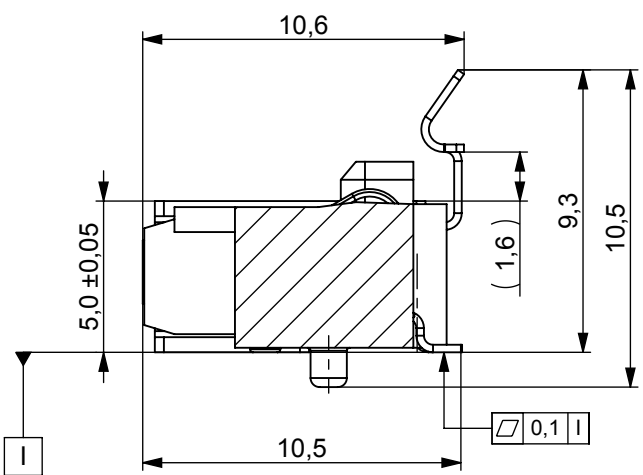
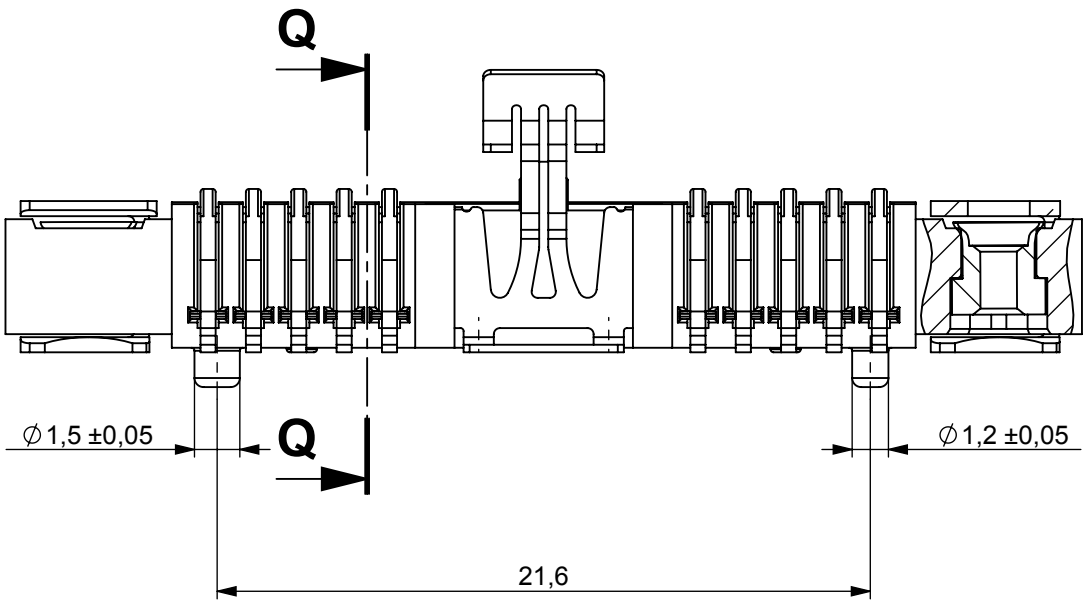
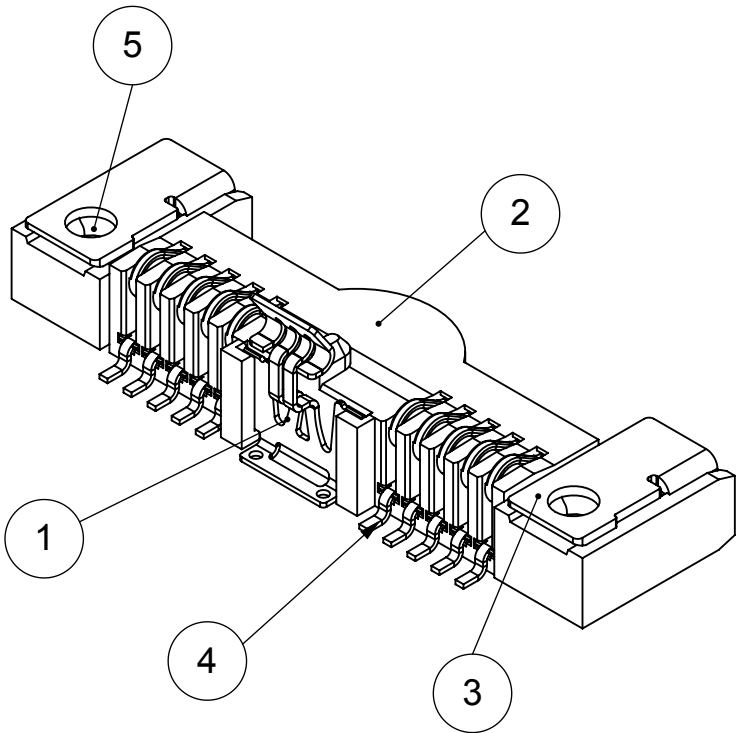


THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF YAMAICHI ELECTRONICS DEUTSCHLAND GmbH. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF YAMAICHI ELECTRONICS DEUTSCHLAND GmbH IS PROHIBITED.

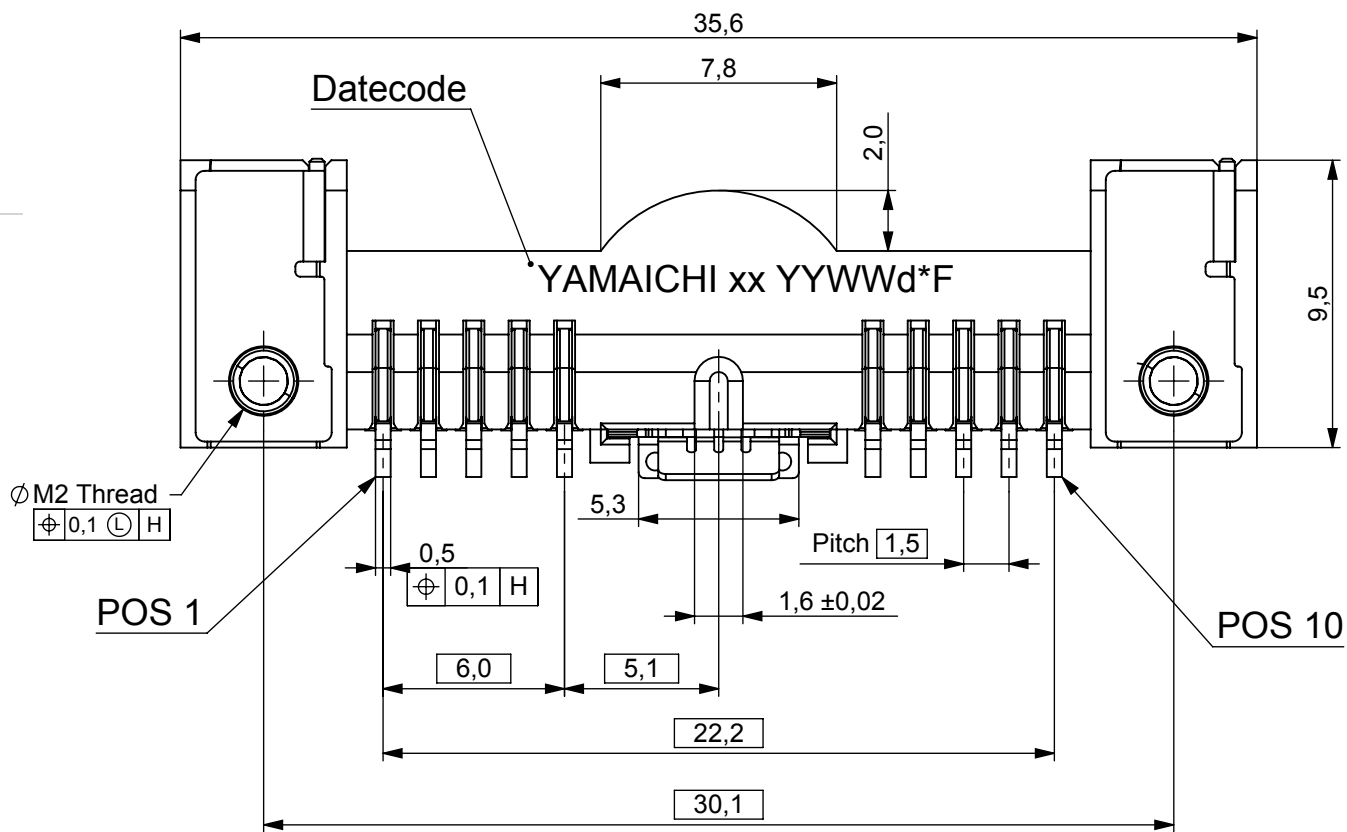
CONFIDENTIAL



Q-Q
(4 : 1)



NOTE: Coplanarity spec refers to all areas in contact with the motherboard 0.1mm



Datecode notes:

- For *F choose AF, BF or FF to describe the contact finish.
- For xx choose manufacturing location code as specified in the TSA.
- "d" is weekday (1-7) where "1" is Sunday.

