

1 2 3 4 5 6 7 8

A

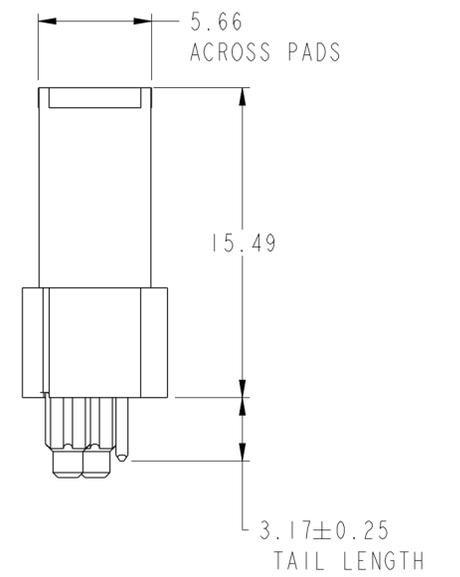
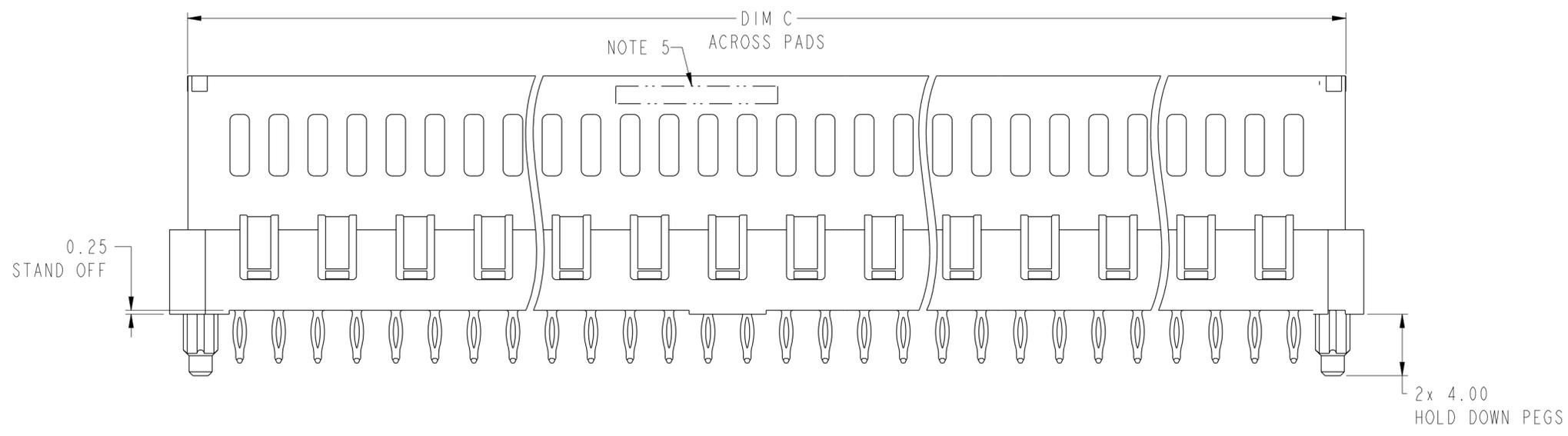
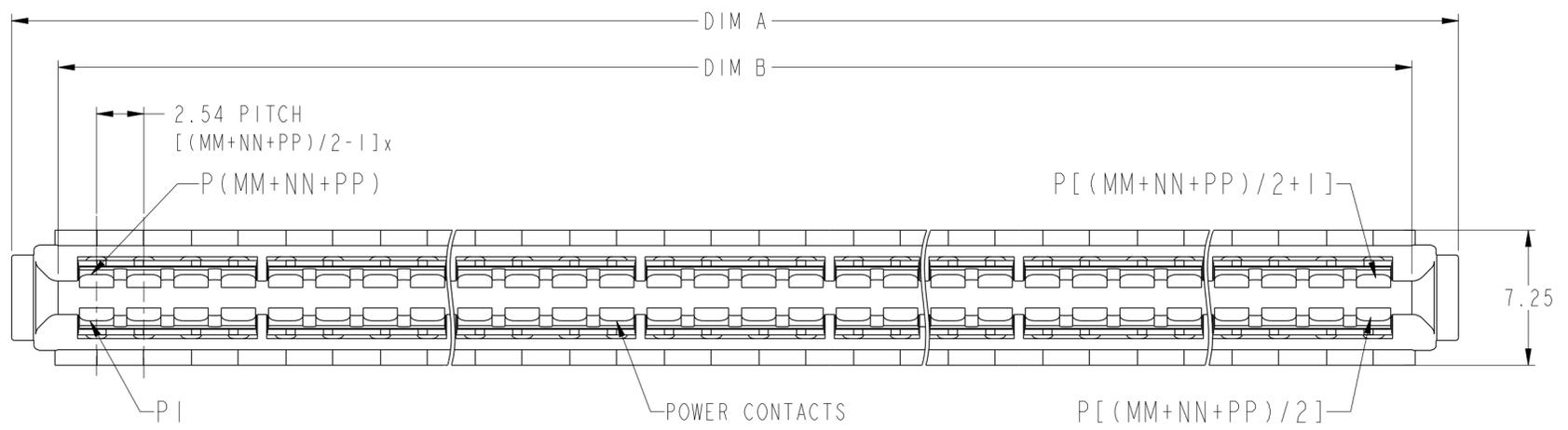
B

