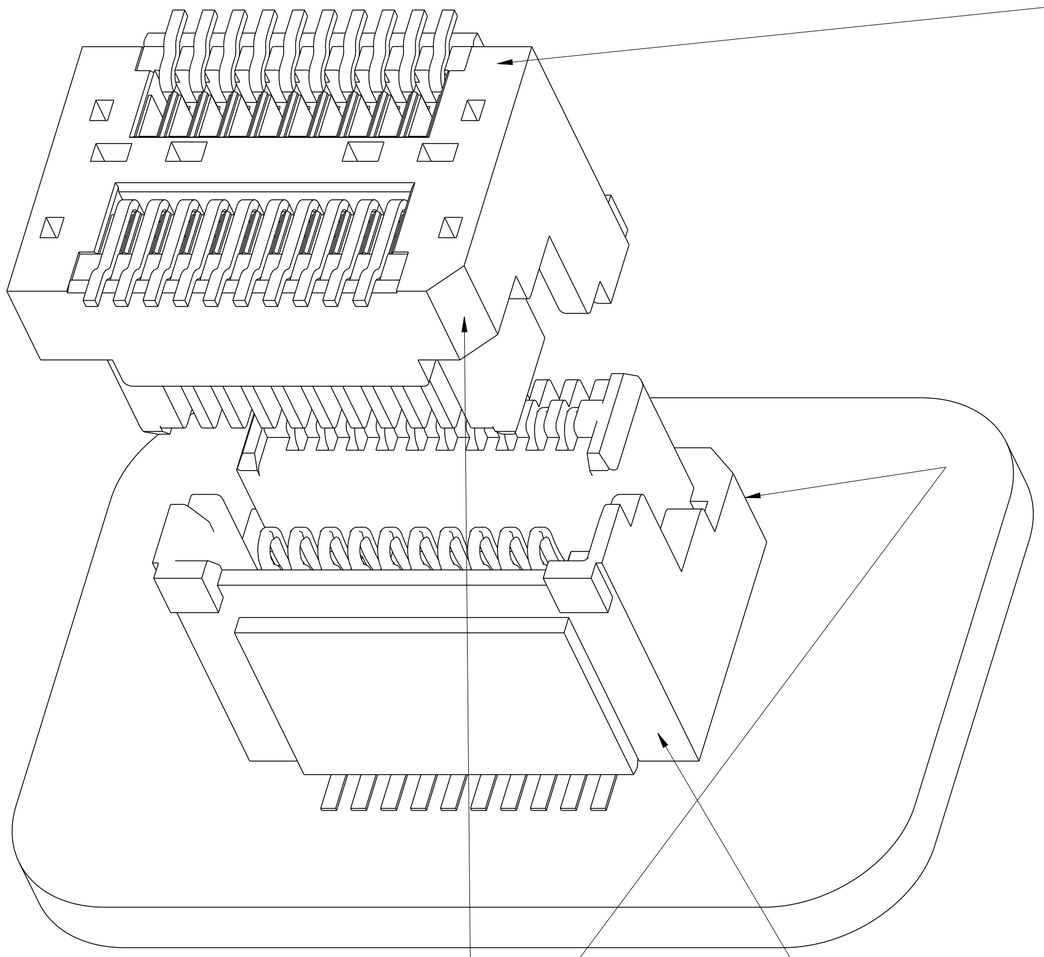
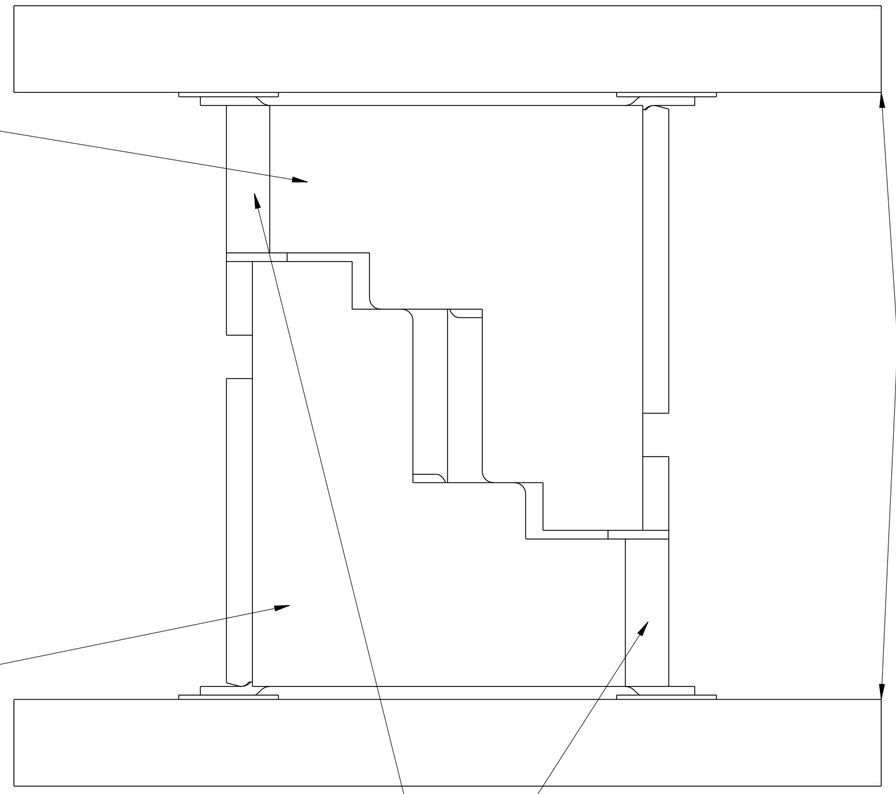
PRODUCT NUMBER
10106814-0XX0X2LF