ITEM NO.	DRW. No.	DESCRIPTION	QTY
1	P1780P19	Card holding spring	1
2	P1780P05	Insulator for BEC 10-pin power connector	1
3	P1240P08	SMT Fixation, for BEC-Connector	2
4	P1780P06	Contact for BEC 10-pin power connector	10
5	P1780P22	M2-Rivet-Hex-Nut for POW10	2

Specification/Drawing subject to alteration without prior notice

ORDER No:	DESCRIPTION	REMARKS
86-01526	BECPOW-1.5-10-S9-AF-REDC1	Contact area finish: Gold plating A (30 μ "")
86-01542	BECPOW-1.5-10-S9-BF-REDC1	Contact area finish: Gold plating B (15 μ "")
86-01543	BECPOW-1.5-10-S9-FF-REDC1	Contact area finish: Gold Flash

RoHS compliant acc. to directive 2011/65/EU

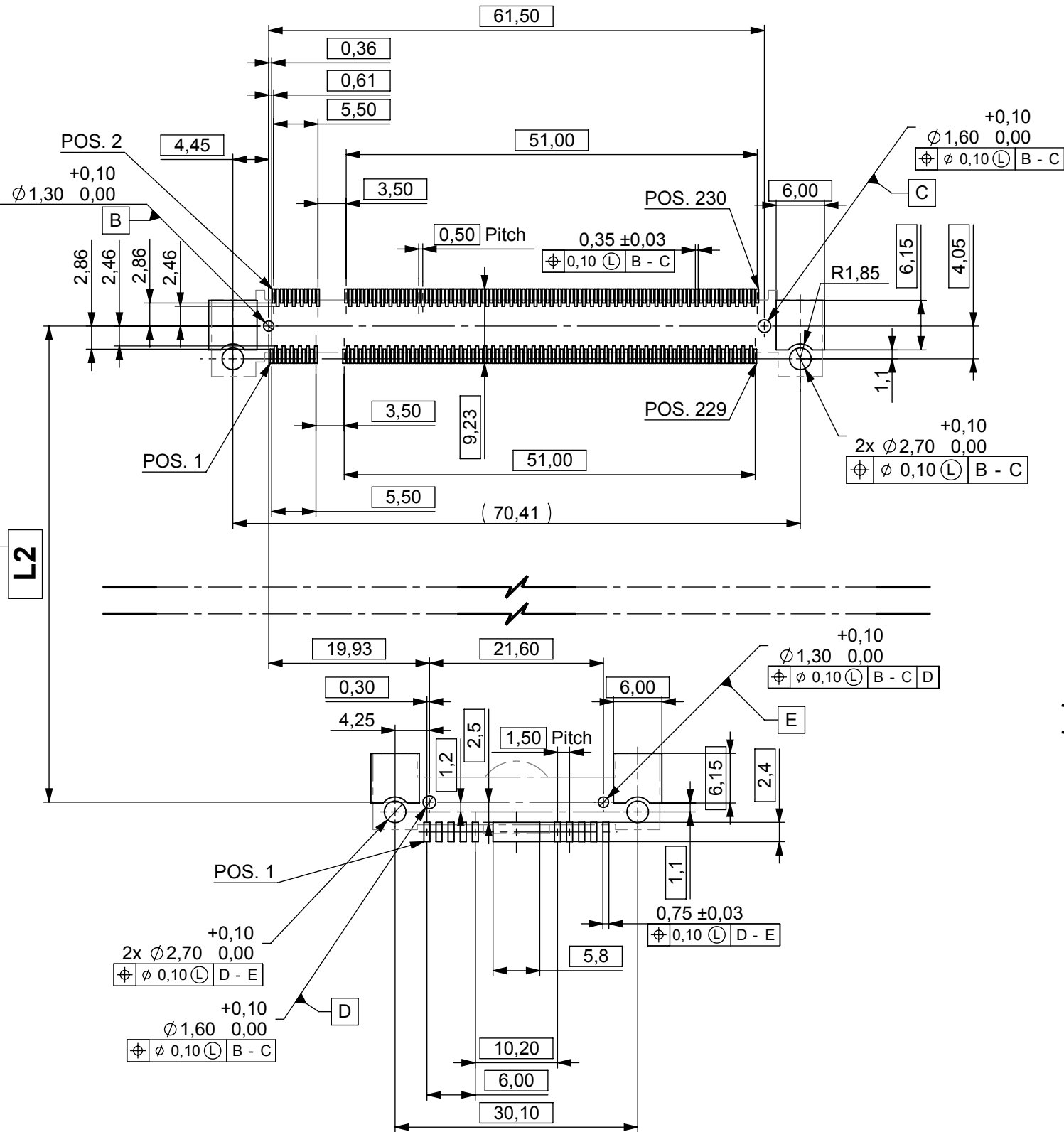
Unless otherwise specified : Dimensions are in millimeters		REV.	REVISION DESCRIPTION	INITIALS	REV. DATE
ISO 2768-1 f		K	RoHS Update	JFS	07.04.2016
		J	Packaging / MSL update	JFS	10.12.2013
		I	General update	JFS	19.11.2013
		H	Spring and Hex-Nut revised	DAH	22.10.2012
		G	Dimension revised	DAH	18.07.2012
Order / Article No. see table		DO NOT SCALE DRAWING			
NOTES:	ANGLE PROJECTION:	DESIGN	NAME	DATE	TITLE:
		DRAWN	DAH	23.02.2012	Board Edge Connector, 10pins, 90° SMT, Power Connector
		CHECKED	JFS	07.04.2016	BECPOW-1.5-10-S9-*F-R-REDC1
WEIGHT:				SCALE: 2:1	REVISION: K
				SHEET1 OF 4	A3 - ASSEMBLY