C

D

E

F

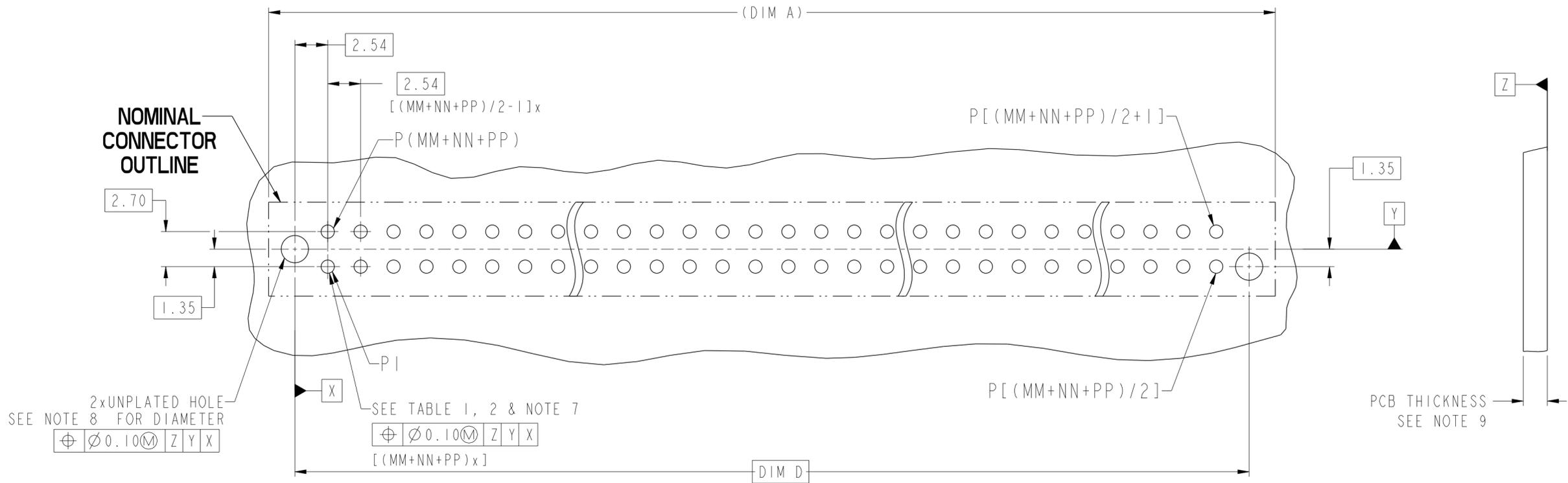


Amphenol
FCi

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spec ref	-	dr	Hai-Ling Liu	2015/10/19	projection	MM	size	A2	scale	4:1
tolerance std	ASME Y14.5	eng	Sunny2 Liu	2016/07/22			ecn no	-	rel level	Released
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	Terris Liu	2016/07/22						
surface		appr	Pai-Ming Zheng	2016/07/22						
linear	0.X ±0.5	Amphenol FCi		title	HPCE VT REC		dwg no	10137351	rev	A
ASME Y14.5	0.XX ±0.25	ALL P CONFIG - UNIVERSAL DRAWING		cat. no.	-					
angular	0° ±2°	PDS: Rev :A		STATUS:Released		Printed: Jul 22, 2016				

