

SECTION A-A  
SCALE 4:1

SECTION B-B  
SCALE 4:1

spec ref	-	dr	Wei-Long Zhang	2012/07/05	projection	MM	size	A2	scale	1:1
tolerance std	ISO 406 ISO 1101	eng	Sunny2 Liu	2016/05/05			ecn no	ELX-DG-24036-1		
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	Terris Liu	2016/05/20				rel level	Released	
surface	linear	0.X	±0.3	appr	Pai-Ming Zheng	2016/05/24	product family	STD VERT REC UNIVERSAL		
		0.XX	±0.10	Amphenol FCI		title	HIGH POWER CARD EDGE		dwg no	10121506
	angular	0°	±2°	cat. no.		Product - Customer Drw		sheet	1 of 4	

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 & SIGNAL	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 (SEE NOTE 8)	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 & SIGNAL	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 (SEE NOTE 8)	0.81-0.86 (0.85 DRILL)	0.025 - 0.050	--	--	0.70 - 0.80



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tolerance std	ISO 406 ISO 1101	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Sunny2 Liu	2016/05/05	ecn no	ELX-DG-24036-1	
surface	ISO 1302	linear	0.X	±0.3	chr	Terris Liu	2016/05/20	rel level	Released	
			0.XX	±0.10	appr	Pai-Ming Zheng	2016/05/24	product family	Amphenol FCI	
		angular	0°	±2°	title			STD VERT REC UNIVERSAL HIGH POWER CARD EDGE		
cat. no.							Product - Customer Drw		sheet 2 of 4	