10106814-0XX0X2LF
HERMAPHRODITIC CONNECTOR
ASSEMBLY



PRINTED
CIRCUIT
BOARD

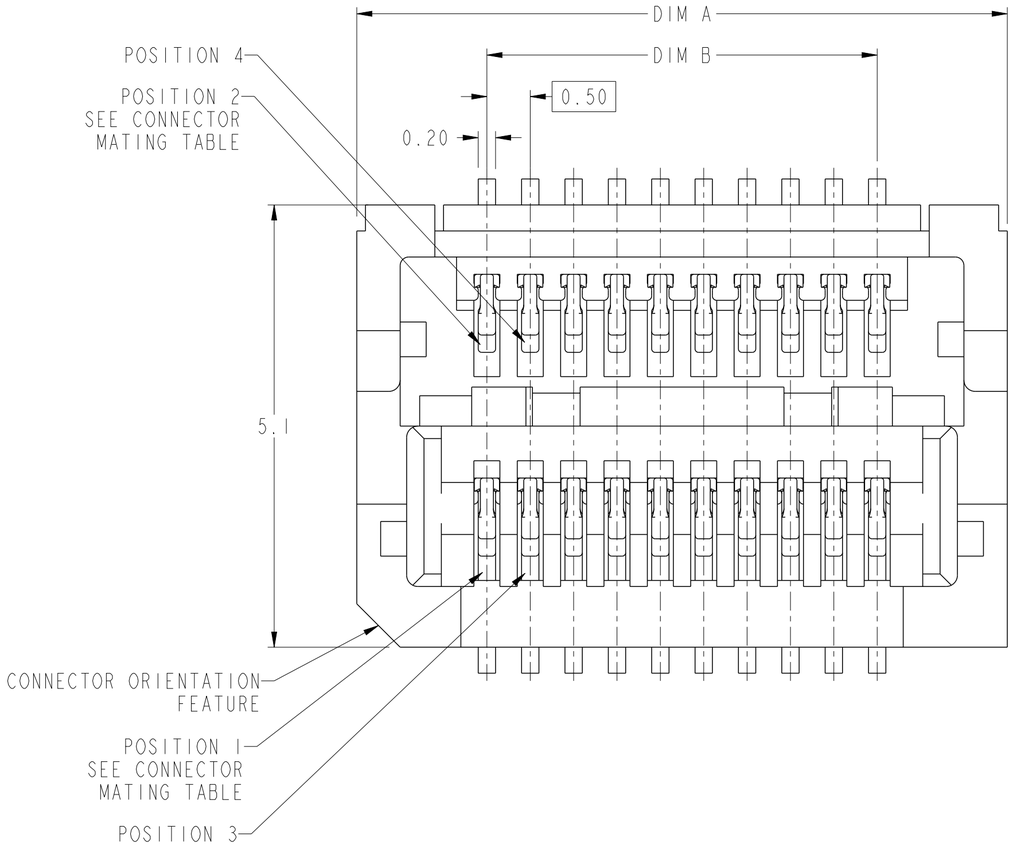
CONNECTOR ORIENTATION
FEATURE
SEE PCB LAYOUT ON PAGE 5

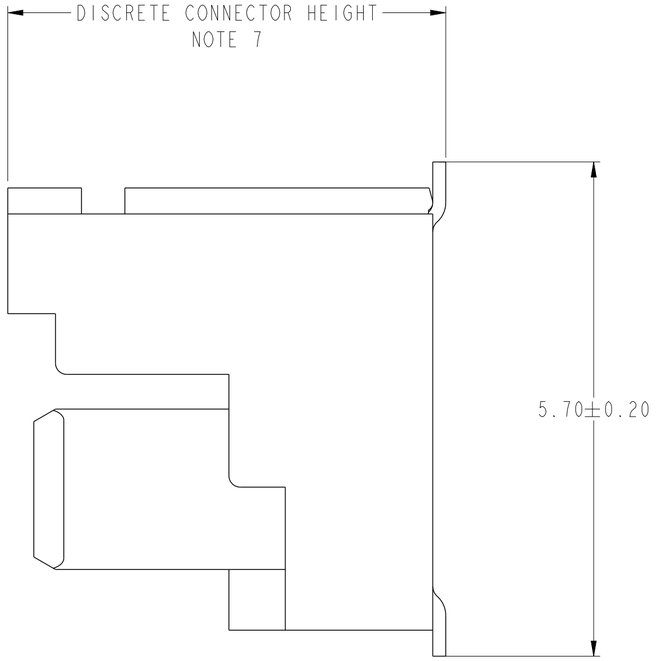
10106814-0XX0X2LF
HERMAPHRODITIC CONNECTOR
ASSEMBLY

