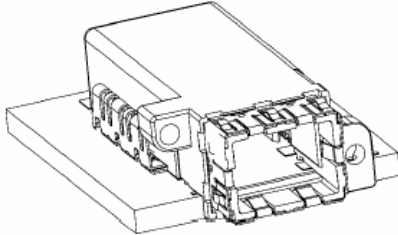
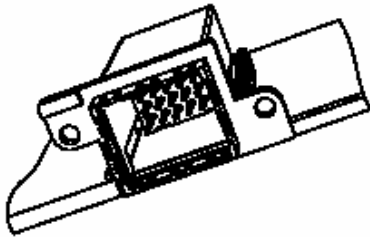
	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
	TITLE <b>Metral Sofix®</b> P/N: 72860LF, 52088LF, 72844LF, 72858LF, 10022805LF, 10051941LF - 201LF, 72846LF	PAGE <b>1 of 44</b>	REVISION <b>C</b>
		AUTHORIZED BY <b>J.Taron</b>	DATE (MM/DD/YY) <b>02/15/2007</b>
		STATUS <b>RELEASED</b>	

## SHIELDED RIGHT ANGLE BOARD CONNECTOR



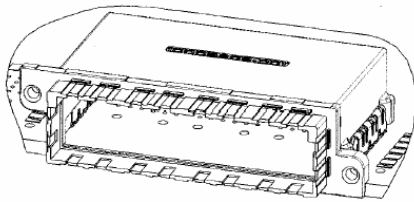
72860LF(STB), 52088LF(PIP)

2X4 SIGNAL



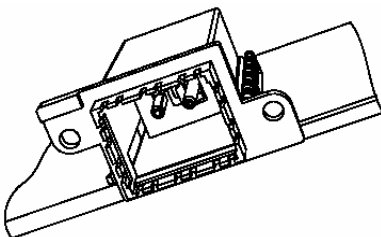
72844LF(STB), 72858LF(PIP)

4X6 SIGNAL




10022805LF, 10051941-201LF

3X24 SIGNAL



72846LF(STB)

POWER

	TYPE	NUMBER	
	APPLICATION SPECIFICATION	GS-20-049	
TITLE <b>Metral Sofix®</b> P/N: 72860LF,52088LF,72844LF,72858LF,10022805LF,10051941LF-201LF,72846LF	PAGE	REVISION	
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	AUTHORIZED BY	DATE (MM/DD/YY)	
J.Taron	02/15/2007		
STATUS		RELEASED	


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	TYPE	NUMBER	
	APPLICATION SPECIFICATION	GS-20-049	
TITLE <b>Metral Sofix®</b> P/N: 72860LF,52088LF,72844LF,72858LF,10022805LF,10051941LF-201LF,72846LF		PAGE	REVISION
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		J.Taron	02/15/2007
		STATUS RELEASED	


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	J. Taron	02/15/2007	
	STATUS	RELEASED	

## 1. PART A- 2X4 SIGNAL

### 1.1 General

#### 1.1.1 General Information

The specification is valid for the Lead Free/RoHS compatible products.

This document describes the assembly process of Signal connector 72860LF and 52088LF and the tools involved in the process. Also referring to GS-12-307.

### 1.2 Connector Definition

#### 1.2.1 Shielded right angle signal connector

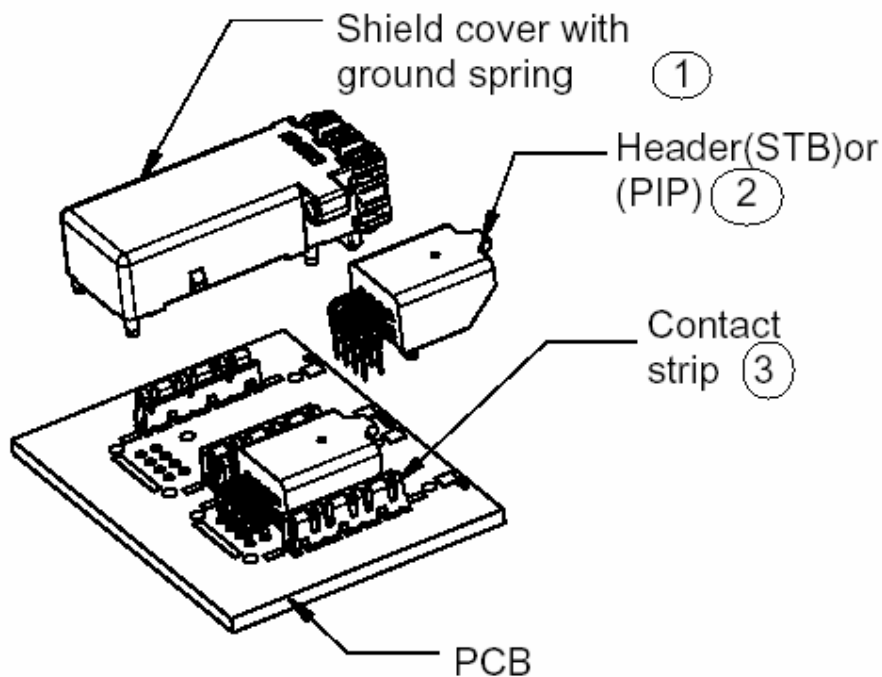



fig.1

#### 1.2.2 Component List

For the list of the components used in the assembly refer customer drawing.

	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
	TITLE <b>Metral Sofix®</b> P/N: 72860LF, 52088LF, 72844LF, 72858LF, 10022805LF, 10051941LF-201LF, 72846LF	PAGE <b>5 of 44</b>	REVISION <b>C</b>
		AUTHORIZED BY <b>J.Taron</b>	DATE (MM/DD/YY) <b>02/15/2007</b>
		STATUS <b>RELEASED</b>	