1 2 3 4 5 6 7 8



2x UNPLATED HOLE
SEE NOTE 8 FOR DIAMETER

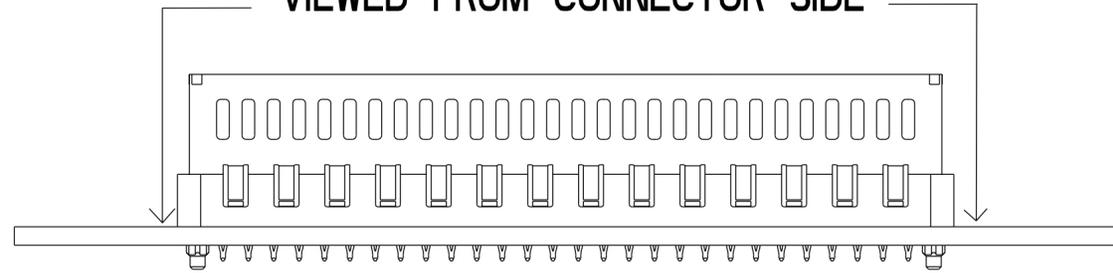
⊕	∅0.10(M)	Z	Y	X
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SEE TABLE 1, 2 & NOTE 7

⊕	∅0.10(M)	Z	Y	X
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PCB THICKNESS
SEE NOTE 9

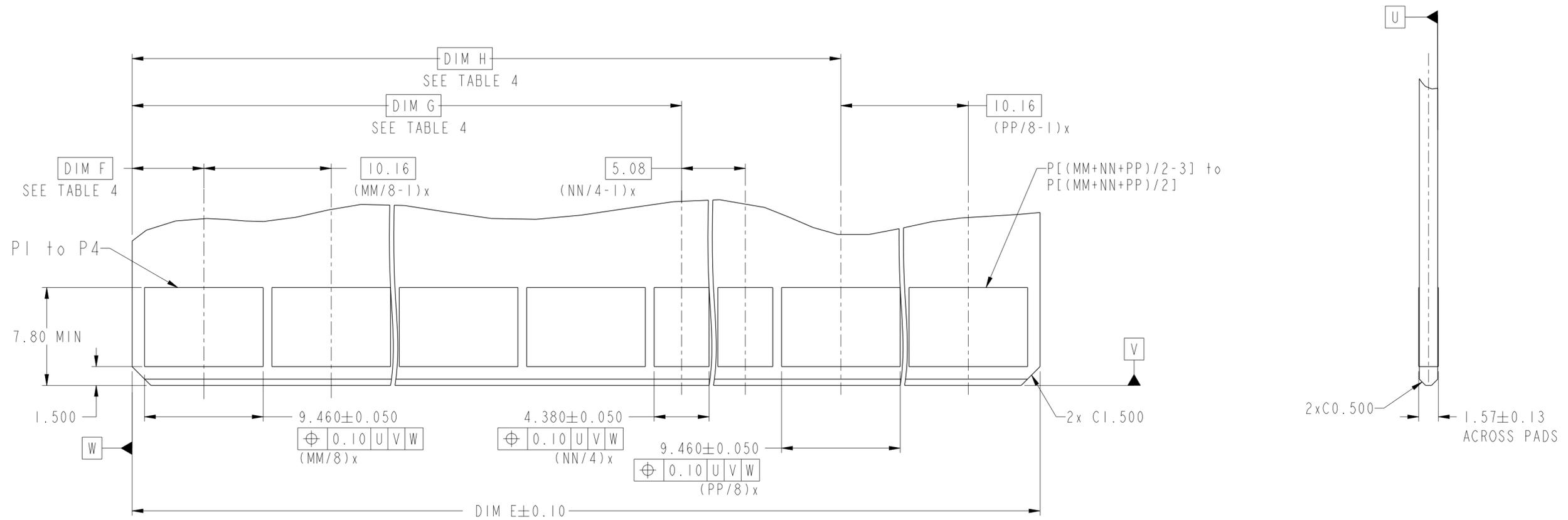
**RECOMMENDED PCB LAYOUT
VIEWED FROM CONNECTOR SIDE**