CONNECTOR ORIENTATION
FEATURE
SEE PCB LAYOUT ON PAGE 5

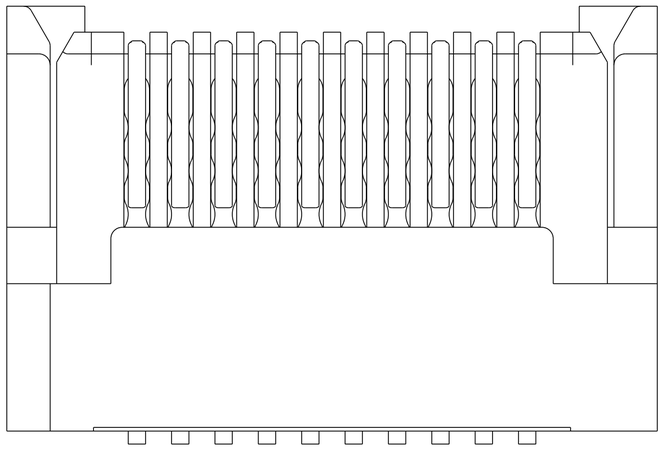
Copyright FCI.

spec ref ---			dr	Stu Stoner	2010/11/22	projection	mm	size A2	scale 20:1
tolerance std ASME Y14.5	TOLERANCES UNLESS OTHERWISE SPECIFIED		eng	Andy Lu	2015/07/15				
			chr	-	-			ecn no	ELX-DG-21387-1
			appr	Pei-Ming Zheng	2015/07/15	product family	MezzoStak	rel level	Released
surface - ASME Y14.5	linear	0.X ±0.3	FCI			title	HERMAPHRODITIC CONNECTOR, SHORT STYLE 20-90 POS, 0.5MM CTR, 4-7MM STACK HT	dwg no	10106814
		0.XX ±0.15							rev D
		0.XXX ±0.05							
	angular	0° ±3°	www.fci.com			cat. no. -	Product - Customer Drw		sheet 1 of 8





HERMAPHRODITIC CONNECTOR MATING	
CONNECTOR POSITION	MATES WITH CONNECTOR POSITION
1	2
3	4
5	6
7	8
9	10
ETC.	



10106814-024002LF SHOWN
WITHOUT STANDARD PICK-UP CAP

spec ref	---		dr	Stu Stoner	2010/11/22	projection	mm	size A2 / scale 20:1
tolerance std ASME Y14.5	TOLERANCES UNLESS OTHERWISE SPECIFIED		eng	Andy Lu	2015/07/15			ecn no ELX-DG-21387-1
			chr	-	-			
			appr	Pei-Ming Zheng	2015/07/15	product family	MezzoStak	rel level Released
surface - ASME Y14.5	linear	0.X ±0.3	FCI	title	HERMAPHRODITIC CONNECTOR, SHORT STYLE			dwg no 10106814 / rev D
		0.XX ±0.15			20-90 POS, 0.5MM CTR, 4-7MM STACK HT			
		0.XXX ±0.05	www.fci.com	cat. no.	-	Product - Customer Drw		sheet 2 of 8
	angular	0° ±3°						

Copyright FCI.

PRODUCT NUMBER	NUMBER OF POSTIONS	DIM A	DIM B	DISCRETE CONNECTOR HEIGHT NOTE 9	PRACTICAL CONNECTOR HEIGHT NOTE 8	STATUS
10106814-021002LF	20	7.5	4.5	3.55	2.00	RELEASED
10106814-031002LF	30	10.0	7.0			
10106814-041002LF	40	12.5	9.5			
10106814-051002LF	50	15.0	12.0			
10106814-061002LF	60	17.5	14.5			
10106814-071002LF	70	20.0	17.0			
10106814-022002LF	20	7.5	4.5	4.05	2.50	UN-RELEASED
10106814-032002LF	30	10.0	7.0			
10106814-042002LF	40	12.5	9.5			
10106814-052002LF	50	15.0	12.0			
10106814-062002LF	60	17.5	14.5			
10106814-072002LF	70	20.0	17.0			
10106814-023002LF	20	7.5	4.5	4.55	3.00	RELEASED
10106814-033002LF	30	10.0	7.0			
10106814-043002LF	40	12.5	9.5			
10106814-053002LF	50	15.0	12.0			
10106814-063002LF	60	17.5	14.5			
10106814-073002LF	70	20.0	17.0			
10106814-083002LF	80	22.5	19.5			UN-RELEASED
10106814-083202LF	80	22.5	19.5			UN-RELEASED
10106814-093002LF	90	25.0	22.0			RELEASED
10106814-093012LF	90	25.0	22.0			RELEASED
10106814-093202LF	90	25.0	22.0			RELEASED
10106814-024002LF	20	7.5	4.5	5.05	3.50	RELEASED
10106814-034002LF	30	10.0	7.0			
10106814-044002LF	40	12.5	9.5			
10106814-054002LF	50	15.0	12.0			
10106814-064002LF	60	17.5	14.5			
10106814-074002LF	70	20.0	17.0			