### 1.3 Front Face Board

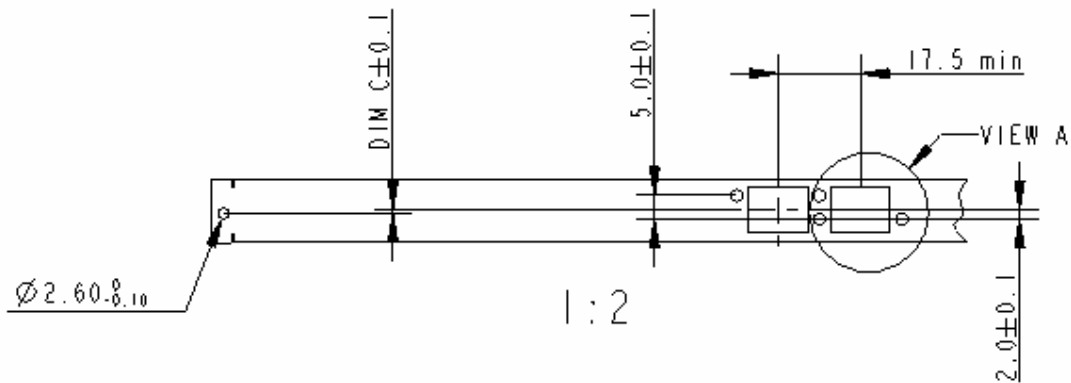


fig.2

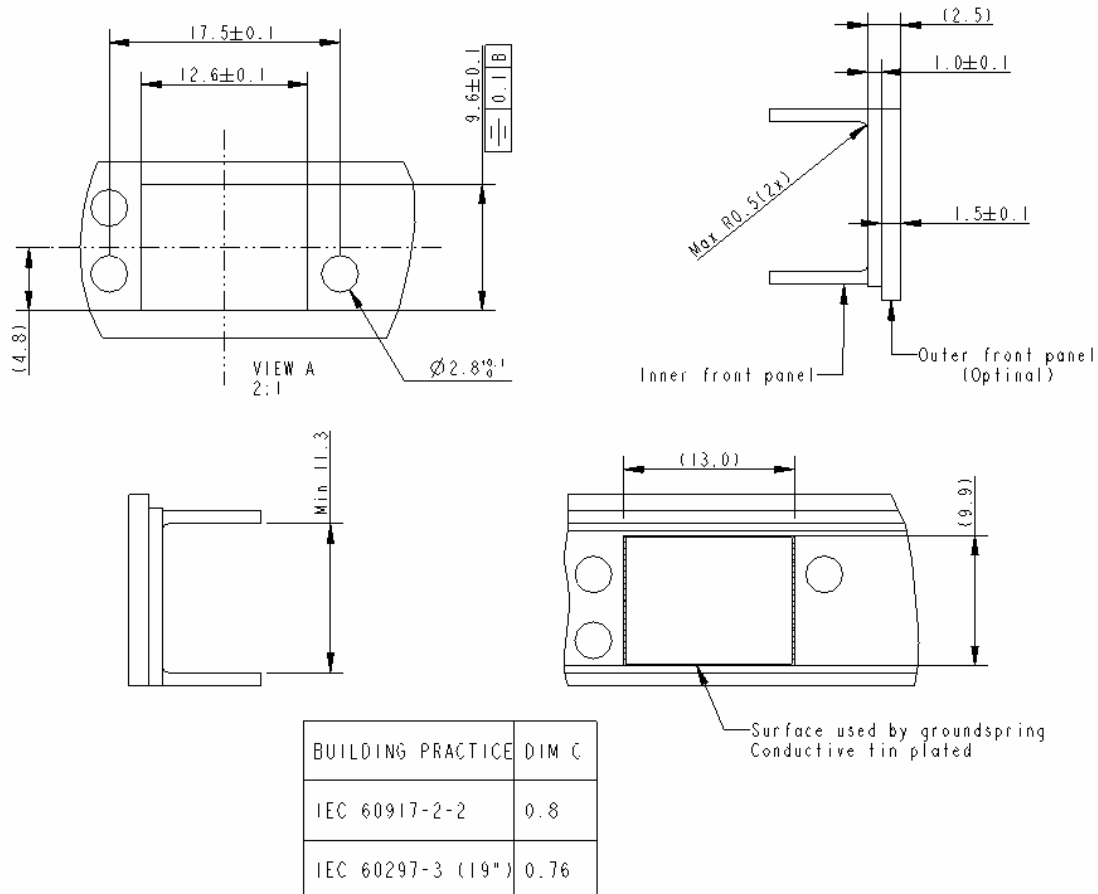



fig.3

	TYPE	NUMBER	
	APPLICATION SPECIFICATION	GS-20-049	
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P/N: 72860LF, 52088LF, 72844LF, 72858LF, 10022805LF, 10051941LF-201LF, 72846LF	AUTHORIZED BY	DATE (MM/DD/YY)	
	J. Taron	02/15/2007	
	STATUS	RELEASED	

## 1.4 Layout Definition

### 1.4.1 Hole Definition

#### 1.4.1.1 Solder to Board (STB)

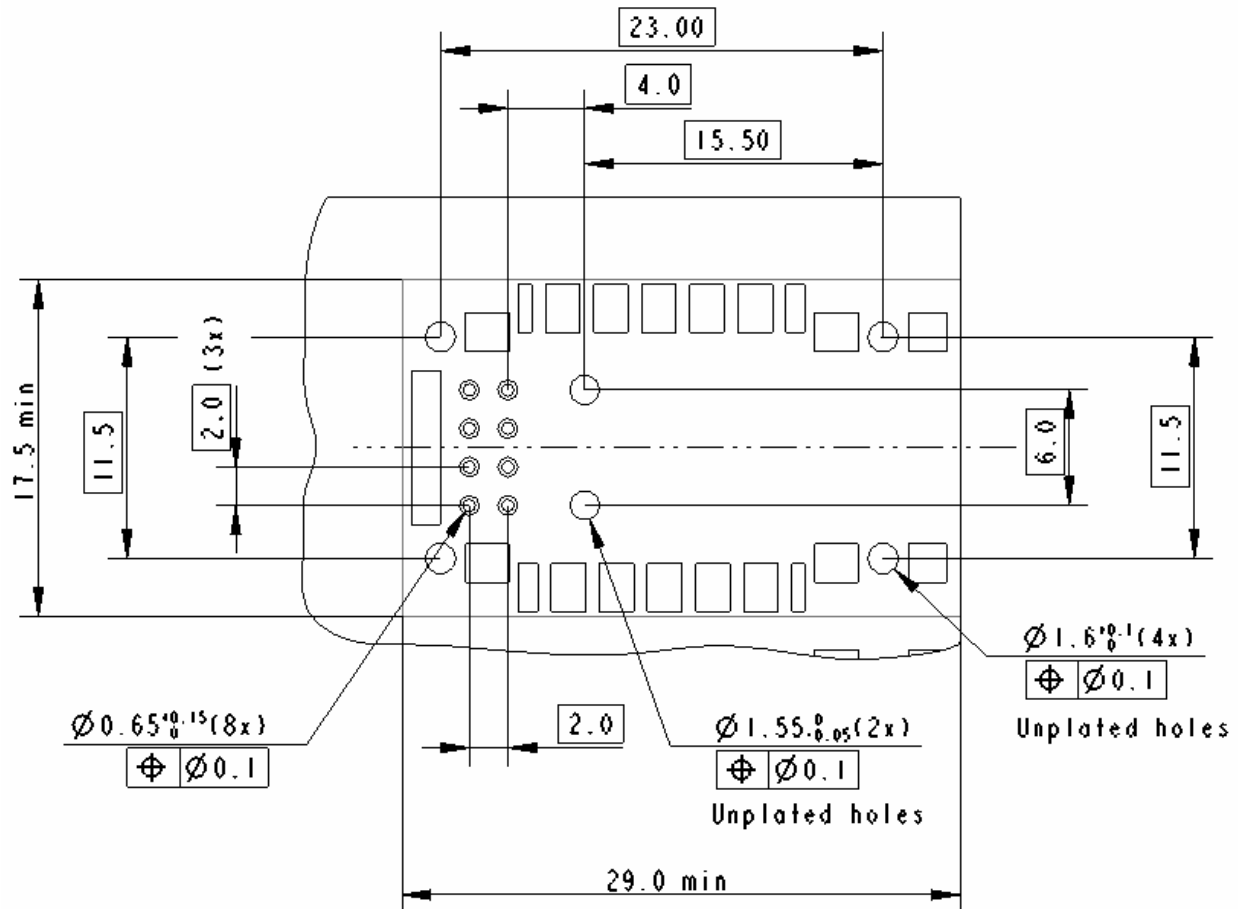



fig.5

	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
	TITLE <b>Metral Sofix®</b> P/N: 72860LF, 52088LF, 72844LF, 72858LF, 10022805LF, 10051941LF-201LF, 72846LF	PAGE <b>7 of 44</b>	REVISION <b>C</b>
		AUTHORIZED BY <b>J.Taron</b>	DATE (MM/DD/YY) <b>02/15/2007</b>
		STATUS <b>RELEASED</b>	