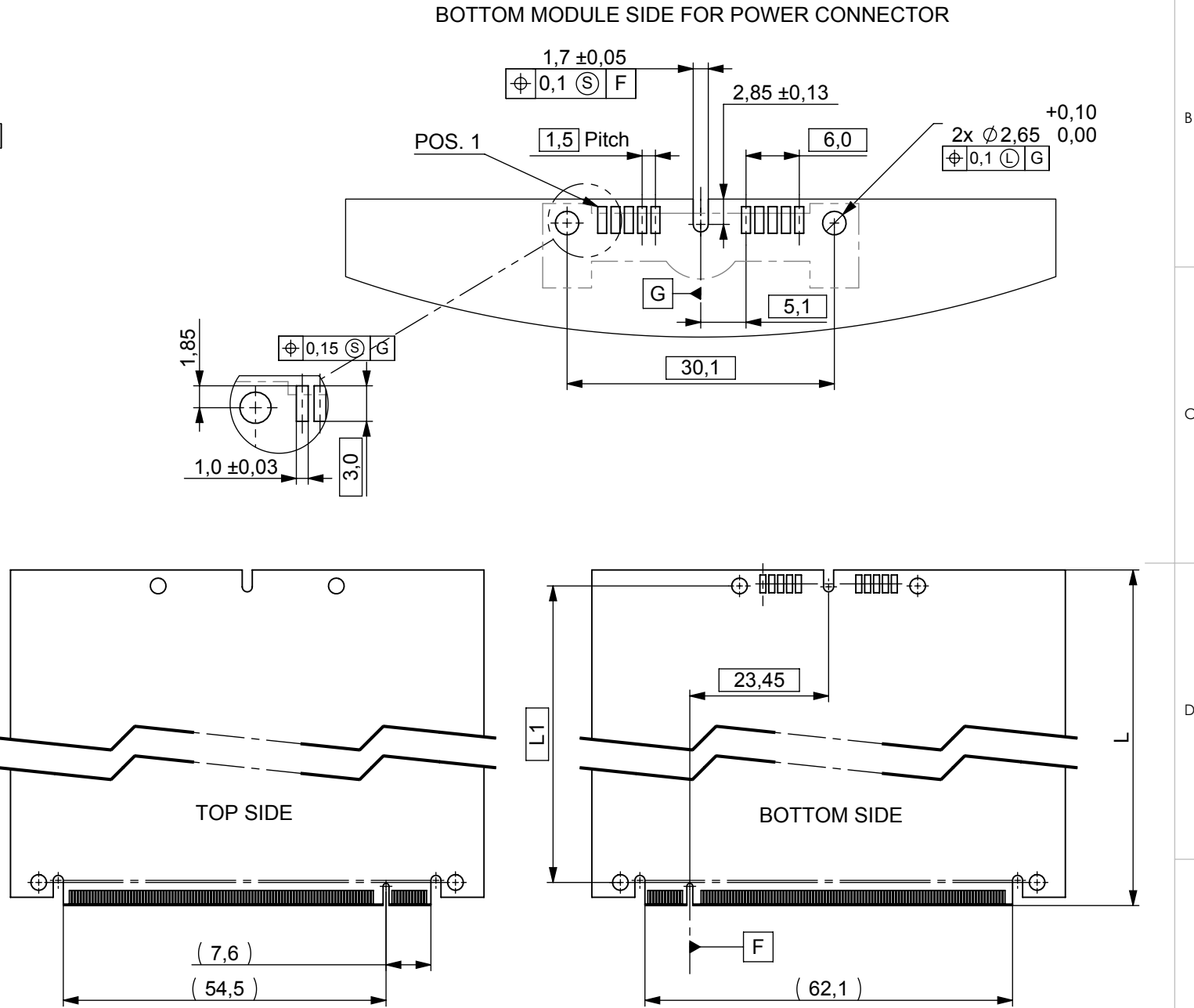
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF YAMAICHI ELECTRONICS DEUTSCHLAND GmbH. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF YAMAICHI ELECTRONICS DEUTSCHLAND GmbH IS PROHIBITED.

