tail over nickel 50u" Min .

**Electrical Characteristics:**

Current Rating: Signal: 3A Per Contact With 3 Adjacent Contacts (UL).  
 Ground: 25A Per Contact With 1 Contact.  
 Voltage Rating: 125V AC .  
 Dielectric Withstanding Voltage: 525V AC For 1 minute.  
 Insulator Resistance: 5000MΩ min at DC 500V.  
 Contact Resistance: Signal: 45mΩ max .  
 Ground: 15mΩ max .  
 Operating Temperature: -55°C ~ +125°C .  
 Durability: 250 Cycle .

**\*RoHS Compliant**

"*" Available Position			
Code	Pos.	Dimension	
		D	E
1			
*	60	20.00	18.48
*	120	40.01	38.48
*	180	60.01	58.48

Code	A	B
1	4.267	4.064
2	7.267	7.064

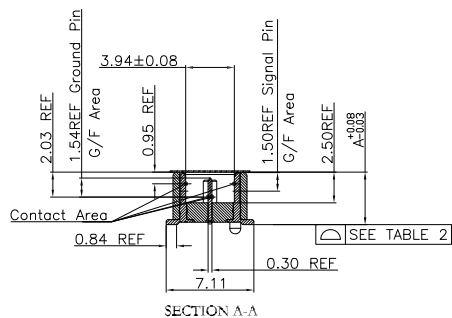
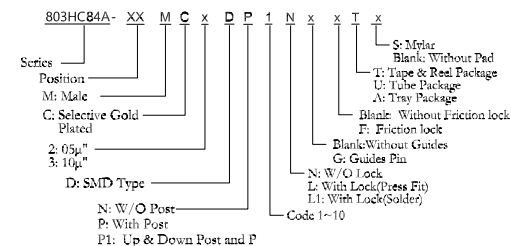



TABLE 2

NO OF POSITIONS	COPLANARITY (INCLUDING GP)
-60 THRU -120	0.10
-180	0.15
Signaling (5mm Stack Height)	Speed Rating (No PCB Effect)
Single-Ended	9.5GHz/19Gbps
Differential	10.5GHz/21Gbp



**PROPRIETARY NOTE:**

This document contains confidential information and proprietary to Rego Electronics and shall not be reproduced or disclosed to other documents or used for any purpose other than that for which was obtained without the expressed written consent of Rego Electronics.

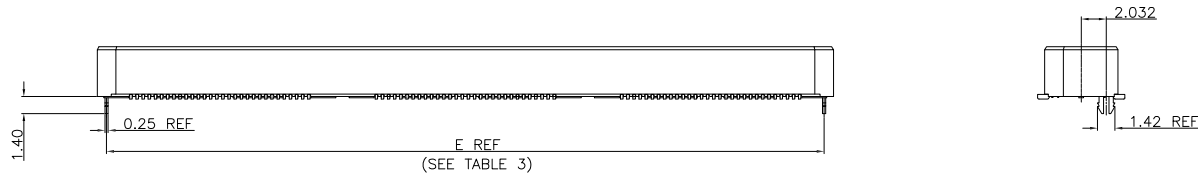
.X ± 0.30	APPROVED: Chris	 TITLE: High Speed Board to Board Pitch 0.5mm Plug PART NO:803HC84A-xxMCxDP1NxxTx SHEET: 1 OF 6
.XX ± 0.20	CHECKED: Andy	
.XXX ± 0.15	DRAWN: Vic	
X* ± 3'		
UNITS: mm	SCALE: NONE	