0.5 BTB HERMAPHRODITIC CONNECTOR ASSEMBLY PART NUMBER SCHEME

EXAMPLE: 10106814-XX X X X 2 LF

NUMBER OF POSITIONS
02 = 20 POS
03 = 30 POS
04 = 40 POS
05 = 50 POS
06 = 60 POS
07 = 70 POS
08 = 80 POS
09 = 90 POS

PRACTICAL CONNECTOR HEIGHT NOTE 8
1 = 2.0MM
2 = 2.5MM
3 = 3.0MM
4 = 3.5MM

PEG OPTION
0 = NO PEGS
2 = PEGS

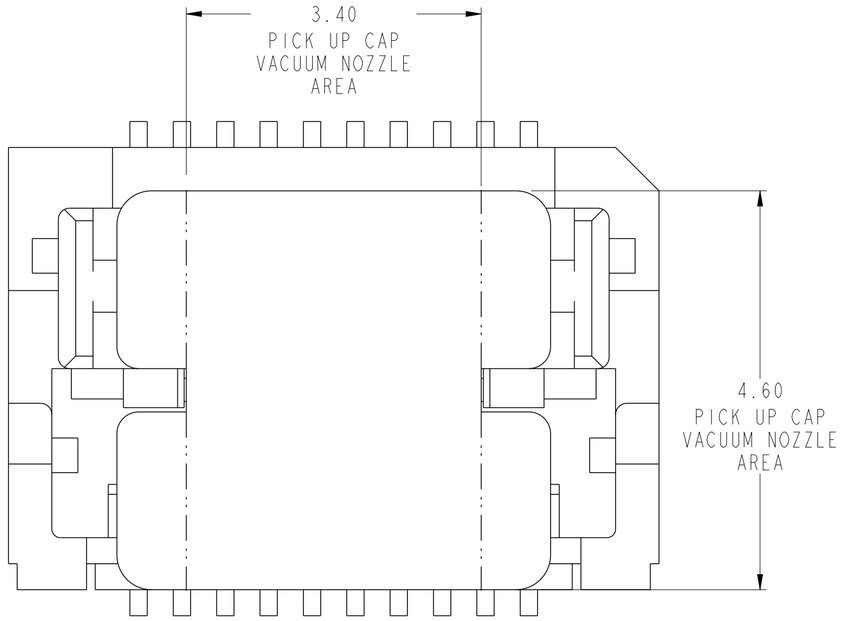
CONTACT PLATING	
0	GENERAL PLATING PER PERFORMANCE REQUIRED BY PRODUCT SPECIFICATION
1	30u" GXT(SPECIAL)

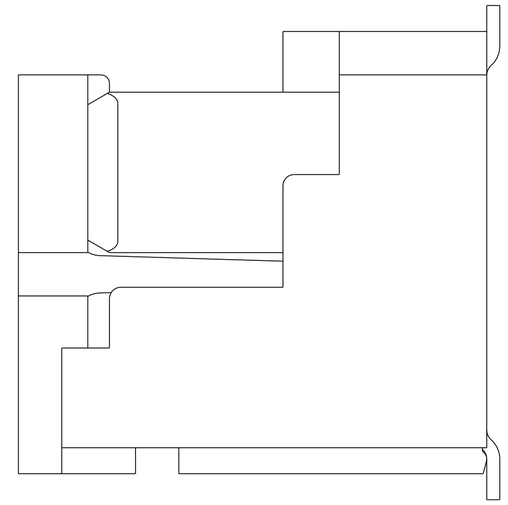
PACKAGING	
2	TAPE AND REEL WITH PICK-UP CAP

LEAD FREE INDICATOR

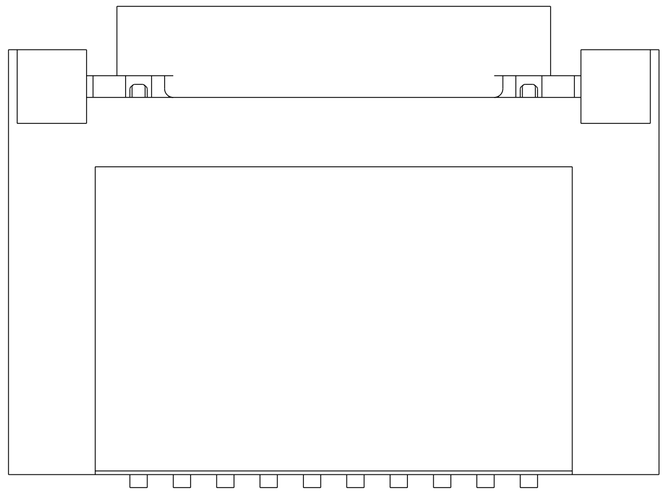
Copyright FCI.

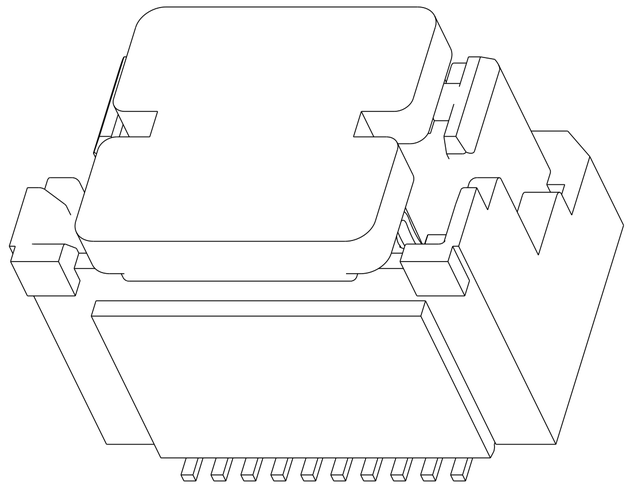
spec ref	- - -		dr	Stu Stoner	2010/11/22	projection	mm	size A2 / scale 10:1
tolerance std ASME Y14.5	TOLERANCES UNLESS OTHERWISE SPECIFIED		eng	Andy Lu	2015/07/15			ecn no ELX-DG-21387-1
			chr	-	-			
			appr	Pei-Ming Zheng	2015/07/15	product family	MezzoStak	rel level Released
surface - ASME Y14.5	linear	0.X ±0.3	FCI www.fci.com		title	HERMAPHRODITIC CONNECTOR, SHORT STYLE 20-90 POS, 0.5MM CTR, 4-7MM STACK HT	dwg no 10106814	rev D
		0.XX ±0.15						
		0.XXX ±0.05						
	angular	0° ±3°	cat. no. -			Product - Customer Drw		sheet 3 of 8





