

rev	ecn no	dr	date	spec ref	*	dr	Helen Zhang	2012/06/26	projection	MM	size	A2	scale	3:1					
A	-	HZ	2012-06-26	tolerance std	ASME Y14.5	eng	Helen Zhang	2012/08/10	chr	-	ecn no	-	rel level	Released					
-	-	-	-	surface	✓	linear	www.fci.com	2012/08/13	product family	R/A HEADER ASSY 20S10DC HCI POWER CONNECTOR	cat. no.	Product - Customer Drw	sheet 1 of 5	rev					
-	-	-	-												0.X	±0.5	title	10121594	A
-	-	-	-												0.XX	±0.25	dwg no		
-	-	-	-												0.XXX	±0.100			
-	-	-	-	angular	0°	±2°													



1 2 3 4 5 6 7 8

A

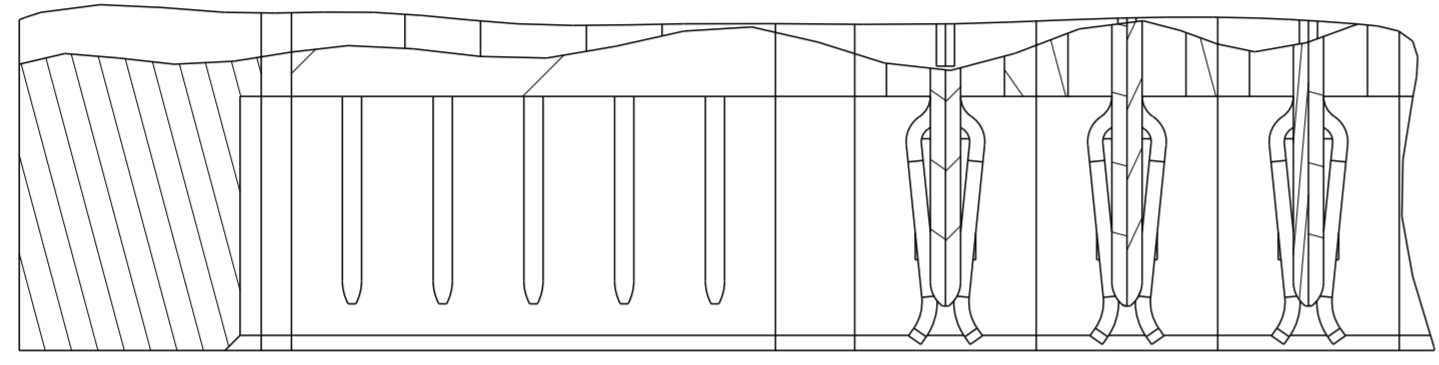
B

C

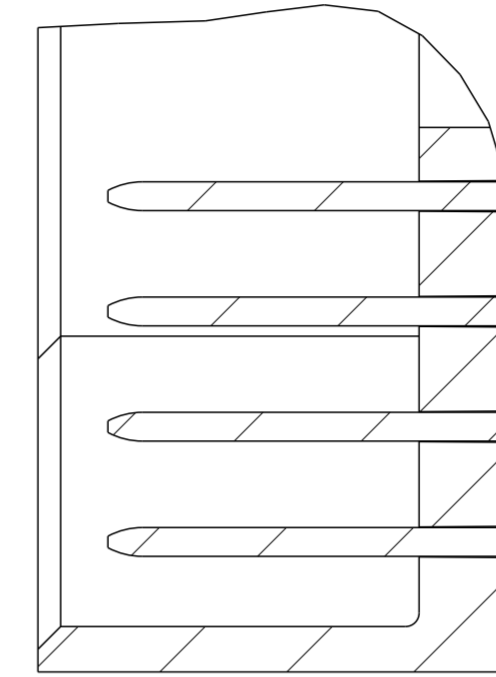
D

E

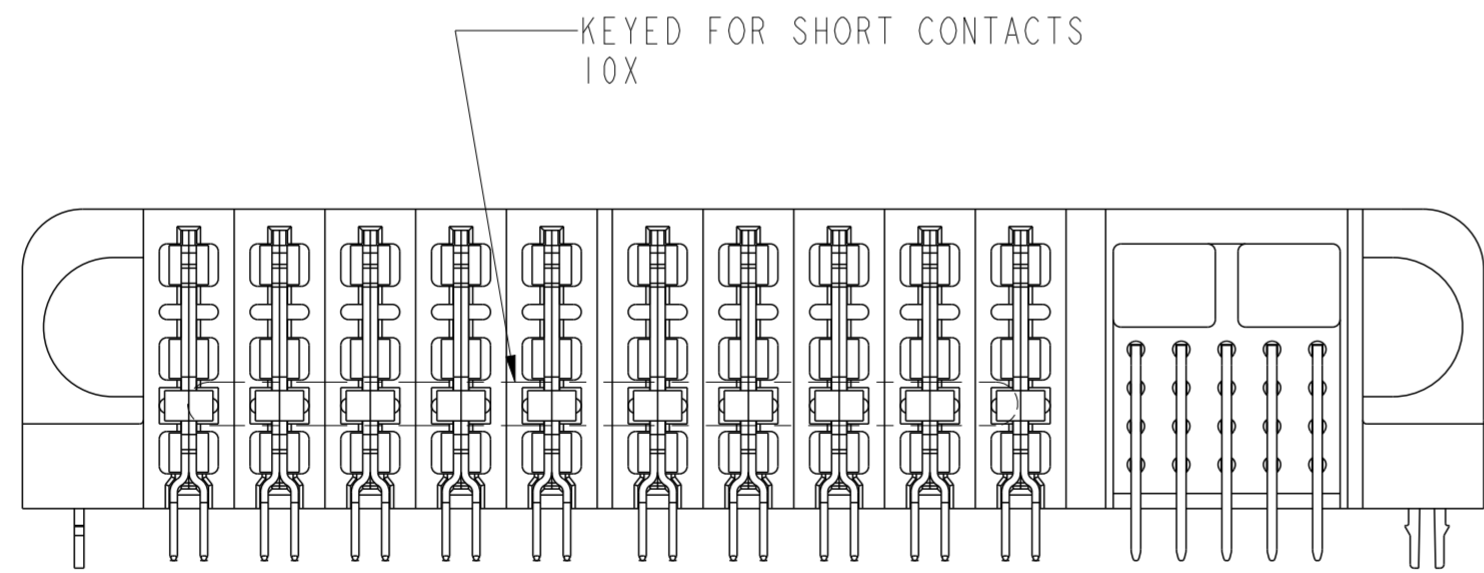
F



DETAIL A
SCALE 4:1



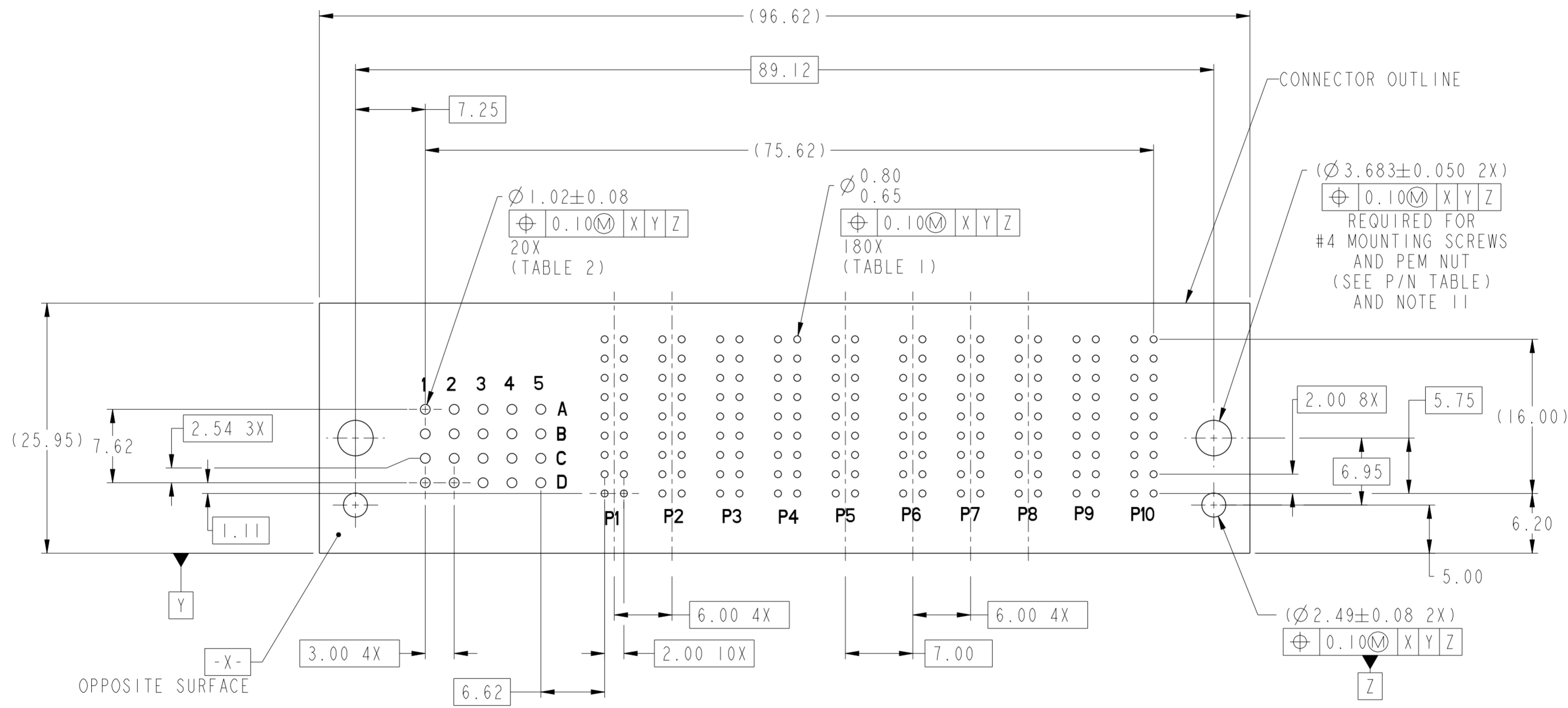
SECTION W-W
SCALE 6:1
SIGNAL MATING
SEQUENCE