R5	22.2.2022
REV	DATE

1 2 3 4 5 6 7 8 9 10

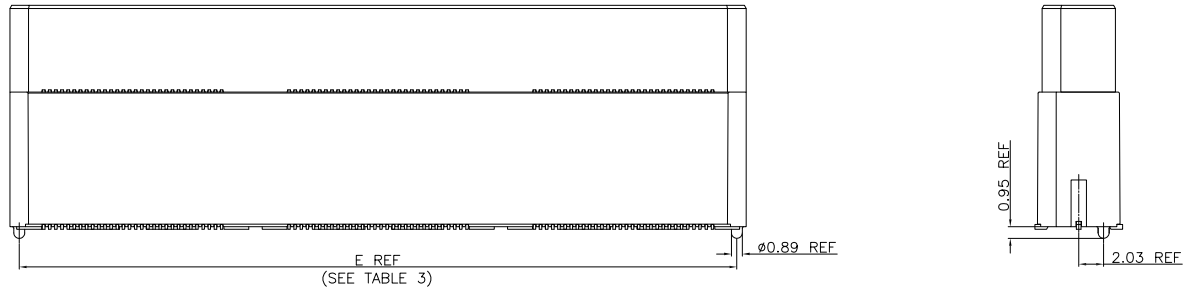
1 2 3 4 5 6 7 8 9 10

A



-L(With Lock)DIFFERENT AS SHOWN, OTHERWISE SAME AS SHEET 1

B



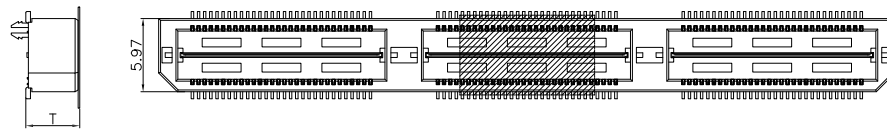
-P(With Post)DIFFERENT AS SHOWN, OTHERWISE SAME AS SHEET 1

(For Code 3 THRU Code 10, SEE TABLE 4.)

C

D

Code	T
1	4.39
2	7.39
3	10.39
4	15.37
9	13.39
10	14.39



-S:Mylar


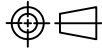
E

F

R5	22.2.2022
REV	DATE

1 2 3 4 5 6 7 8 9 10

**PROPRIETARY NOTE:**  
 This document contains confidential information and proprietary to Rego Electronics and shall not be reproduced or disclosed to other documents or used for any purpose other than that for which was obtained without the expressed written consent of Rego Electronics.

.X ± 0.30	APPROVED: Chris	 <a href="http://www.rego.com.tw">http://www.rego.com.tw</a>
.XX ± 0.20	CHECKED: Andy	
.XXX ± 0.15	DRAWN: Vic	
X* ± 3°		TITLE: High Speed Board to Board Pitch 0.5mm Plug
	UNITS: mm	SCALE: NONE
		PART NO: 803HC84A-xxMCxDP1NxxTx
		SHEET: 2 OF 6

A

B

C

D

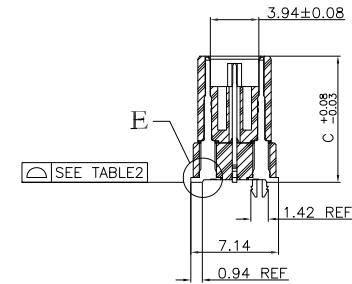
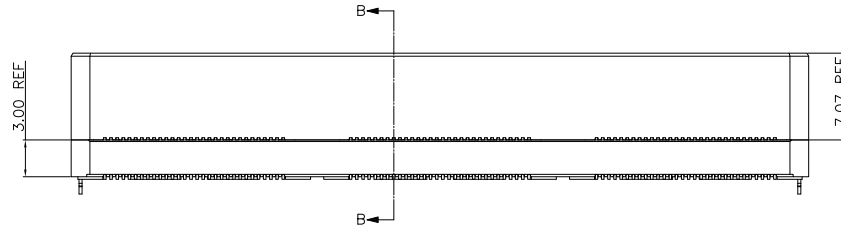
E

F

1 2 3 4 5 6 7 8 9 10

A

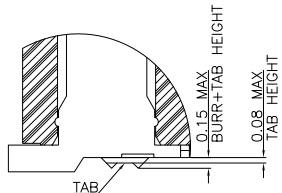
TABLE 4		
Code	SEE FIGURE	C OVERALL HEIGHT
3	1	10.269
4	1	15.243
5	2	18.240
6	2	21.237
7	3	24.237
8	3	29.238
9	1	13.269
10	1	14.270