spec ref	-	dr	Hai-Ling Liu	2015/10/19	projection	MM	size	A2	scale	4:1
tolerance std	ASME Y14.5	eng	Sunny2 Liu	2016/07/22			ecn no	-	rel level Released	
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	Terris Liu	2016/07/22			product family	-		
surface	ASME Y14.5	appr	Pai-Ming Zheng	2016/07/22			title	HPCE VT REC ALL P CONFIG - UNIVERSAL DRAWING		cat. no.
linear	0.X ±0.5 0.XX ±0.25 0.XXX ±0.10	angular	0° ±2°	Amphenol FCI	part no	10137351	rev	A		

CONTACT TYPE	TOP LAYER DESCRIPTION	TABLE 1 (HPCE / SOLDER TAILS) PLATED THROUGH-HOLE REQUIREMENTS				
		DRILLED HOLE DIAMETER	COPPER THICKNESS	TIN-LEAD THICKNESS	TIN THICKNESS	FINISHED HOLE DIAMETER
POWER	TIN-LEAD	1.10-1.16 (1.15 DRILL)	0.025 - 0.050	0.005 - 0.015	--	0.94 - 1.10
	IMMERSION TIN	1.10-1.16 (1.15 DRILL)	0.025 - 0.050	--	0.9 - 1.5um	0.94 - 1.10
	COPPER	1.10-1.16 (1.15 DRILL)	0.025 - 0.050	--	--	0.94 - 1.10

CONTACT TYPE	TOP LAYER DESCRIPTION	TABLE 2 (HPCE / PRESS-FIT TAILS) PLATED THROUGH-HOLE REQUIREMENTS				
		DRILLED HOLE DIAMETER	COPPER THICKNESS	TIN-LEAD THICKNESS	TIN THICKNESS	FINISHED HOLE DIAMETER
POWER	TIN-LEAD	0.81-0.86 (0.85 DRILL)	0.025 - 0.050	0.005 - 0.015	--	0.65 - 0.80
	IMMERSION TIN	0.81-0.86 (0.85 DRILL)	0.025 - 0.050	--	0.9 - 1.5um	0.70 - 0.80
	COPPER	0.81-0.86 (0.85 DRILL)	0.025 - 0.050	--	--	0.70 - 0.80



RECOMMENDED MATING BOARD FOOTPRINT

spec ref	-	dr	Hai-Ling Liu	2015/10/19	projection	MM	size	A2	scale	4:1	
tolerance std	ASME Y14.5	eng	Sunny2 Liu	2016/07/22			ecn no	-	rel level	Released	
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	Terris Liu	2016/07/22							
		appr	Pai-Ming Zheng	2016/07/22							
surface	ASME Y14.5	linear	0.X	±0.5	0.XX	±0.25	0.XXX	±0.10	angular	0°	±2°
					HPCE VT REC ALL P CONFIG - UNIVERSAL DRAWING			cat. no.	Product - Customer Drw	sheet 3 of 4	
					title	HPCVT REC	dwg no	10137351	rev	A	

Amphenol FCI

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10137351 - MM NN PP

LF

LEAD FREE

LEFT 4 BEAM POWER CONTACT QTY
 MIDDLE 2 BEAM POWER CONTACT QTY
 RIGHT 4 BEAM POWER CONTACT QTY

	A	B	C	D
TAIL TYPE SEE NOTE ⑩	STB		PF	
HOLD DOWN OPTION	Y	N	Y	N

CONFIGURATION:
 I: 4 BEAM (NN = 00 AND PP = 00);
 II: 2 BEAM (MM = 00 AND PP = 00);
 III: 4 BEAM + 2 BEAM (PP = 00);
 IV: 2 BEAM + 4 BEAM (MM = 00);
 V: 4 BEAM + 2 BEAM + 4 BEAM.