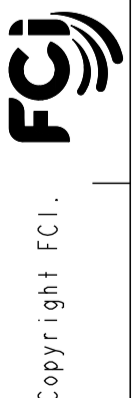
VIEW G-G

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spec ref	*	dr	Helen Zhang	2012/06/26	projection	MM	size	A2	scale	3:1												
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Helen Zhang	2012/08/10			ecn no	-	rel level													
surface	<table border="1"> <tr> <td>linear</td> <td>0.X</td> <td>±0.5</td> </tr> <tr> <td></td> <td>0.XX</td> <td>±0.25</td> </tr> <tr> <td></td> <td>0.XXX</td> <td>±0.100</td> </tr> <tr> <td>angular</td> <td>0°</td> <td>±2°</td> </tr> </table>	linear	0.X	±0.5				0.XX	±0.25		0.XXX	±0.100	angular	0°	±2°	chr	-	product family	Released	cat. no.	R/A HEADER ASSY 20S10DC	10121594
linear	0.X	±0.5																				
	0.XX	±0.25																				
	0.XXX	±0.100																				
angular	0°	±2°																				
		appr	Pei-Ming Zheng	2012/08/13			Product - Customer Drw		sheet 2 of 5													



RECOMMENDED PCB LAYOUT
COMPONENT SIDE
NOTE 6



spec ref	*	dr	Helen Zhang	2012/06/26	projection	MM	size	A2	scale	3:1							
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Helen Zhang	2012/08/10			ecn no	-	rel level Released	title R/A HEADER ASSY 20S10DC HCI POWER CONNECTOR							
surface	linear <table border="1"> <tr><td>0.X</td><td>± 0.5</td></tr> <tr><td>0.XX</td><td>± 0.25</td></tr> <tr><td>0.XXX</td><td>± 0.100</td></tr> </table> angular <table border="1"> <tr><td>0°</td><td>$\pm 2^\circ$</td></tr> </table>	0.X	± 0.5	0.XX			± 0.25	0.XXX			± 0.100	0°	$\pm 2^\circ$	chr	-	appr	Pei-Ming Zheng
0.X	± 0.5																
0.XX	± 0.25																
0.XXX	± 0.100																
0°	$\pm 2^\circ$																
				dwg no 10121594		rev A											

A
B
C
D
E
F

A
B
C
D
E
F

TABLE 1 (HCI POWER)
PLATED THROUGH-HOLE REQUIREMENTS

TOP LAYER DESCRIPTION	DRILLED HOLE DIAMETER	COPPER THICKNESS	TIN-LEAD THICKNESS	NICKEL THICKNESS	GOLD THICKNESS	TIN THICKNESS	SILVER THICKNESS	FINISHED HOLE DIAMETER
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
IMMERSION SILVER	0.81-0.86 (0.85 DRILL)	0.025 - 0.050	--	--	--	--	0.15 - 0.65um	0.70 - 0.80
COPPER (SEE NOTE 9)	0.81-0.86 (0.85 DRILL)	0.025 - 0.050	--	--	--	--	--	0.70 - 0.80
GOLD	0.81-0.86 (0.85 DRILL)	0.025 - 0.050	--	0.003 - 0.007	FLASH UP TO 0.0002	--	--	0.69 - 0.80