### 1.4.1.2 Pin In Paste (PIP)

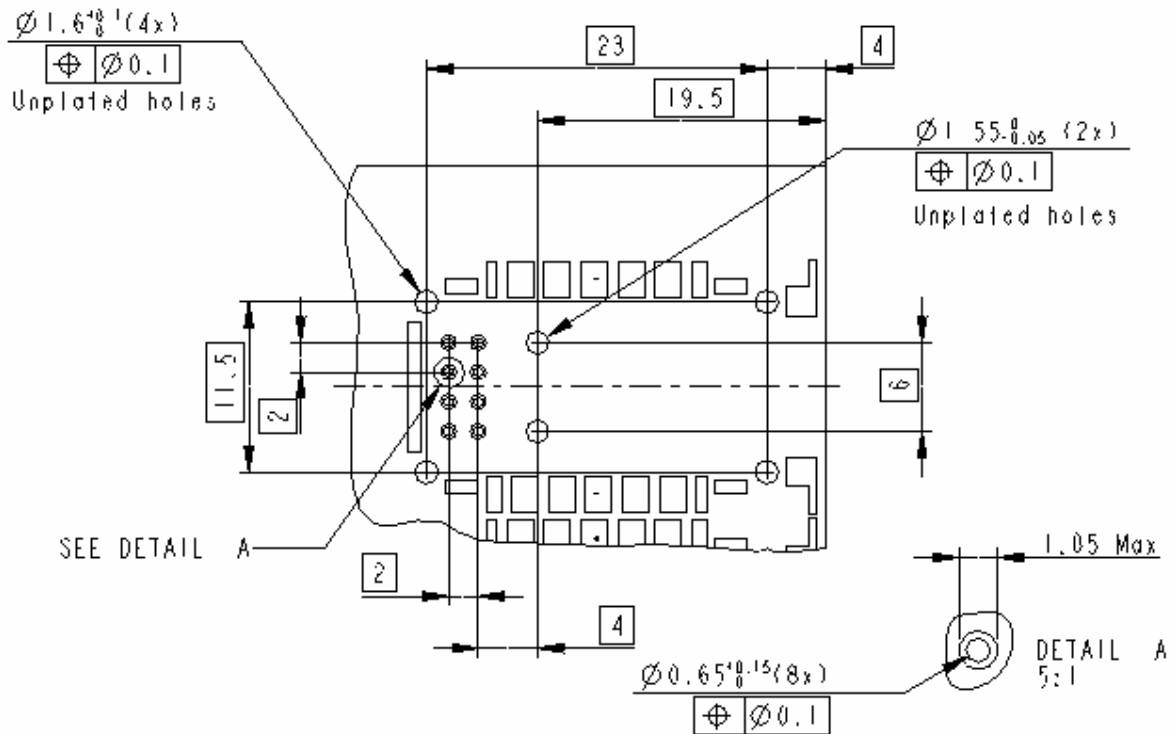

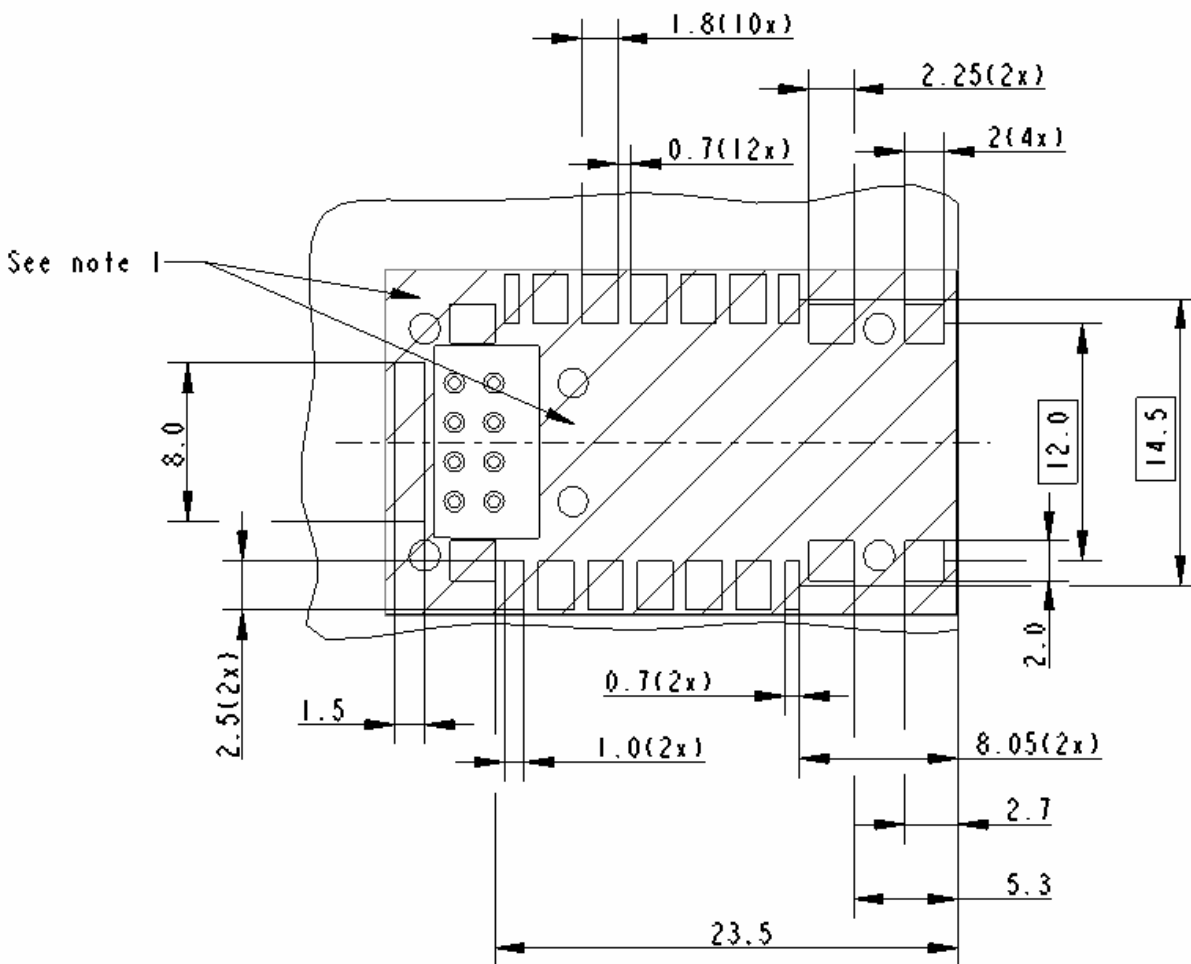


fig.6

	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
	TITLE <b>Metral Sofix®</b> P/N: 72860LF, 52088LF, 72844LF, 72858LF, 10022805LF, 10051941LF-201LF, 72846LF	PAGE <b>8 of 44</b>	REVISION <b>C</b>
		AUTHORIZED BY <b>J.Taron</b>	DATE (MM/DD/YY) <b>02/15/2007</b>
		STATUS <b>RELEASED</b>	

## 1.4.2 Pad Definition


### 1.4.2.1 Solder to Board (STB)



Note:  
 No tracks in the outer layer  
 inside the cross-hatched area,  
 only ground permitted.

fig.7



	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
	TITLE <b>Metral Sofix®</b> P/N: 72860LF, 52088LF, 72844LF, 72858LF, 10022805LF, 10051941LF-201LF, 72846LF	PAGE <b>9 of 44</b>	REVISION <b>C</b>
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		STATUS <b>RELEASED</b>	

### 1.4.2.2 Pin in Paste (PIP)

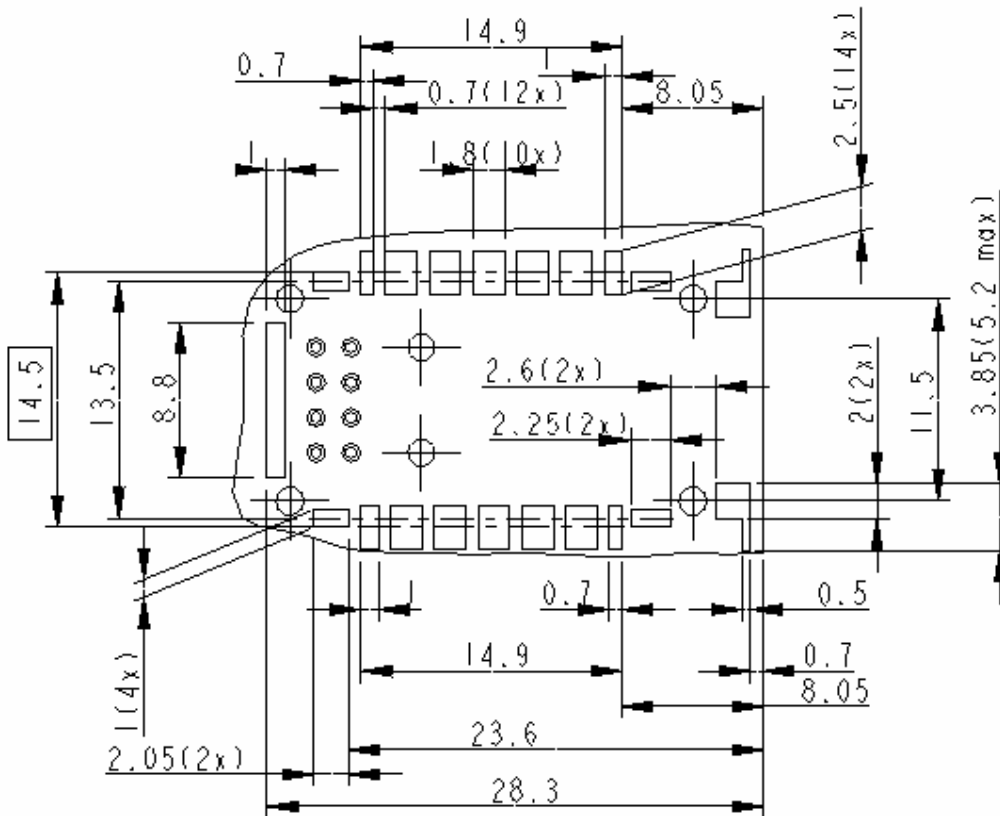



fig.8

## 1.5 Instructions

	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
	TITLE <b>Metral Sofix®</b> P/N: 72860LF, 52088LF, 72844LF, 72858LF, 10022805LF, 10051941LF-201LF, 72846LF	PAGE <b>10 of 44</b>	REVISION <b>C</b>
	AUTHORIZED BY <b>J.Taron</b>	DATE (MM/DD/YY) <b>02/15/2007</b>	
	STATUS <b>RELEASED</b>		

### 1.5.1 Surface mounting of contact strip

In common production processes, the contact strip is automatically mounted in surface mounting machine after the screen printing process. After re-flow soldering the contact strip shall be mounted acc. to mounting tolerances, see fig.8.