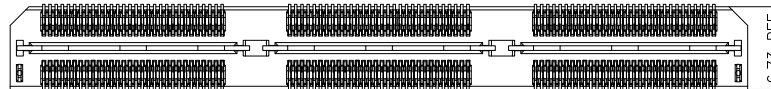
SECTION B-B

B

C

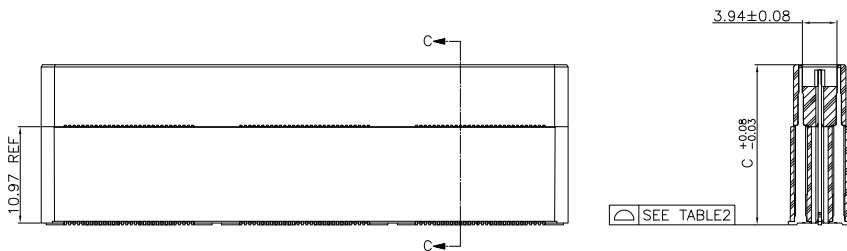


DETAIL E



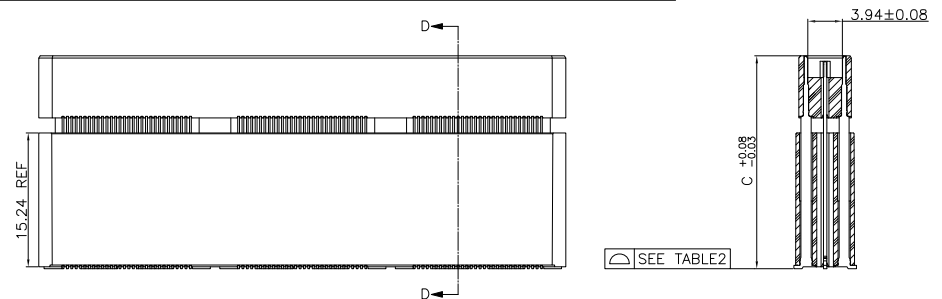
DIFFERENT AS SHOWN, OTHERWISE SAME AS SHEET 1  
803HC84A-A180MxxDN3Lx SHOWN  
FIG 1

D



DIFFERENT AS SHOWN, OTHERWISE SAME AS -P  
803HC84A-A180MxxDN5x SHOWN  
FIG 2

SECTION C-C  
SCALE 1.25:1



DIFFERENT AS SHOWN, OTHERWISE SAME AS -P  
803HC84A-A180MxxDN7x SHOWN  
FIG 2

SECTION D-D  
SCALE 1.25:1


E

F

R5	22.2.2022
REV	DATE

1 2 3 4 5 6 7 8 9 10

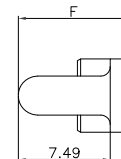
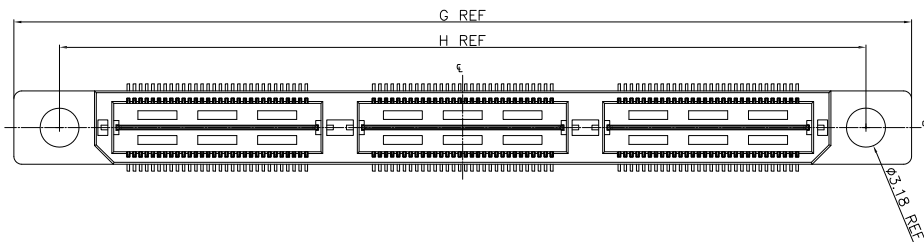
**PROPRIETARY NOTE:**  
This document contains confidential information and proprietary to Rego Electronics and shall not be reproduced or disclosed to other documents or used for any purpose other than that for which was obtained without the expressed written consent of Rego Electronics.

.X ± 0.30	APPROVED: Chris	 <a href="http://www.rego.com.tw">http://www.rego.com.tw</a>
.XX ± 0.20	CHECKED: Andy	
.XXX ± 0.15	DRAWN: Vic	
X* ± 3*		
UNITS: mm	SCALE: NONE	TITLE: High Speed Board to Board Pitch 0.5mm Plug
		PART NO: 803HC84A-xxMCxDP1NxxTx
		SHEET: 3 OF 6

1 2 3 4 5 6 7 8 9 10

A

No OF POS	G	H
60	33.15	25.73
120	53.15	45.73
180	73.15	65.74

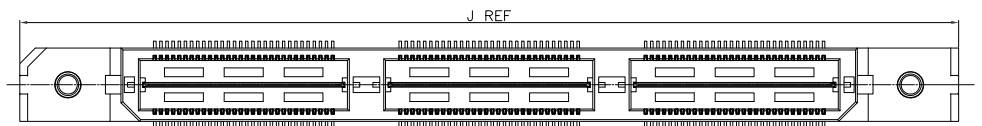


Code	F
1	9.220
2	12.220

B

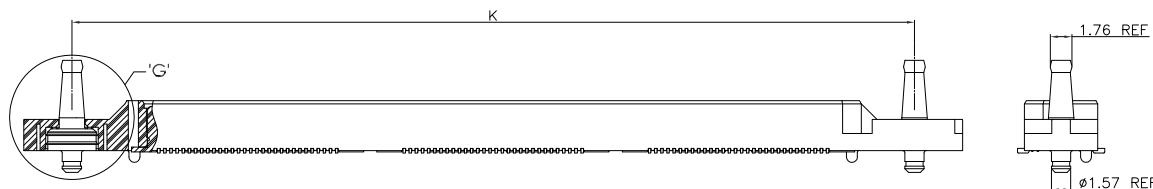
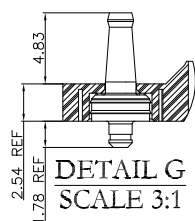
-G(Guides Pin) DIFFERENT AS SHOWN, OTHERWISE SAME AS SHEET 1  
(FOR Code1 & Code 2 LEAD STYLE ONLY)