TABLE 2 (HPC SIGNALS)
PLATED THROUGH-HOLE REQUIREMENTS

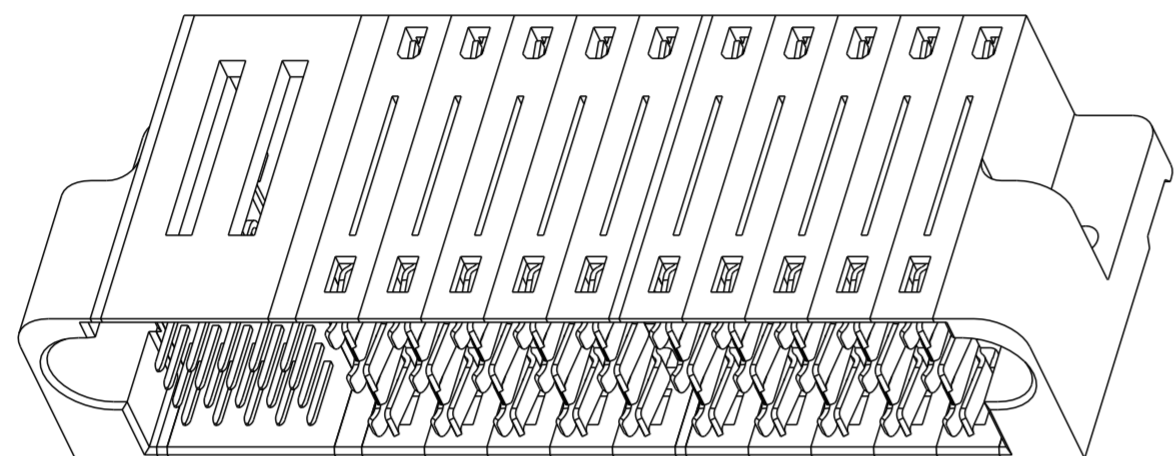
TOP LAYER DESCRIPTION	DRILLED HOLE DIAMETER	COPPER THICKNESS	TIN-LEAD THICKNESS	FINISHED HOLE DIAMETER
TIN-LEAD	1.125-1.175 ($\varnothing .0453 \pm .0010$)	0.025-0.050	0.005-0.015	0.94 - 1.10 ($\varnothing .040 \pm .003$)



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spec ref	*	dr	Helen Zhang	2012/06/26	projection	MM	size	A2	scale	3:1												
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Helen Zhang	2012/08/10			ecn no	-	rel level													
chr	-	chr	-	rel level			Released															
surface	<table border="1"> <tr> <td>linear</td> <td>0.X</td> <td>±0.5</td> </tr> <tr> <td></td> <td>0.XX</td> <td>±0.25</td> </tr> <tr> <td></td> <td>0.XXX</td> <td>±0.100</td> </tr> <tr> <td>angular</td> <td>0°</td> <td>±2°</td> </tr> </table>	linear	0.X	±0.5		0.XX	±0.25		0.XXX	±0.100	angular	0°	±2°	apppr	Pai-Ming Zheng	2012/08/13	product family	R/A HEADER ASSY 20S10DC	cat. no.	10121594	rev	A
linear	0.X	±0.5																				
	0.XX	±0.25																				
	0.XXX	±0.100																				
angular	0°	±2°																				
www.fci.com		Product - Customer Drw		sheet 4 of 5																		

PART NUMBER	RETENTION CLIPS	#4 SCREW	DIM A (TAIL LENGTH)	TAIL TYPE
10121594-001LF	NO	YES	3.43	SOLDER TAIL
10121594-002LF	NO	YES	4.70	SOLDER TAIL
10121594-003LF	YES	NO	3.43	SOLDER TAIL
10121594-004LF	YES	NO	4.70	SOLDER TAIL



NOTES:

- CONNECTOR MATERIALS:
HOUSING: HIGH TEMPERATURE THERMOPLASTIC, BLACK
UL 94V-0 COMPLIANT
CONTACTS: HIGH PERFORMANCE COPPER ALLOY
- CONTACT FINISH (ref GS-12-380 SECTION 5.2)
- PRODUCT SPECIFICATION: GS-12-380.
- APPLICATION SPECIFICATION: GS-20-070.
- "FCI", PART NUMBER AND DATE CODE TO BE MARKED ON THIS SURFACE.
THE P/N CAN BE OMITTED IF THERE IS NOT ENOUGH SPACE ON THIS SURFACE.
- MINIMUM NOMINAL PCB THICKNESS: 1.6mm
- PACKAGING MEETS FCI SPECIFICATION GS-14-1073.
- 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.

spec ref	*	dr	Helen Zhang	2012/06/26	projection	MM	size	A2	scale	3:1																	
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Helen Zhang	2012/08/10			ecn no	-	rel level																		
chr	-	chr	-	Released																							
appr	Pei-Ming Zheng	2012/08/13	product family																								
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linear	0.X	±0.5																									
	0.XX	±0.25																									
	0.XXX	±0.100																									
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cat. no.	www.fci.com	Product - Customer Drw		sheet 5 of 5																							