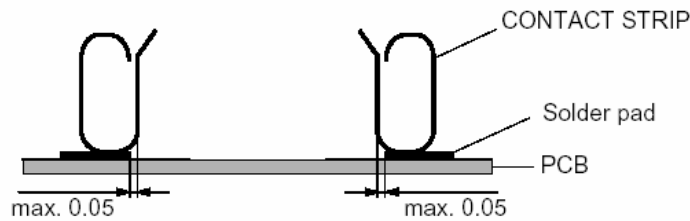
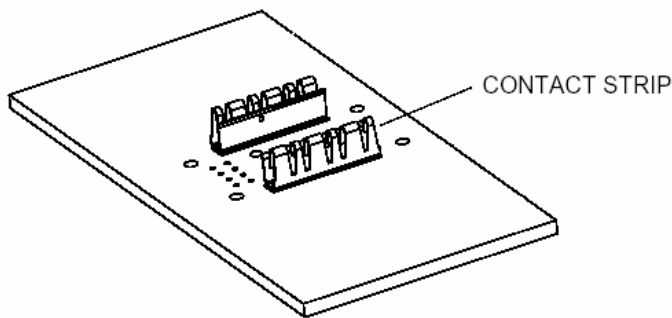
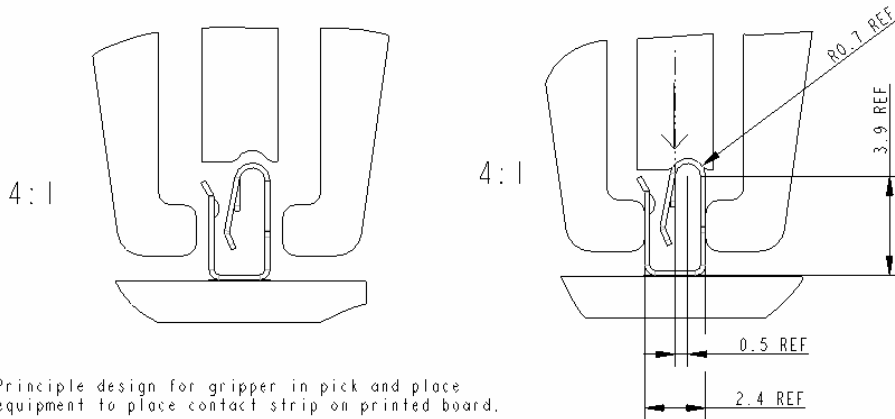


fig.9


### GRIPPER FOR CONTACT STRIP

Principle Design



Principle design for gripper in pick and place equipment to place contact strip on printed board.

fig.10

	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
	TITLE <b>Metral Sofix®</b> P/N: 72860LF, 52088LF, 72844LF, 72858LF, 10022805LF, 10051941LF-201LF, 72846LF	PAGE <b>11 of 44</b>	REVISION <b>C</b>
	AUTHORIZED BY <b>J.Taron</b>	DATE (MM/DD/YY) <b>02/15/2007</b>	
	STATUS <b>RELEASED</b>		

## 1.5.2 Mounting Header

If the height of the connector is missing in the process control, before wave soldering a soldering fixture with a pressure mechanism over the connector is used to secure the correct mounting of the connector.

### 1.5.2.1 Solder to Board (STB)

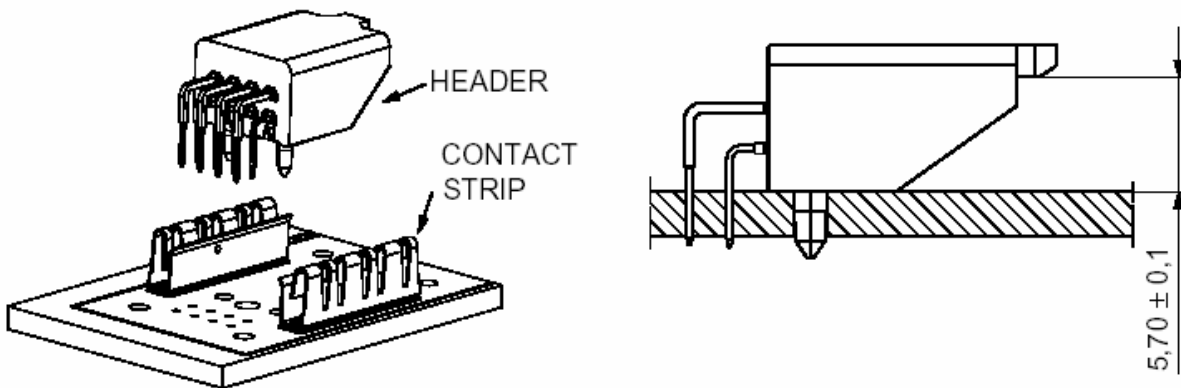


fig.11

### 1.5.2.2 Pin in Paste (PIP)

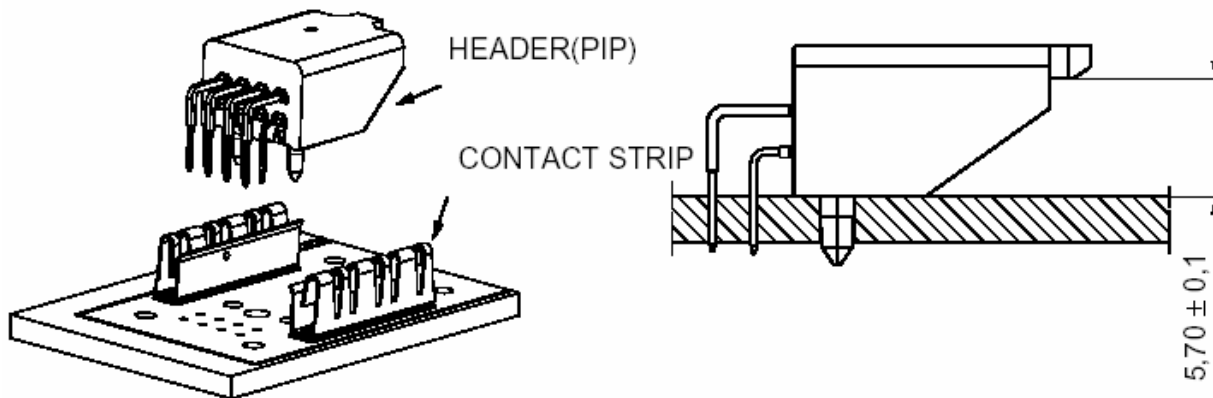

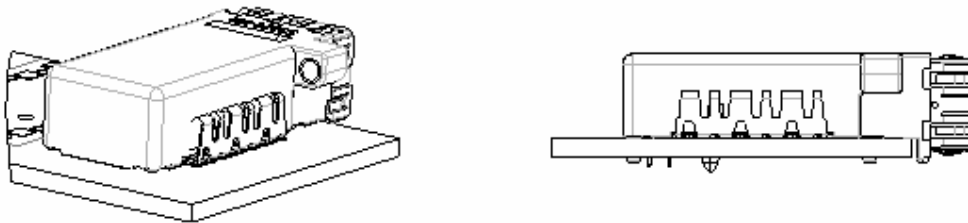


fig.12

	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
TITLE <b>Metral Sofix®</b> P/N: 72860LF, 52088LF, 72844LF, 72858LF, 10022805LF, 10051941LF - 201LF, 72846LF		PAGE <b>12 of 44</b>	REVISION <b>C</b>
		AUTHORIZED BY <b>J. Taron</b>	DATE (MM/DD/YY) <b>02/15/2007</b>
		STATUS <b>RELEASED</b>	


### 1.5.3 Mounting Cover

Metal cover with contact strip is mounted together with other front mechanics.  
 Mounting mode see GS-12-307.



SHIELD COVER WITH  
 SPRING SHOWN

fig.13

	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
	TITLE <b>Metral Sofix®</b> P/N: 72860LF, 52088LF, 72844LF, 72858LF, 10022805LF, 10051941LF-201LF, 72846LF	PAGE <b>13 of 44</b>	REVISION <b>C</b>
	AUTHORIZED BY <b>J. Taron</b>	DATE (MM/DD/YY) <b>02/15/2007</b>	
	STATUS <b>RELEASED</b>		