CONFIDENTIAL

RECOMMENDED MAINBOARD LAYOUT
(including layout for BEC230HS)



RECOMMENDED MODULE-PCB LAYOUT
(for further details regarding the Module please refer to the BEC230HS drawing)



Specification/Drawing subject to alteration without prior notice

VARIABLE DIMENSIONS			
MODULE SIZE	L	L1	L2
		L-6,6mm	L-3,75mm
**NOTE: $85\text{mm} \leq L \leq 110\text{mm}$			

****Module size range to be verified during qualification process.**

 **RoHS compliant acc. to directive 2011/65/EU**

Unless otherwise specified : Dimensions are in millimeters TOLERANCES ISO 2768-1 f		REV.		REVISION DESCRIPTION		INITIALS		REV. DATE					
		K		RoHS Update		JFS		07.04.2016					
		J		Packaging / MSL update		JFS		10.12.2013					
		I		General update		JFS		19.11.2013					
		H		Spring and Hex-Nut revised		DAH		22.10.2012					
Order / Article No. see table		G		Dimension revised		DAH		18.07.2012		CLASSIFICATION: Board Edge Connector, 10pins, 90° SMT, Power Connector BECPOW-1.5-10-S9-*F-R-REDC1			
		DO NOT SCALE DRAWING											
NOTES:		 FIRST		NAME		DATE		TITLE: Customer-P1780A02		REVISION: K			
				DESIGN		DAH						23.02.2012	
				DRAWN		JFS						07.04.2016	
				CHECKED		JFS						07.04.2016	
WEIGHT:								SCALE: 1:1		SHEET2 OF 4		A3 - ASSEMBLY	

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF YAMAICHI ELECTRONICS DEUTSCHLAND GmbH. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF YAMAICHI ELECTRONICS DEUTSCHLAND GmbH IS PROHIBITED.

SPECIFICATION

CONFIDENTIAL

MATERIAL/FINISH		
INSULATOR	Material	LCP (UL 94V-0)
SPRING	Material	Stainless Steel
	Plating	Tin over Ni on solder tail area
	Thickness	0.25mm
SMT tabs	Material	Copper Alloy
	Plating	Underplate: Ni, Solder tails: Tin
	Thickness	0.50mm
CONTACTS	Material	High Performance Copper Alloy
	Plating	Underplate: Ni, Contact area: Selective gold (Flash, 15 or 30µinch Au plating) Solder tails area: gold Flash
	Thickness	0.25
Hex Rivet-Nut	Material	Carbon Steel
	Plating	Ni
	Push-through Force	50N min.