C



No OF POS	J	K
60	36.53	28.68
120	56.53	48.68
180	76.53	68.68

D




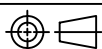
-P1(Up & Down Post and P) DIFFERENT AS SHOWN, OTHERWISE SAME AS SHEET 1  
(FOR Code 1 LEAD STYLE ONLY)  
(Not Available with -L(With Lock),-G(Guides Pin))

E

F

R5	22.2.2022
REV	DATE

**PROPRIETARY NOTE:**  
This document contains confidential information and proprietary to Rego Electronics and shall not be reproduced or disclosed to other documents or used for any purpose other than that for which was obtained without the expressed written consent of Rego Electronics.

.X ± 0.30	APPROVED: Chris	 <a href="http://www.rego.com.tw">http://www.rego.com.tw</a> TITLE: High Speed Board to Board Pitch 0.5mm Plug
.XX ± 0.20	CHECKED: Andy	
.XXX ± 0.15	DRAWN: Vic	
X* ± 3'		
 UNITS: mm SCALE: NONE	PART NO: 803HC84A-xxMCxDP1NxxTx	
	SHEET: 4 OF 6	

1 2 3 4 5 6 7 8 9 10

1 2 3 4 5 6 7 8 9 10

A

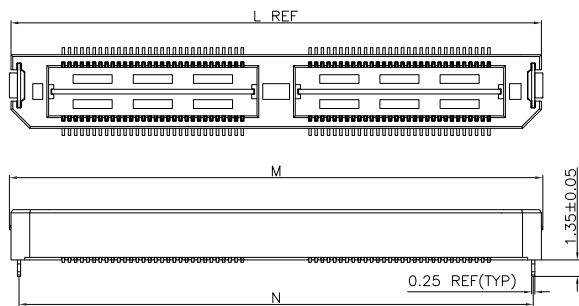
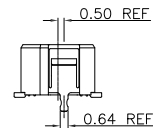


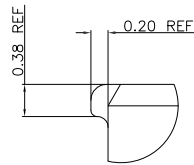
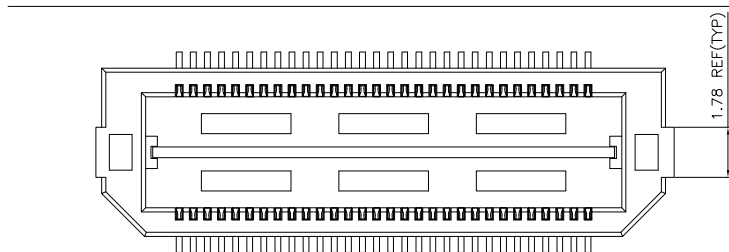
TABLE 9			
No OF POS	L	M	N
60	23.01	23.24	21.69
120	43.01	43.24	41.69
180	63.02	63.25	61.70



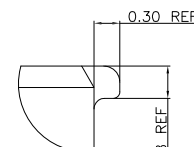
B

-L1(With Lock) DIFFERENT AS SHOWN, OTHERWISE SAME AS SHEET 1  
 (FOR Code 1 LEAD STYLE ONLY)  
 (Not Available with -L(With Lock),-G(GuidesPin),-F(Friction lock),or-P1(Up and Down Post) Options)

C

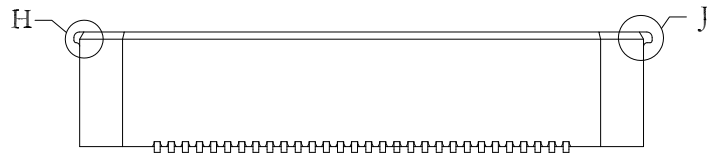


DETAIL "H"  
SCALE 12:1



DETAIL "J"  
SCALE 12:1

D



-F(Friction lock)  
 (DIFFERENT AS SHOWN, OTHERWISE SAME AS SHEET 1)  
 (Not Available with -G(Guides Pin) Options)



E

F

R5	22.2.2022
REV	DATE

1 2 3 4 5 6 7 8 9 10

**PROPRIETARY NOTE:**  
 This document contains confidential information and proprietary to Rego Electronics and shall not be reproduced or disclosed to other documents or used for any purpose other than that for which was obtained without the expressed written consent of Rego Electronics.