**1.5.4. Position of ground spring and connector in final assembly from front panel**

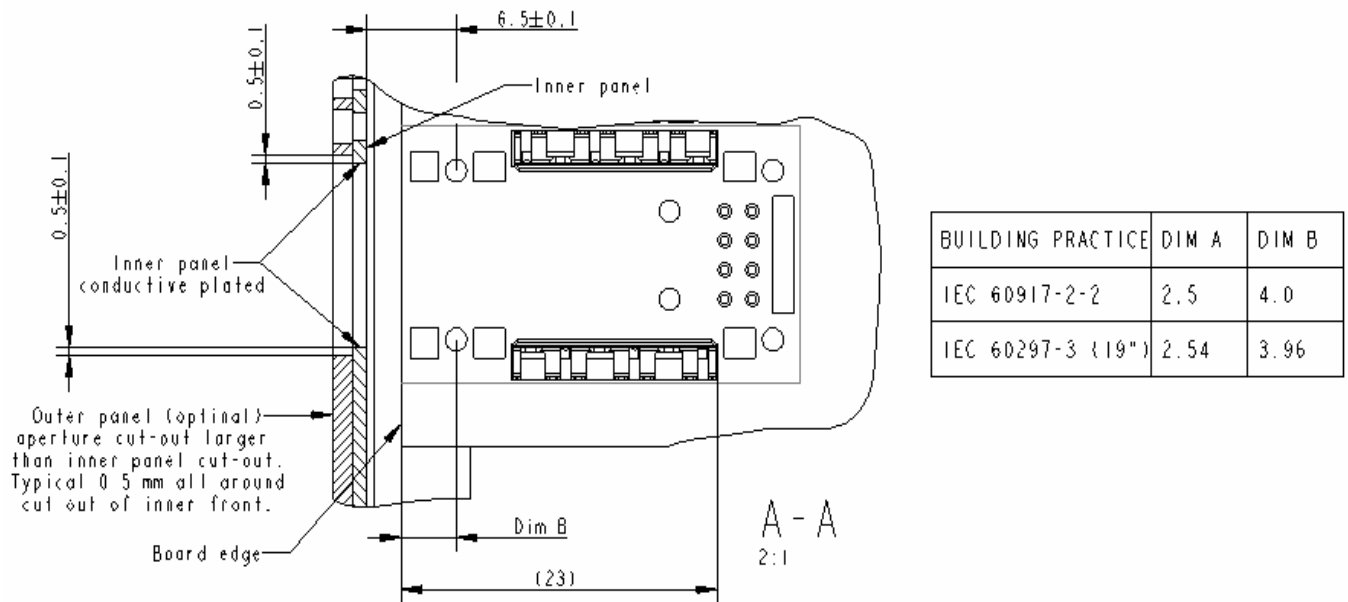
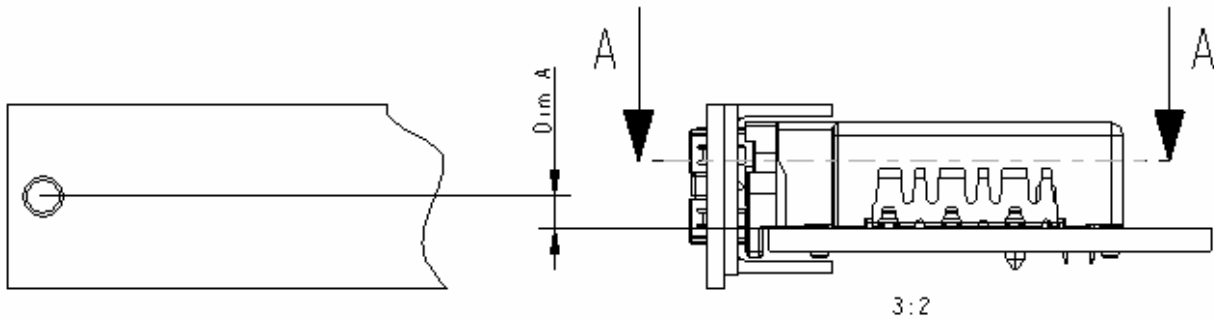



fig.14

	TYPE	NUMBER	
	APPLICATION SPECIFICATION	GS-20-049	
TITLE	PAGE	REVISION	
Metral Sofix® P/N: 72860LF, 52088LF, 72844LF, 72858LF, 10022805LF, 10051941LF-201LF, 72846LF	14 of 44	C	
	AUTHORIZED BY	DATE (MM/DD/YY)	
	J. Taron	02/15/2007	
	STATUS	RELEASED	

## 2. PART B- 4X6 SIGNAL

### 2.1 General

#### 2.1.1 General Information

The specification is valid for the Lead Free/RoHS compatible products.  
This document describes the assembly process of Signal connector 72844LF and 72858LF and the tools involved in the process. Also referring to GS-12-307.

### 2.2 Connector definition

#### 2.2.1 Shielded right angle single connector

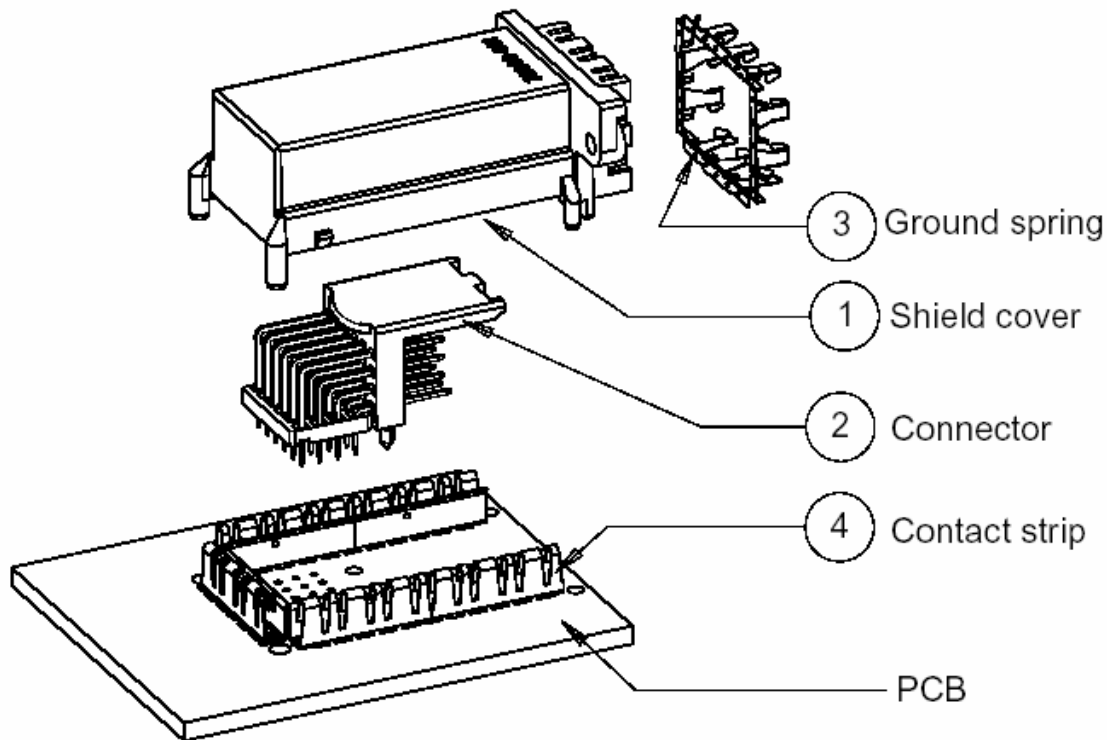



fig.1

#### 2.2.2. Component List

For the list of the components used in the assembly refer customer drawing.

	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
	TITLE <b>Metral Sofix®</b> P/N: 72860LF, 52088LF, 72844LF, 72858LF, 10022805LF, 10051941LF-201LF, 72846LF	PAGE <b>15 of 44</b>	REVISION <b>C</b>
		AUTHORIZED BY <b>J.Taron</b>	DATE (MM/DD/YY) <b>02/15/2007</b>
		STATUS <b>RELEASED</b>	