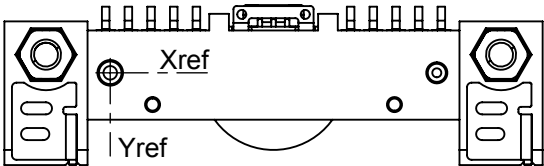
SPECIFICATION	
MATING CYCLES*	30 cycles
INSULATION RESISTANCE*	250 MΩ(at DC 500V)
CONTACT RESISTANCE*	40 mΩ Max
DIELECTRIC WITHSTANDING VOLTAGE*	500VAC/Minute
OPERATION TEMPERATURE*	-40 °C to +85° C
SOLDERABILITY*	Compliant to J-STD-020C (Pb-free)
VOLTAGE RATING*	50 VDC
CURRENT RATING*	1.5 A max

GRAVITY CENTER

COORDINATES

Xg = 10.88 mm
Yg = 0.63 mm
Zg = 2.68 mm

REFERENCE AXIS



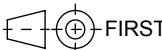
Zref: Contact soldering plane

NOTES:

- Electrical properties are indicative and may vary depending on the quality and design of the PCBs (Module-card and Motherboard)
- Recommended screw type to use for the GND connection: M2 X 6mm (2 screws / connector)
- Tightening Torque for the screws is system dependant and should be defined for the complete assembly (connector + module-card).
- Max. Tightening Torque for the screws: 0.4Nm.
- Use of thread-locking substances could be applicable and should be defined according to the application requirements, considering the complete assembly (connector + module-card).
- MSL Classification: 2a

Critical Dimensions.
To determine Cmk and Cpk.

Specification/Drawing subject
to alteration without prior notice

Unless otherwise specified : Dimensions are in millimeters TOLERANCES ISO 2768-1 f		REV.		REVISION DESCRIPTION		INITIALS		REV. DATE					
		K		RoHS Update		JFS		07.04.2016					
		J		Packaging / MSL update		JFS		10.12.2013					
		I		General update		JFS		19.11.2013					
		H		Spring and Hex-Nut revised		DAH		22.10.2012					
Order / Article No. see table		G		Dimension revised		DAH		18.07.2012		CLASSIFICATION: Board Edge Connector, 10pins, 90° SMT, Power Connector BECPOW-1.5-10-S9-*F-R-REDC1			
		DO NOT SCALE DRAWING											
NOTES:		 FIRST		NAME		DATE		TITLE: Customer-P1780A02					
				DESIGN		DAH 23.02.2012							
				DRAWN		JFS 07.04.2016							
				CHECKED		JFS 07.04.2016							
WEIGHT:								SCALE: 2:1		SHEET3 OF 4		A3 - ASSEMBLY	
										REVISION: K			

RoHS compliant acc. to directive 2011/65/EU

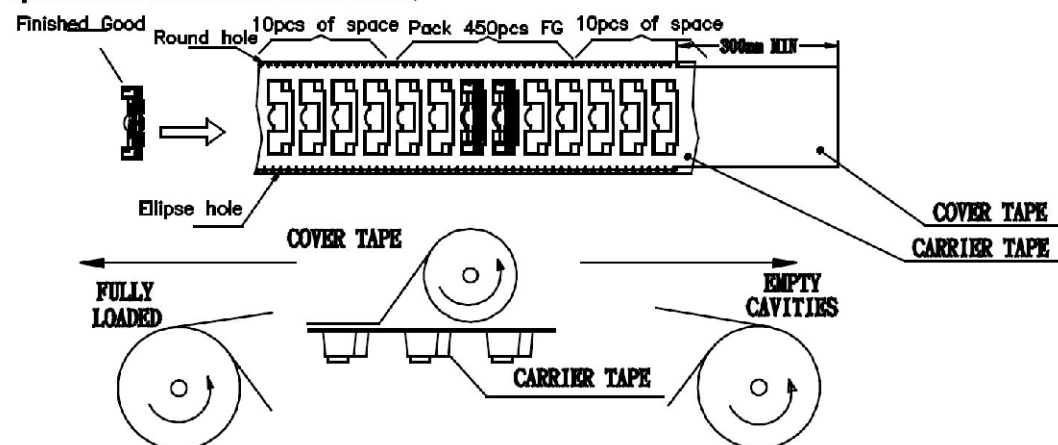
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF YAMAICHI ELECTRONICS DEUTSCHLAND GmbH. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF YAMAICHI ELECTRONICS DEUTSCHLAND GmbH IS PROHIBITED.