10106814-024002LF SHOWN
WITH STANDARD PICK-UP CAP





spec ref	- - -			dr	Stu Stoner	2010/11/22	projection	mm
tolerance std ASME Y14.5	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Andy Lu	2015/07/15		
				chr	-	-		
				appr	Pei-Ming Zheng	2015/07/15	product family	MezzoStak
surface - ASME Y14.5	linear	0.X	±0.3	FCI www.fci.com	title	HERMAPHRODITIC CONNECTOR, SHORT STYLE 20-90 POS, 0.5MM CTR, 4-7MM STACK HT	dwg no	10106814
		0.XX	±0.15					
		0.XXX	±0.05					
	angular	0°	±3°		cat. no.	-	Product - Customer Drw	

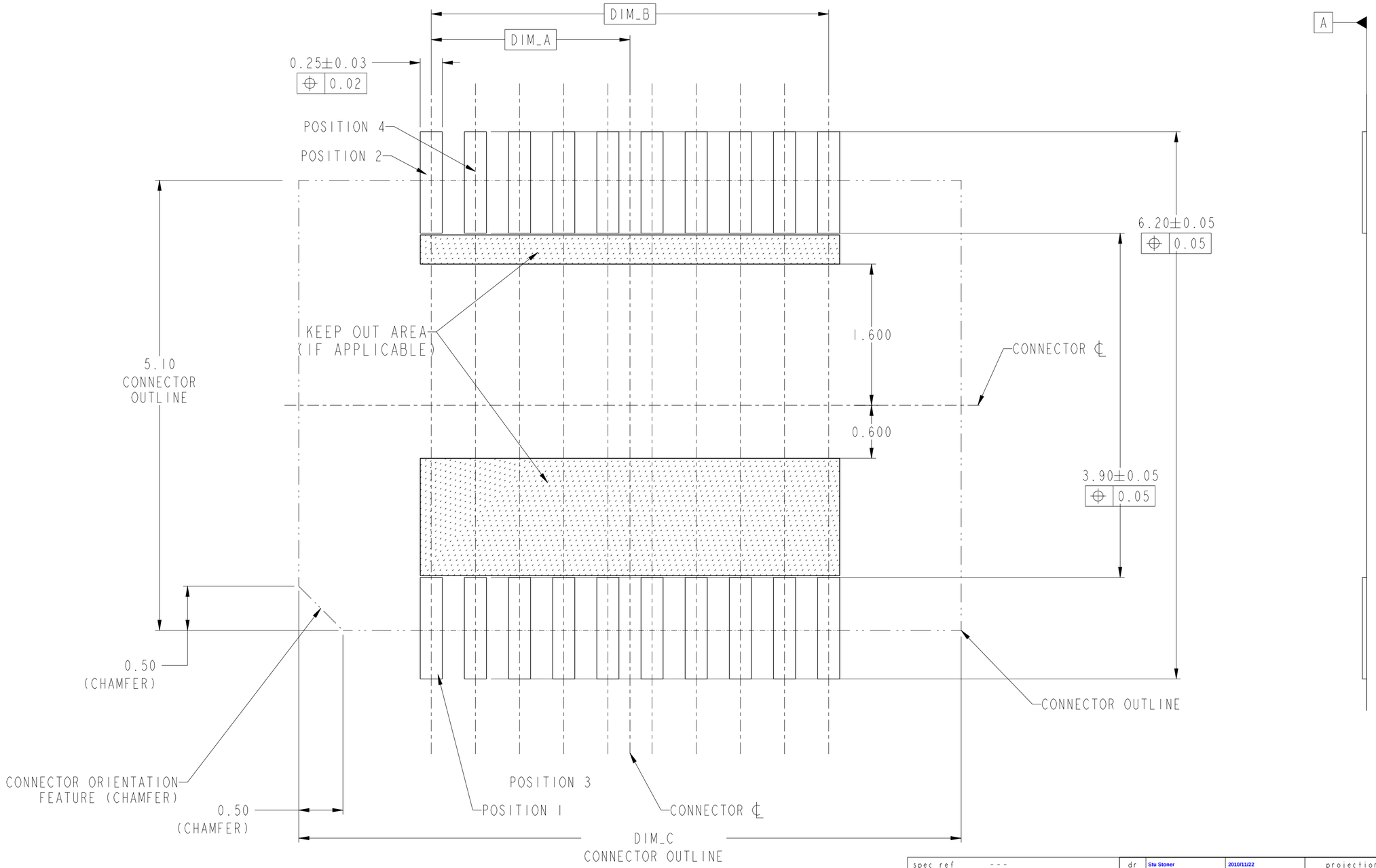
size	scale	rev
A2	20:1	D

ecn no ELX-DG-21387-1
rel level **Released**
sheet 4 of 8

PDS: Rev :D **STATUS: Released** **Printed: Jul 16, 2015**

Copyright FCI.