### 2.3 Front Face Board

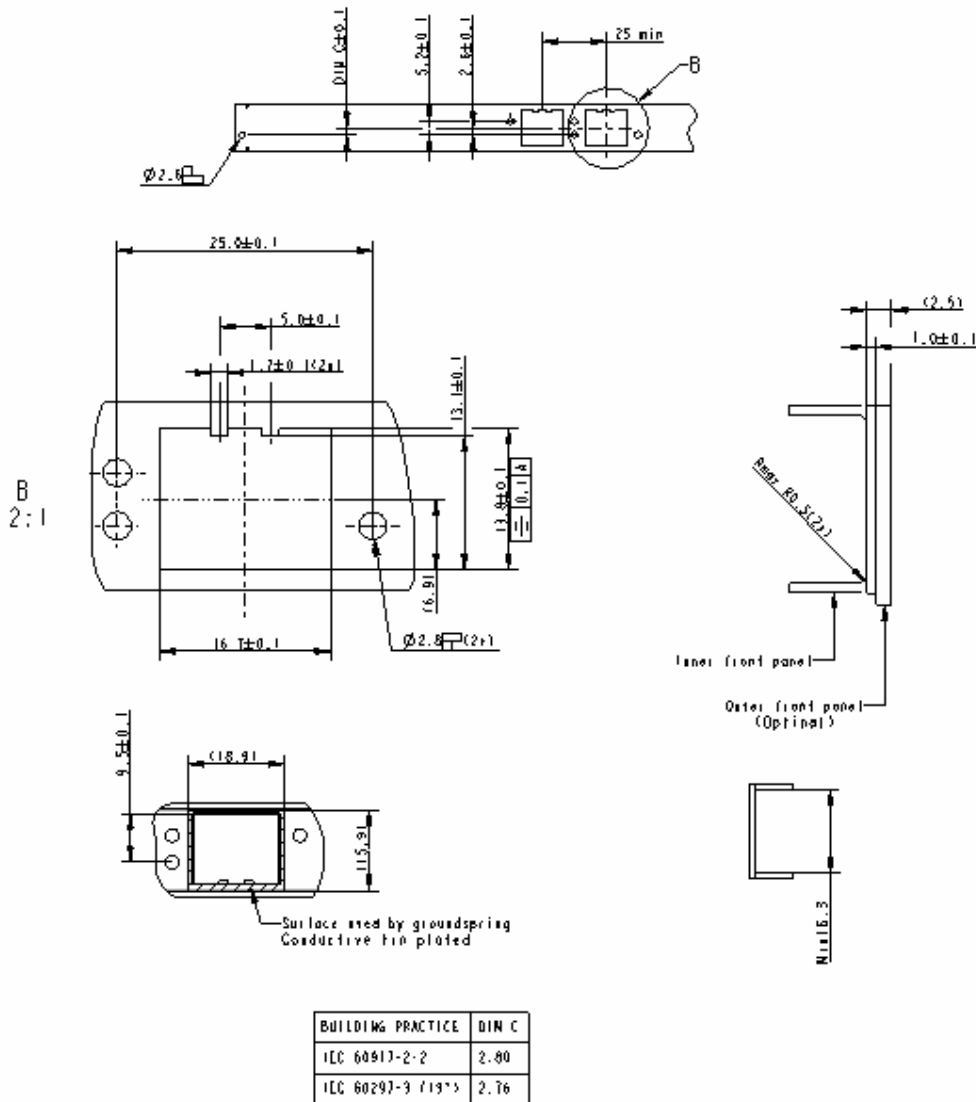



fig.2

	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
	TITLE <b>Metral Sofix®</b> P/N: 72860LF, 52088LF, 72844LF, 72858LF, 10022805LF, 10051941LF-201LF, 72846LF	PAGE <b>16 of 44</b>	REVISION <b>C</b>
		AUTHORIZED BY <b>J.Taron</b>	DATE (MM/DD/YY) <b>02/15/2007</b>
		STATUS <b>RELEASED</b>	

## 2.4. Layout Definition

### 2.4.1. Hole Definition

#### 2.4.1.1. Solder to Board (STB)

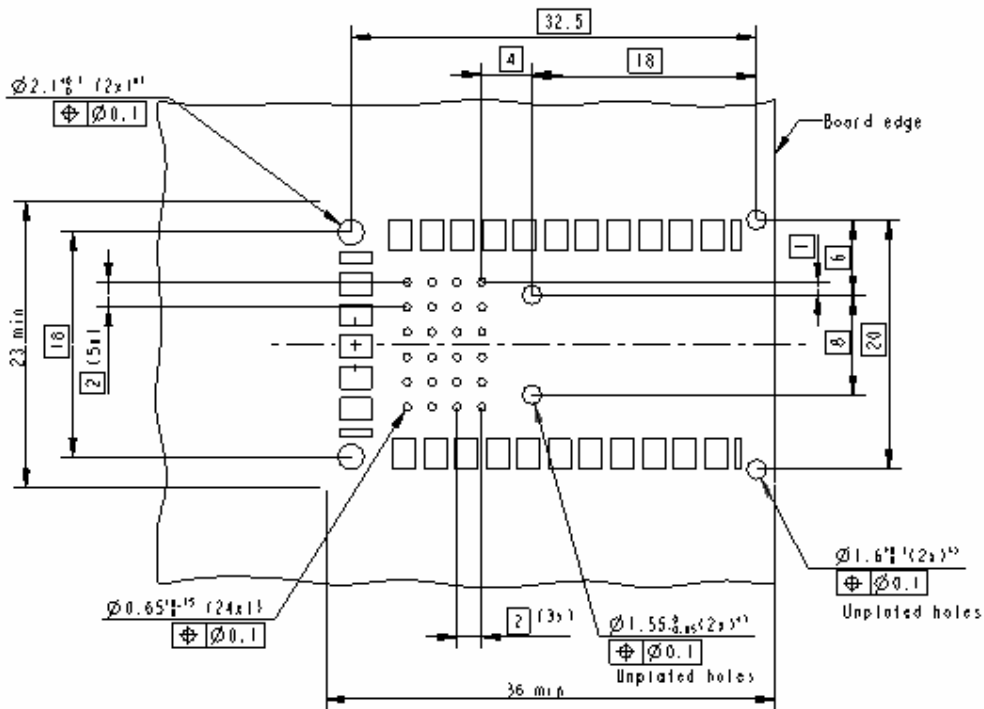



fig.3



	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
	TITLE <b>Metral Sofix®</b> P/N: 72860LF, 52088LF, 72844LF, 72858LF, 10022805LF, 10051941LF-201LF, 72846LF	PAGE <b>17 of 44</b>	REVISION <b>C</b>
		AUTHORIZED BY <b>J. Taron</b>	DATE (MM/DD/YY) <b>02/15/2007</b>
		STATUS <b>RELEASED</b>	

### 2.4.1.2. Pin in Paste (PIP)

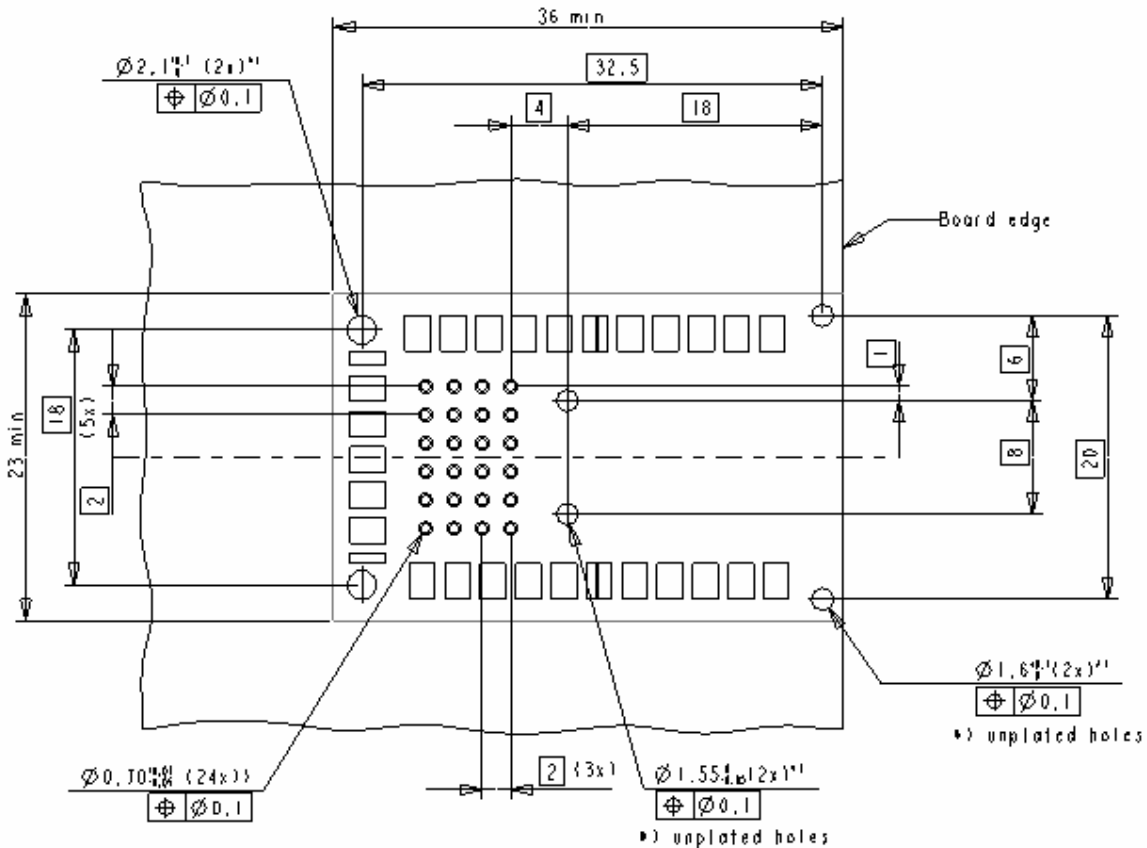



fig.4

	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
	TITLE <b>Metral Sofix®</b> P/N: 72860LF,52088LF,72844LF,72858LF,10022805LF,10051941LF-201LF,72846LF	PAGE <b>18 of 44</b>	REVISION <b>C</b>
		AUTHORIZED BY <b>J.Taron</b>	DATE (MM/DD/YY) <b>02/15/2007</b>
		STATUS <b>RELEASED</b>	