PDS: Rev :C

STATUS:Released

Printed: May 24, 2016

Amphenol FCI

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A

B

C

D

E

F

A

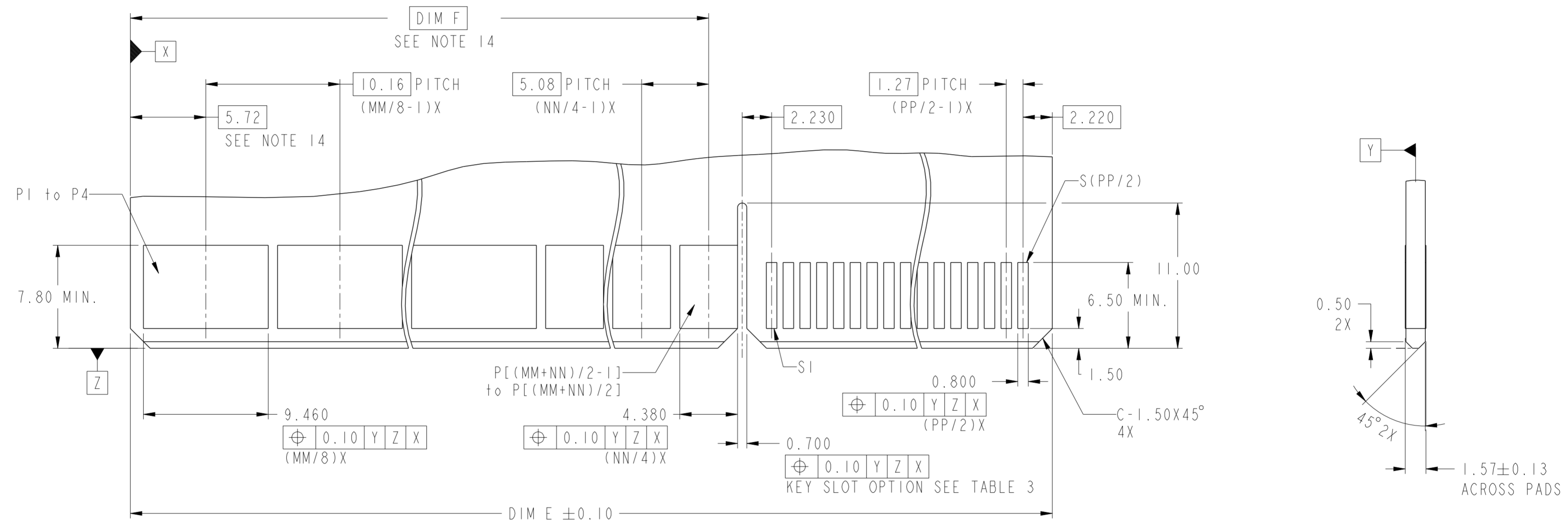
B

C

D

E

F



Amphenol FCI

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spec ref	-	dr	Wei-Long Zhang	2012/07/05	projection	MM	size	A2	scale	1:1
tolerance std	ISO 406 ISO 1101	eng	Sunny2 Liu	2016/05/05			ecn no	ELX-DG-24036-1	rel level	Released
surface	ISO 1302	chr	Terris Liu	2016/05/20						
		appr	Pei-Ming Zheng	2016/05/24						
TOLERANCES UNLESS OTHERWISE SPECIFIED		Amphenol FCI		product family		std VERT REC UNIVERSAL		cat. no.		10121506
linear	0.X ±0.3 0.XX ±0.10 0.XXX ±0.05	HIGH POWER CARD EDGE		Product - Customer Drw		sheet 3 of 4		rev		C
angular	0° ±2°									

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10121506 - MM NN PP LF

LEAD FREE

Polarization Key Option

Tail Type  
Note 12

A	B	C	D
Y	Y	N	N
STB	PF	STB	PF

4 BEAM PWR CONTACT QTY  
(NEXT TO LEFT END)

2 BEAM PWR CONTACT QTY  
(NEXT TO SIGNAL)

SIGNAL CONTACT QTY



Example: The configuration above is 10121506-241232BLF  
STD VERT REC 36P32S with polarization key.  
24P is 4 beam contact, 12P is 2 beam contact.

TABLE 3. PART NUMBER CODE. HPCE STD VERT REC P+S CONFIG

DIM	TABLE 2. LENGTH FORMULAS.
DIM A (13)	$(MM/8) \times 10.16 + (NN/4) \times 5.08 + (PP/2) \times 1.27 + 9.12$
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 (14)	$(MM/8-1) \times 10.16 + (NN/4-1) \times 5.08 + 13.34$ (WITH 4 BEAM CONTACT) 3.18 (WITHOUT 4 BEAM CONTACT)



EXAMPLE: 10121506-241232BLF

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.
- HOUSING COMPONENT WILL WITHSTAND EXPOSURE TO 260°C PEAK TEMPERATURE FOR 60 SECONDS IN A CONVECTION, INFRA-RED, OR VAPOR PHASE REFLOW OVEN.
- COPPER PLATING THICKNESS IN CENTER OF VIA-HOLE CAN BE NO MORE THAN 0.003 LESS THAN OTHER AREAS.
- ALL HOLE SIZES ARE FINISHED HOLE SIZES.
- MOUNTING HOLES ARE UNPLATED  
Ø 2.40 +/- 0.1 FOR PRESS-FIT TAILS  
Ø 2.18 +/- 0.03 FOR SOLDER TAILS
- PRESS FIT APPLICATION TOOL DRAWING : 10119453.
- STB= SOLDER TO BOARD, 1.57-2.38mm PCB THICKNESS.  
PF = PRESS FIT, 1.57mm MINIMUM PCB THICKNESS.
- MAXIMUM OVERALL LENGTH IS 100mm.

- DIM IS NOT APPLICABLE IF NO 4 BEAM CONTACT OR 2 BEAM CONTACT.
- A  $\Delta$  SYMBOL WILL BE NEXT TO ANY DIMENSION, VIEW, OR NOTE WHICH HAS BEEN MODIFIED WITH THE CURRENT DRAWING REVISION.

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surface	linear	0.X	±0.3	0.XX	±0.10	0.XXX	±0.05	angular	0°	±2°	Amphenol FCI	Product - Customer Drw	sheet 4 of 4

Amphenol FCI

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