PRODUCT NUMBER	NUMBER OF POSTIONS	DIM A	DIM B	DIM C	PEGS STATUS	DIM_D
10106814-02X002LF	20	2.25	4.50	7.50	NO	N/A
10106814-03X002LF	30	3.50	7.00	10.00	NO	N/A
10106814-04X002LF	40	4.75	9.50	12.50	NO	N/A
10106814-05X002LF	50	6.00	12.00	15.00	NO	N/A
10106814-06X002LF	60	7.25	14.50	17.50	NO	N/A
10106814-07X002LF	70	8.50	17.00	20.00	NO	N/A
10106814-08X002LF	80	9.75	19.50	22.50	NO	N/A
10106814-09X0X2LF	90	11.00	22.00	25.00	NO	N/A
10106814-08X202LF	80	9.75	19.50	22.50	YES	22.00
10106814-09X202LF	90	11.00	22.00	25.00	YES	24.50



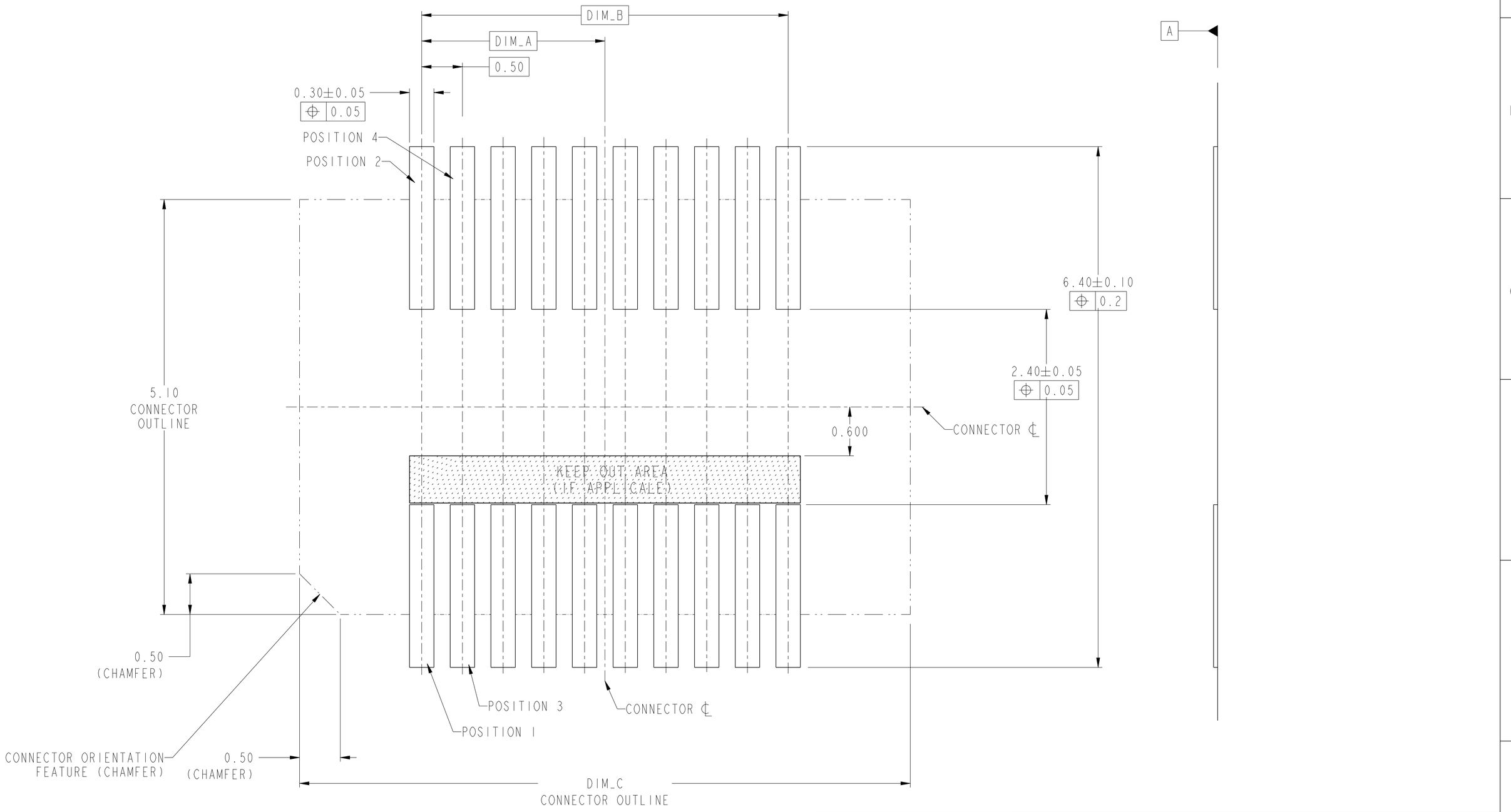
OPTION 1 - SPACE OPTIMZED FOOTPRINT
SEE TABLE FOR CONNECTOR LAYOUT DIMENSIONS
SEE NOTE 8 FOR STENCIL CREATION GUIDELINES

Copyright FCI.

spec ref	- - -		dr	Stu Stoner	2010/11/22	projection	mm
tolerance std ASME Y14.5	TOLERANCES UNLESS OTHERWISE SPECIFIED		eng	Andy Lu	2015/07/15		
			chr	-	-		
			appr	Pei-Ming Zheng	2015/07/15		

size A2	scale 30:1						
ecn no ELX-DG-21387-1							
product family MezzoStak	rel level **Released**						
surface - ASME Y14.5	linear	0.X	±0.3	FCI www.fci.com	title HERMAPHRODITIC CONNECTOR, SHORT STYLE 20-90 POS, 0.5MM CTR, 4-7MM STACK HT	dwg no 10106814	rev D
		0.XX	±0.15				
		0.XXX	±0.05				
	angular	0°	±3°	cat. no. -	Product - Customer Drw	sheet 5 of 8	