## 2.4.2 Pad Definition

### 2.4.2.1. Solder to Board (STB)

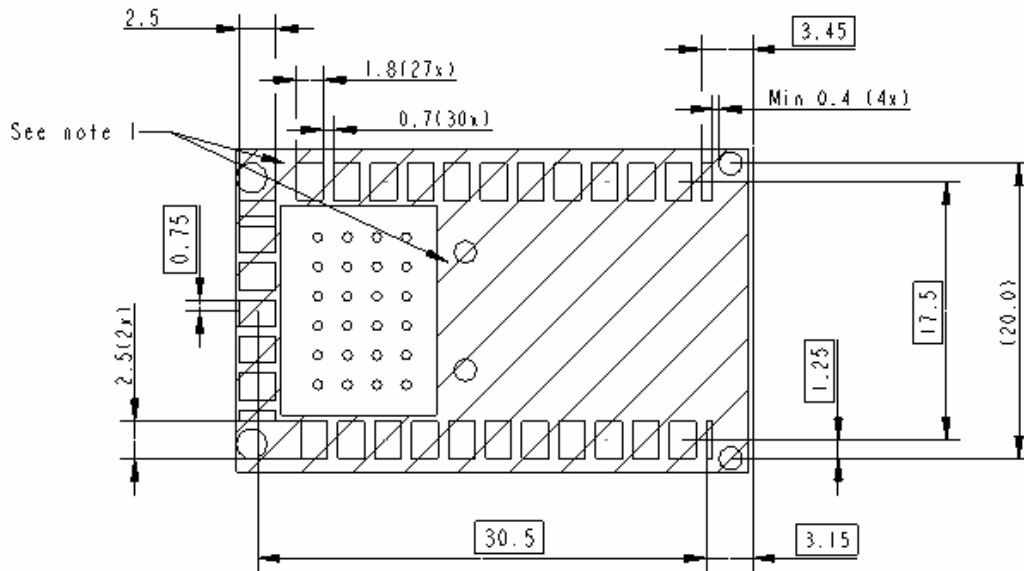



fig.5

	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
	TITLE <b>Metral Sofix®</b> P/N: 72860LF, 52088LF, 72844LF, 72858LF, 10022805LF, 10051941LF-201LF, 72846LF	PAGE <b>19 of 44</b>	REVISION <b>C</b>
		AUTHORIZED BY <b>J.Taron</b>	DATE (MM/DD/YY) <b>02/15/2007</b>
		STATUS <b>RELEASED</b>	

### 2.4.2.2. Pin in Paste (PIP)

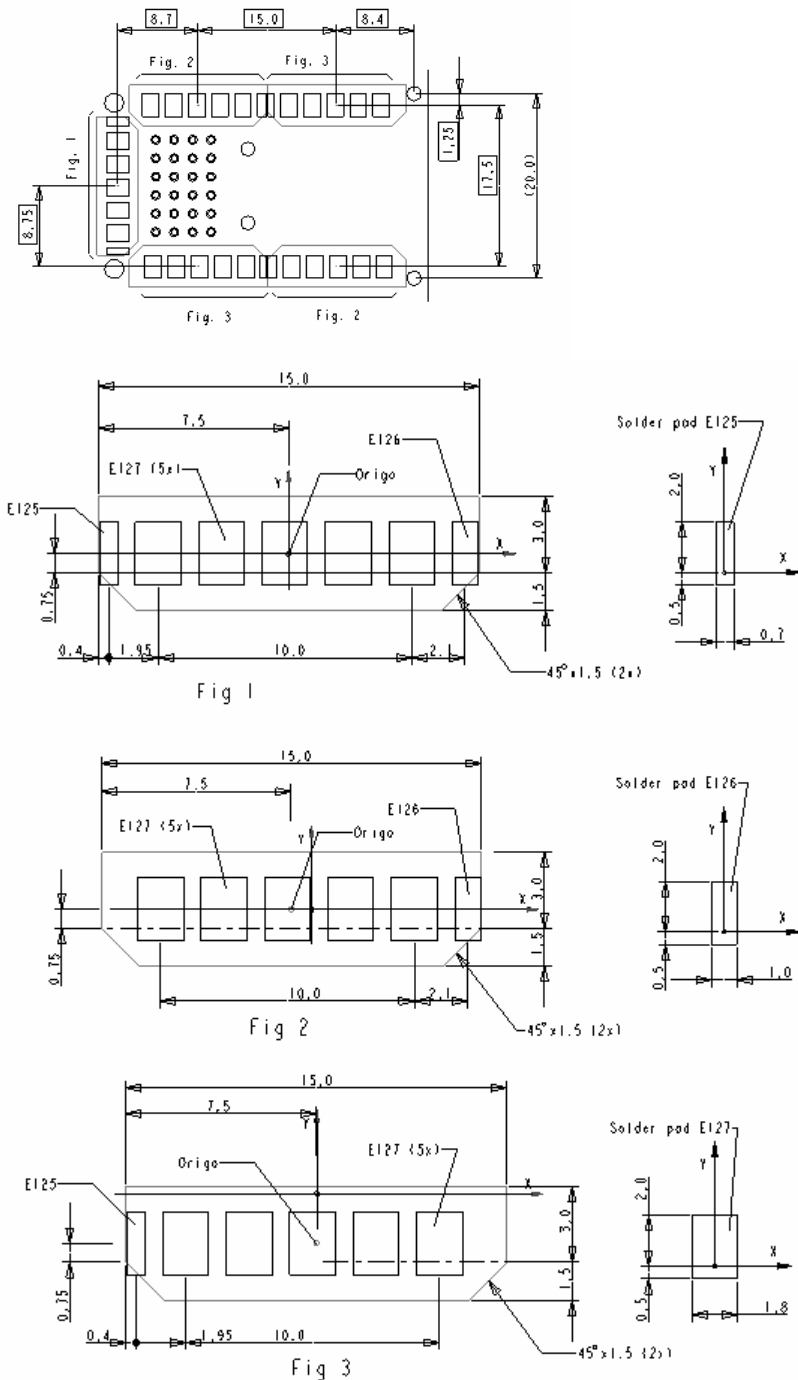



fig.6

	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
	TITLE <b>Metral Sofix®</b> P/N: 72860LF, 52088LF, 72844LF, 72858LF, 10022805LF, 10051941LF-201LF, 72846LF	PAGE <b>20 of 44</b>	REVISION <b>C</b>
		AUTHORIZED BY <b>J.Taron</b>	DATE (MM/DD/YY) <b>02/15/2007</b>
		STATUS <b>RELEASED</b>	

## 2.5. Instructions

### 2.5.1 Surface mounting of contact strip

In common production the contact strip is automatically mounted in surface mounting machine after the screen printing process. After re-flow soldering the contact strip shall be controlled according to mounting tolerances in fig.7.

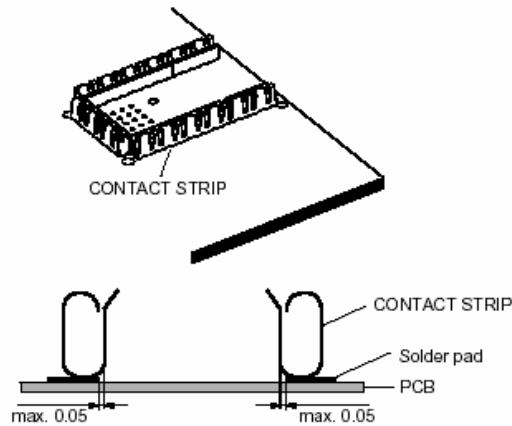
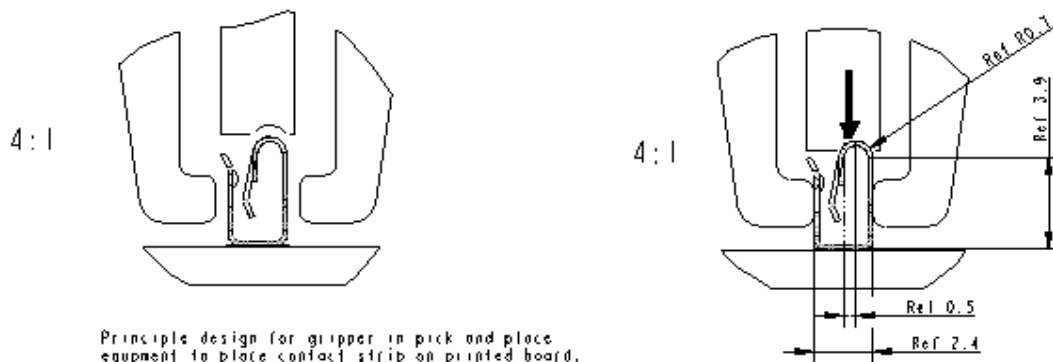



fig.7

### GRIPPER FOR CONTACT STRIP



Principle design for gripper in pick and place equipment to place contact strip on printed board.

fig.8

	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
	TITLE <b>Metral Sofix®</b> P/N: 72860LF, 52088LF, 72844LF, 72858LF, 10022805LF, 10051941LF - 201LF, 72846LF	PAGE <b>21 of 44</b>	REVISION <b>C</b>
		AUTHORIZED BY <b>J.Taron</b>	DATE (MM/DD/YY) <b>02/15/2007</b>
		STATUS <b>RELEASED</b>	

## 2.5.2 Mounting Header

If the height of the connector is missing in the process control, before wave soldering, a soldering fixture with a pressure mechanism over the connector is used to secure the correct mounting of the connector.