.X ± 0.30	APPROVED: Chris	 <a href="http://www.rego.com.tw">http://www.rego.com.tw</a>
.XX ± 0.20	CHECKED: Andy	
.XXX ± 0.15	DRAWN: Vic	
X* ± 3'		
	UNITS: mm	SCALE: NONE
	PART NO:803HC84A-xxMCxDP1NxxTx	
SHEET: 5 OF 6		

A

B

C

D

E

F

1 2 3 4 5 6 7 8 9 10

A

B

C

D

E

F

A

B

C

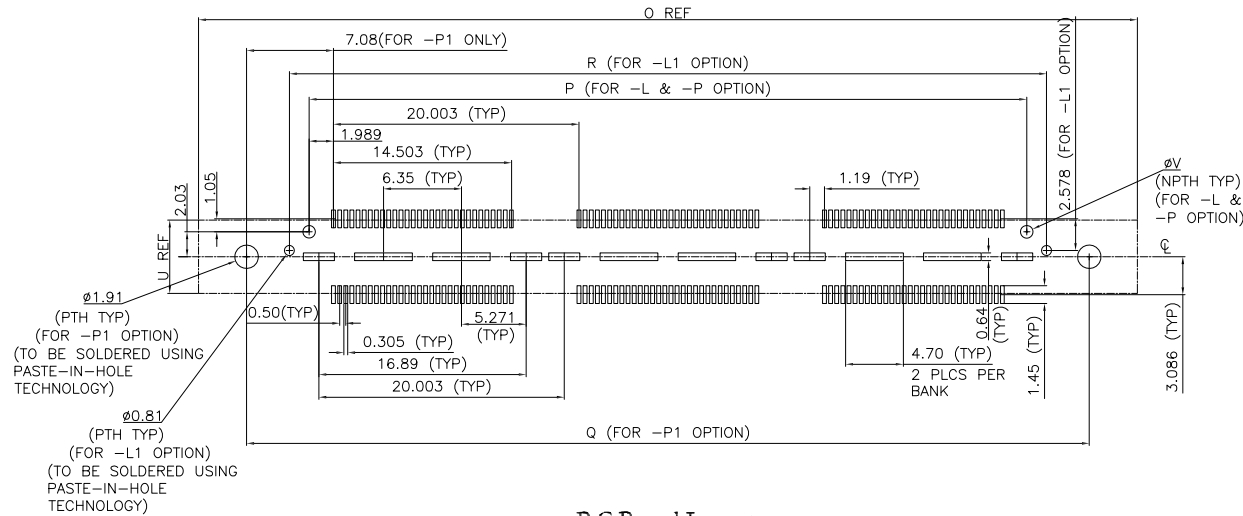
D

E

F

Code	U
-01, -02	5.97
-03 THRU -10	6.73


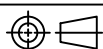
OPTION	V
-L	1.19
-P	1.02



P.C. Board Layout  
(Tolerance: ±0.05)

No OF POS	O							
	-L & -P	-F	-G	-P1	-L1	-L & -P	-P1	-L1
60	20.02	20.52	33.15	36.53	23.01	18.48	28.68	21.69
120	40.02	40.53	53.15	56.53	43.01	38.48	48.68	41.69
180	60.08	60.53	73.15	76.53	63.02	58.48	68.68	61.70

**PROPRIETARY NOTE:**  
This document contains confidential information and proprietary to Rego Electronics and shall not be reproduced or disclosed to other documents or used for any purpose other than that for which was obtained without the expressed written consent of Rego Electronics.

.X ± 0.30	APPROVED: Chris	 <a href="http://www.rego.com.tw">http://www.rego.com.tw</a> TITLE: High Speed Board to Board Pitch 0.5mm Plug
.XX ± 0.20	CHECKED: Andy	
.XXX ± 0.15	DRAWN: Vic	
X* ± 3*		
 UNITS: mm SCALE: NONE	PART NO: 803HC84A-xxMCxDP1NxxTx SHEET: 6 OF 6	

R5	22.2.2022
REV	DATE

1 2 3 4 5 6 7 8 9 10