PRODUCT NUMBER	NUMBER OF POSTIONS	DIM A	DIM B	DIM C	PEGS STATUS	DIM_D
10106814-02X002LF	20	2.25	4.50	7.50	NO	N/A
10106814-03X002LF	30	3.50	7.00	10.00	NO	N/A
10106814-04X002LF	40	4.75	9.50	12.50	NO	N/A
10106814-05X002LF	50	6.00	12.00	15.00	NO	N/A
10106814-06X002LF	60	7.25	14.50	17.50	NO	N/A
10106814-07X002LF	70	8.50	17.00	20.00	NO	N/A
10106814-08X002LF	80	9.75	19.50	22.50	NO	N/A
10106814-09X0X2LF	90	11.00	22.00	25.00	NO	N/A
10106814-08X202LF	80	9.75	19.50	22.50	YES	22.00
10106814-09X202LF	90	11.00	22.00	25.00	YES	24.50

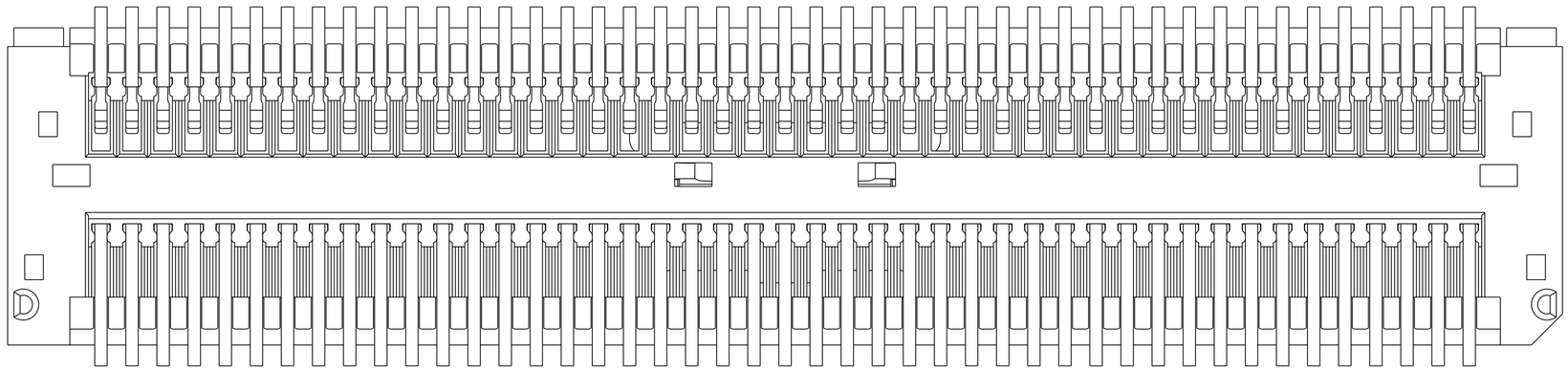


OPTION 2 - FOOTPRINT
SEE TABLE FOR CONNECTOR LAYOUT DIMENSIONS
SEE NOTE 8 FOR STENCIL CREATION GUIDELINES

spec ref	---			dr	Stu Stoner	2010/11/22	projection	mm	size A2 / scale 10:1
tolerance std ASME Y14.5	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Andy Lu	2015/07/15			ecn no ELX-DG-21387-1
				chr	-	-			
				appr	Pei-Ming Zheng	2015/07/15	product family	MezzoStak	rel level Released
surface ASME Y14.5	linear	0.X	±0.3	FCI www.fci.com	title	HERMAPHRODITIC CONNECTOR, SHORT STYLE 20-90 POS, 0.5MM CTR, 4-7MM STACK HT	dwg no	10106814	rev D
		0.XX	±0.15						
		0.XXX	±0.05						
	angular	0°	±3°		cat. no.	-	Product - Customer Drw		sheet 6 of 8

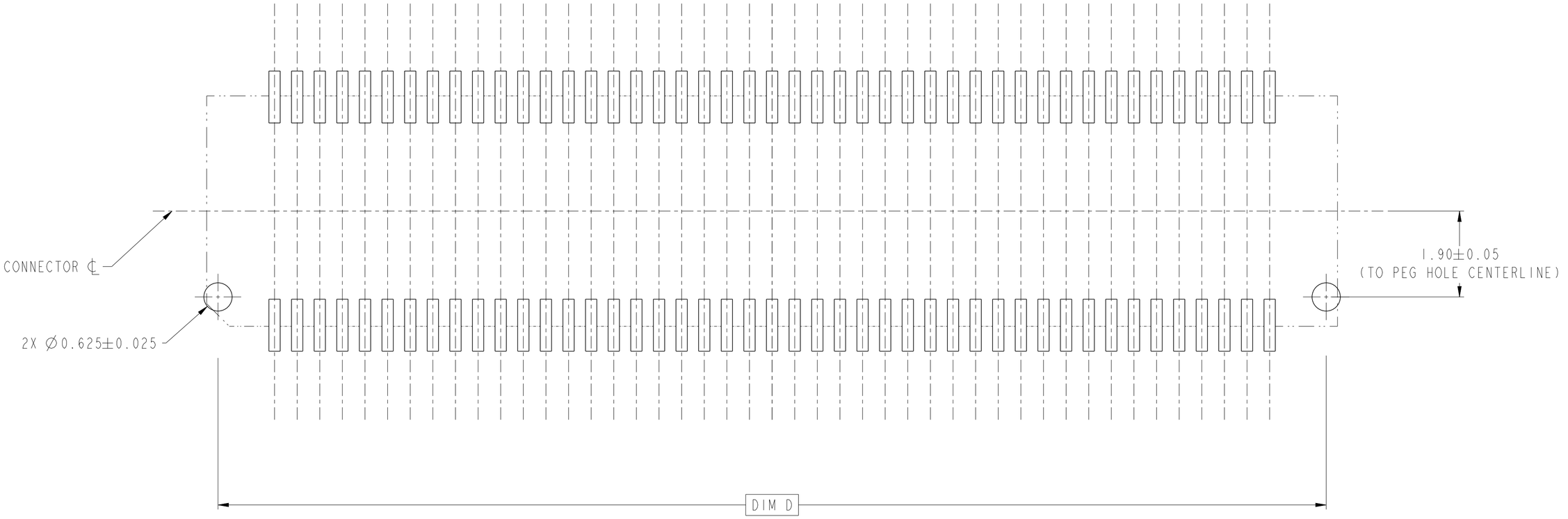
Copyright FCI.