Packing

CONFIDENTIAL

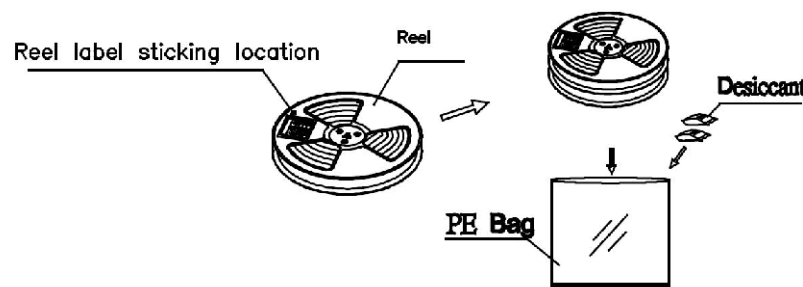
Applicable PN:10pin power conn

1. Fix carrier tape and cover tape of 10pin power conn to packing machine according to operation instruction of packing machine, then put products into carrier tape.
2. Make sure that put the product in the right direction, SMT Tail's direction shall be shown as below, keep 10 pcs spaces in the front and the end of carrier.



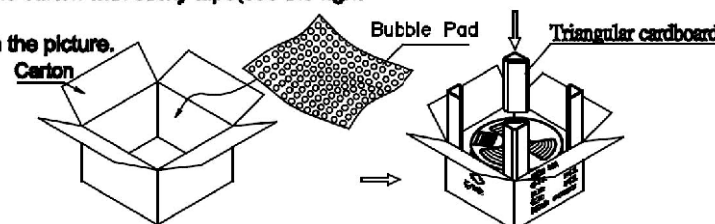
3. Pack 450pcs in every reel, stick the end of reel with transparent tape, and stick label at the right position which should be shown PN ,version, Qty, and Date(see below picture). Reel label should be stuck closely to ellipse hole of carrier surface.

4. Put every 2 reels which label upwards and 2 desiccants into a plastic bag, then seal the opening side of the plastic bag with packing machine as below.

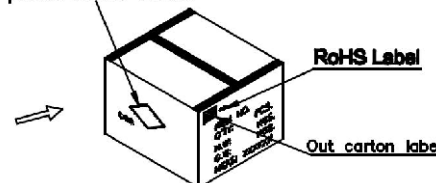


5. Put 2pcs bubble pads to the bottom of carton, take the product in plastic bag into carton with four triangular cardboards in each angle of the carton, then seal the carton with sticky tape (see the right picture).

6. Stick the label at the right position of the carton as shown in the picture.



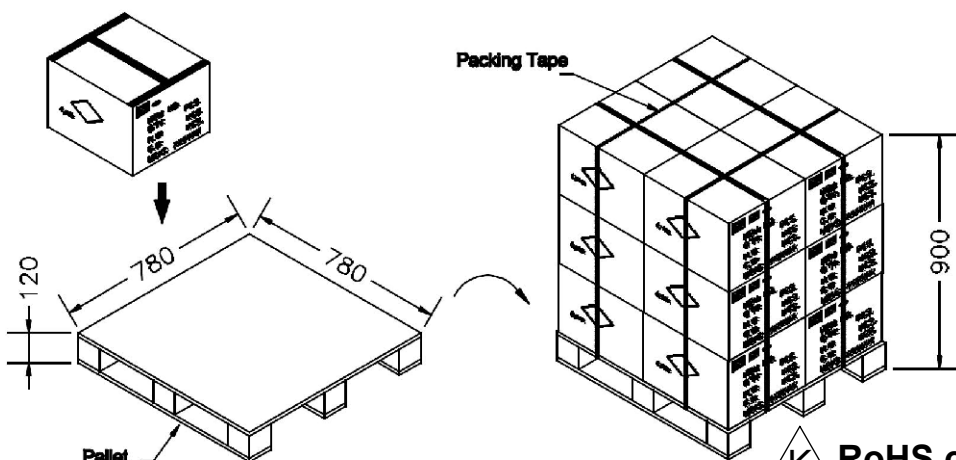
Remark : Logo shown as right picture can be hand-made or stuck with paster at the inner box and out carton. It's no need to stick if label is already printed on the carton.