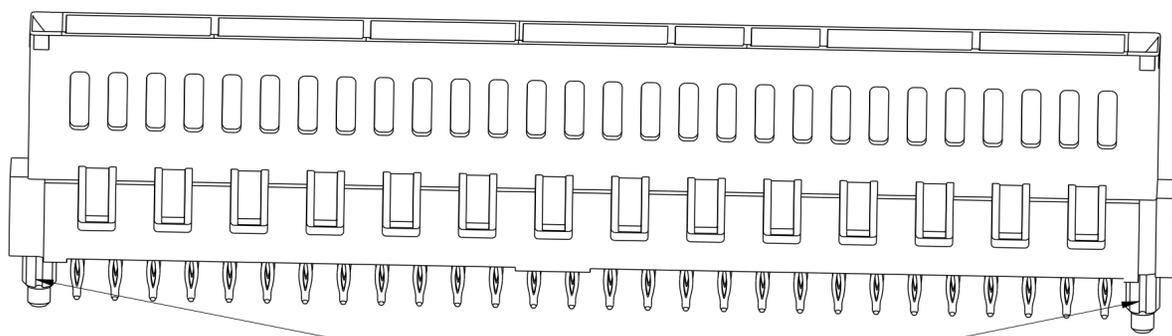
TABLE 3: HPCE STANDARD VERT REC P CONFIG

DIM	TABLE 4: LENGTH FORMULAS	
DIM A ⑩	$(MM + NN + PP) / 2 \times 2.54 + 6.58$	
DIM B	DIM A - 5.00	
DIM C	DIM A - 2.34	
DIM D	DIM A - 4.04	
DIM E	DIM A - 5.30	
DIM F	CONFIG. I	5.72
	CONFIG. II	-
	CONFIG. III	5.72
	CONFIG. IV	-
	CONFIG. V	5.72
DIM G	CONFIG. I	-
	CONFIG. II	3.18
	CONFIG. III	$(MM / 8 - 1) \times 10.16 + 13.34$
	CONFIG. IV	3.18
	CONFIG. V	$(MM / 8 - 1) \times 10.16 + 13.34$
DIM H	CONFIG. I	-
	CONFIG. II	-
	CONFIG. III	-
	CONFIG. IV	$(NN / 4 - 1) \times 5.08 + 10.80$
	CONFIG. V	$(MM / 8 - 1) \times 10.16 + (NN / 4 - 1) \times 5.08 + 20.96$

Amphenol FCI

NOTES:

- CONNECTOR MATERIALS:
 HOUSING: HIGH TEMPERATURE THERMAL PLASTIC, BLACK
 UL 94V-0 COMPLIANT
 CONTACTS: HIGH PERFORMANCE COPPER ALLOY.
- CONTACT FINISH REF. GS-12-604 SECTION 5.2.
- PRODUCT SPECIFICATION: GS-12-604.
- APPLICATION SPECIFICATION: GS-20-128.
- PRODUCT MARKING ON HOUSING IN AREA SHOWN MEETS AFCI SPECIFICATION GS-24-007.
- PACKAGING MEETS FCI SPECIFICATION GS-14-937.
- ALL HOLE SIZES ARE FINISHED HOLE SIZES.
- MOUNTING HOLES ARE UNPLATED
 $\varnothing 2.40 \pm 0.1$ FOR PRESS-FIT TAILS
 $\varnothing 2.18 \pm 0.03$ FOR SOLDER TAILS
- STB= SOLDER TO BOARD, 2.36mm PCB THICKNESS
 PF= PRESS FIT, 1.57mm MINIMUM PCB THICKNESS
- MAXIMUM OVERALL LENGTH IS 100mm
- PRESS FIT APPLICATION TOOLING DRAWING: 10119453



HOLD DOWN OPTION

spec ref	-	dr	Hai-Ling Liu	2015/10/19	projection	MM	size	A2	scale	4:1
tolerance std	ASME Y14.5	eng	Sunny2 Liu	2016/07/22			ecn no	-	rel level	Released
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	Terris Liu	2016/07/22						
		appr	Pai-Ming Zheng	2016/07/22						
surface	linear	Amphenol FCI		HPCE VT REC		10137351		rev		A
ASME Y14.5	angular			ALL P CONFIG - UNIVERSAL DRAWING		cat. no.		Product - Customer Drw		sheet 4 of 4

PDS: Rev :A

STATUS:Released

Printed: Jul 22, 2016

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