10106814-0932X2LF SHOWN



SCALE 15:1

2X (∅0.50) PEGS FEATURE
ONLY FOR 10106814-083202LF
AND 10106814-093202LF



PCB LAYOUT FOR 10106814-083202LF AND 10106814-093202LF
OTHER DIMENSIONS, SEE SHEET 5 AND 6

SCALE 15:1

spec ref	---			dr	Stu Stoner	2010/11/22	projection	mm	size A2 / scale 10:1
tolerance std ASME Y14.5	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Andy Lu	2015/07/15			ecn no ELX-DG-21387-1
				chr	-	-			
				appr	Pei-Ming Zheng	2015/07/15	product family MezzoStak		rel level Released
surface - ASME Y14.5	linear	0.X	±0.3	FCI	title	HERMAPHRODITIC CONNECTOR, SHORT STYLE	dwg no	10106814	rev D
		0.XX	±0.15			20-90 POS, 0.5MM CTR, 4-7MM STACK HT			
		0.XXX	±0.05						
	angular	0°	±3°	www.fci.com	cat. no.	-	Product - Customer Drw		sheet 7 of 8

Copyright FCI.

NOTES

1 - MATERIAL:
    HOUSING - HIGH-TEMPERATURE THERMOPLASTIC, UL94-V0, COLOR: BLACK
    CONTACTS: COPPER ALLOY
       CONTACT PLATING:
       SEPARABLE INTERFACE: PERFORMANCE-BASED PLATING, QUALIFIED TO MEET THE REQUIREMENTS
       OF FCI PRODUCT SPECIFICATION.
    SOLDER TAILS: GOLD FLASH.

2 - RECOMMENDED LEAD FREE SOLDER PASTE THICKNESS 150µm.

3 - THE HOUSING WILL WITHSTAND EXPOSURE TO 260°C PEAK TEMPERATURE FOR
    30 SECONDS IN A CONVECTION INFRA RED OR VAPOR PHASE REFLOW OVEN.

4 - THIS PRODUCT MEETS EUROPEAN UNION DIRECTIVES AND OTHER COUNTRY
    REGUGULATION AS DESCRIBED IN GS-22-008

5 - PACKAGING TAPE AND REEL. PACKAGING SPECIFICATION GS-14-1320, PRODUCT SPECIFICATION GS-12-1322.

6 - PRACTICAL CONNECTOR HEIGHT AS SPECIFIED IN THE TABLE IS NOT THE DIMENSIONAL HEIGHT OF THE
    CONNECTOR BUT THE HEIGHT AS IT PERTAINS TO TOTAL STACK HEIGHT. AN EXAMPLE IS A CONNECTOR
    WITH A 2.5MM PRACTICAL CONNECTOR HEIGHT, WHEN MATED TO ITSELF WILL RESULTING IN A BOARD TO BOARD STACK HEIGHT OF 5MM.

7 - DISCRETE CONNECTOR HEIGHT AS SHOWN IN THE TABLE IS THE ACTUAL DIMENSIONAL CONNECTOR HEIGHT. ALSO SEE INFORMATION ON PRACTICAL HEIGHT IN NOTE 6.

8 - REFER TO IPC 7525-A FOR STENCIL CREATION.

spec ref	- - -		dr	Stu Stoner	2010/11/22	projection	mm
tolerance std ASME Y14.5	TOLERANCES UNLESS OTHERWISE SPECIFIED		eng	Andy Lu	2015/07/15		size A2 / scale 20:1
			chr	-	-		ecn no ELX-DG-21387-1
			appr	Pei-Ming Zheng	2015/07/15	product family MezzoStak	rel level Released
surface - ASME Y14.5	linear	0.X ±0.3	FCI www.fci.com	title	HERMAPHRODITIC CONNECTOR,SHORT STYLE 20-90 POS, 0.5MM CTR, 4-7MM STACK HT	dwg no 10106814	rev D
		0.XX ±0.15					
		0.XXX ±0.05					
	angular	0° ±3°	cat. no. -		Product - Customer Drw		sheet 8 of 8

Copyright FCI.

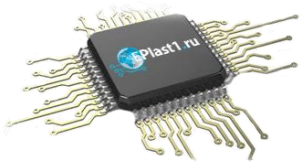
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)
Факс: 8 (812) 320-02-42
Электронная почта: org@eplast1.ru
Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.