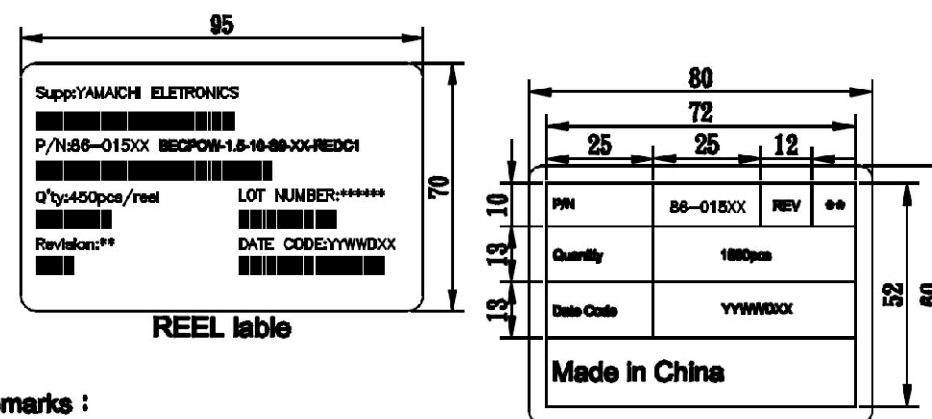
7. After inspection, put P1780A02(86-015XX) on the pallet(780Lx780Wx120H) accordingly as shown picture.

8. Make sure finished goods in right directions, label should be outward as shown picture.

9. Pack all the products(4 cartons/floor, 3 floors/pallet, 12cartons/pallet) with 4 packing tapes as shown.



Product labels :



Remarks :

1. Stick 1pcs reel label for per reel
2. 4 reels per carton, stick carton label on the outer carton
3. LOT NO. : **** fill in according to actual production status
4. D/C: YYWDX shows : YY: Year, WW: which week, D: which day of this week, Sunday is first day of a week
5. REV : **customer's drawing 86-015XX(P1780A02) as confirmation

Remarks
1. To prevent TML from deformation, it can't touch TML tail while packing.
2. Carrier Tape material: Transparent antistatic PS
3. Cover Tape material: Transparent antistatic PS
4. Reel Material: Blue antistatic PS

Remarks
1. Make sure finished goods in the right direction.
2. Make all the cartons flush and cling.
3. Tighten the ribbon.
4. Confirm PN on the label should be in accordance with product while packing.

Packing material list		
Description	PN	Qty.
Carton	41643-00 (400x400x250)	1pcs
Carrier Tape	44560-00	7.6m*4
15" REEL	46560-01	4pcs
Cover Tape	45495-01	7.9m*4
Triangular cardboard	4B527-00	4pcs
Desiccant	4G500-00	4PCS
Bubble pad	400L*400W*8T	2PCS
PE bag	600L*600W 60*50	2pcs 5pcs
OK Label		1PCS

Packing Material List			Packing Contents	
PN	Description	Qty.		
Finished Goods	86-015XX	12 Cartons	Pcs/Reel	450 pcs / reel
Pallet	4D503-00	1PCS	Reel/Out carton	4reels/carton
Packing Reel	49525-00	14m	Pcs/Carton	1800 pcs / carton

Packaging conforms EIA RS-481 standard

Specification/Drawing subject to alteration without prior notice

Unless otherwise specified : Dimensions are in millimeters TOLERANCES ISO 2768-1 f		REV.	REVISION DESCRIPTION	INITIALS	REV. DATE
		K	RoHS Update	JFS	07.04.2016
Order / Article No. see table		J	Packaging / MSL update	JFS	10.12.2013
		A	General update	JFS	19.11.2013
NOTES:		H	Spring and Hex-Nut revised	DAH	22.10.2012
		G	Dimension revised	DAH	18.07.2012
ANGLE PROJECTION: FIRST		DO NOT SCALE DRAWING		CLASSIFICATION: Board Edge Connector, 10pins, 90° SMT, Power Connector BECPOW-1.5-10-S9-*F-R-REDC1	
		DESIGN	DAH	23.02.2012	TITLE:
WEIGHT:		DRAWN	JFS	07.04.2016	DWG NO.:
		CHECKED	JFS	07.04.2016	REVISION: K
		Customer-P1780A02		SCALE: 2:1	
				SHEET4 OF 4	
				A3 - ASSEMBLY	