After wave soldering the connector shall be controlled according to mounting tolerances

### 2.5.2.1 Solder To Board (STB)

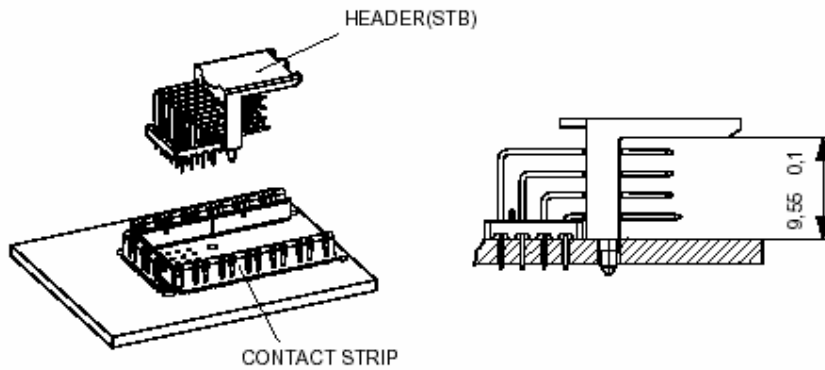


fig.9

### 2.5.2.2. Pin in Paste (PIP)

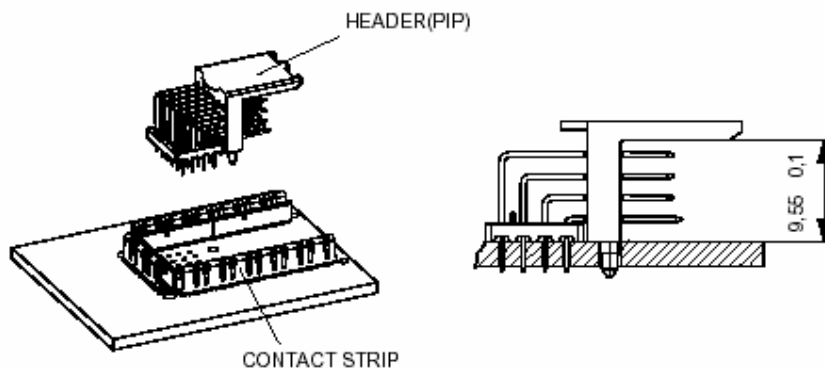



fig.10

	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
TITLE <b>Metral Sofix®</b> P/N: 72860LF, 52088LF, 72844LF, 72858LF, 10022805LF, 10051941LF-201LF, 72846LF		PAGE <b>22 of 44</b>	REVISION <b>C</b>
		AUTHORIZED BY <b>J. Taron</b>	DATE (MM/DD/YY) <b>02/15/2007</b>
		STATUS <b>RELEASED</b>	

### 2.5.3. Mounting Cover

Metal cover with contact strip is mounted together with front mechanics.

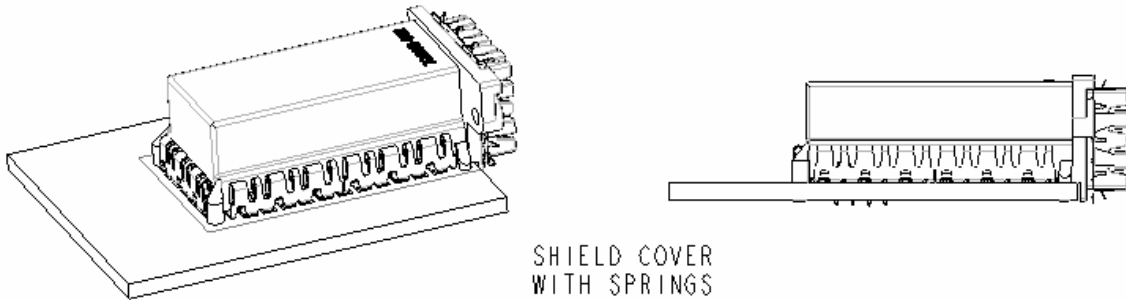



fig.11

	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
	TITLE <b>Metral Sofix®</b> P/N: 72860LF, 52088LF, 72844LF, 72858LF, 10022805LF, 10051941LF-201LF, 72846LF	PAGE <b>23 of 44</b>	REVISION <b>C</b>
		AUTHORIZED BY <b>J.Taron</b>	DATE (MM/DD/YY) <b>02/15/2007</b>
		STATUS <b>RELEASED</b>	

### 2.5.4 Position of ground spring and connector in final assembly from front panel

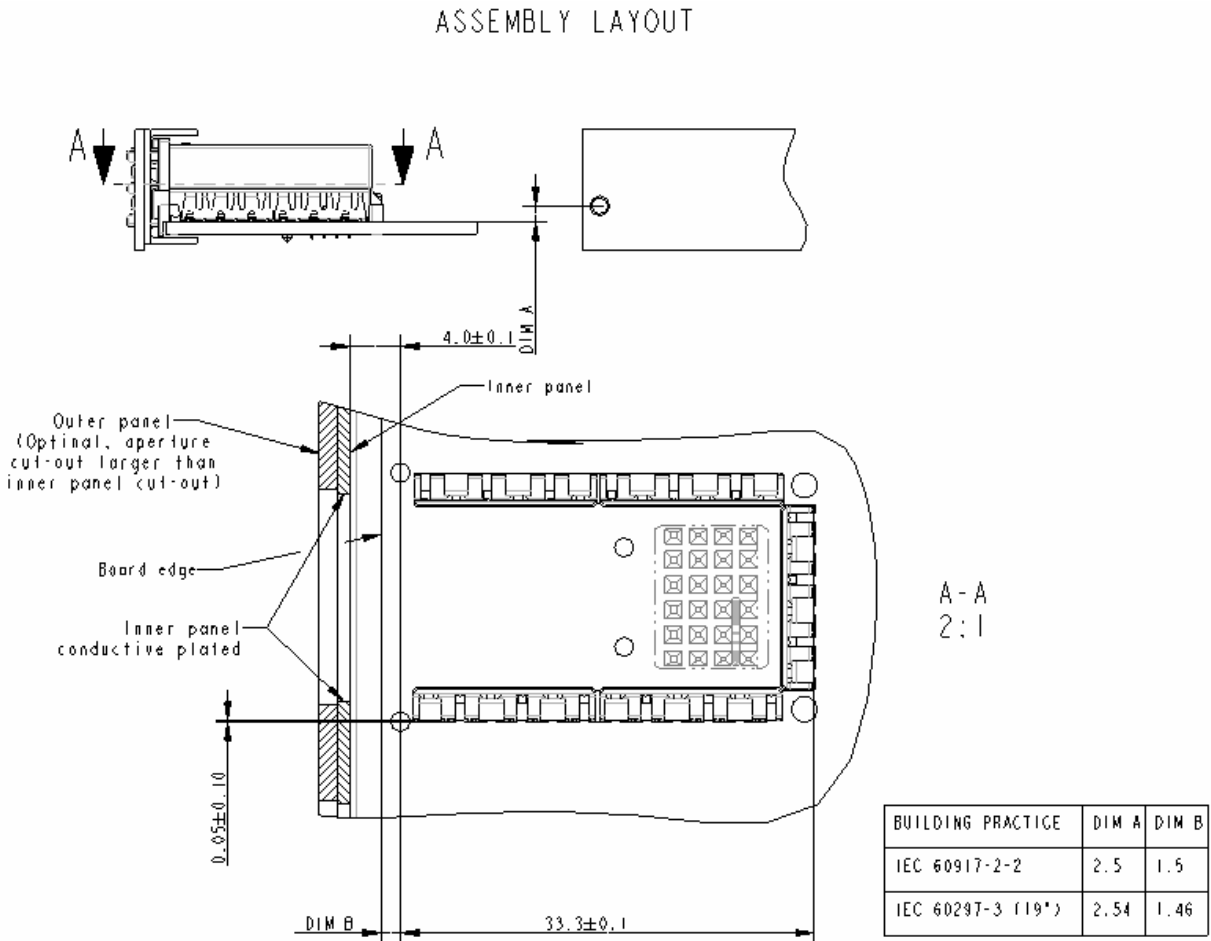



fig.12

	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
	TITLE <b>Metral Sofix®</b> P/N: 72860LF,52088LF,72844LF,72858LF,10022805LF,10051941LF-201LF,72846LF	PAGE <b>24 of 44</b>	REVISION <b>C</b>
		AUTHORIZED BY <b>J.Taron</b>	DATE (MM/DD/YY) <b>02/15/2007</b>
		STATUS <b>RELEASED</b>	

## 3.PART C- 3x24 SIGNAL

### 3.1General

#### 3.1.1General Information

The specification is valid for the Lead Free/RoHS compatible products.  
 This document describes the assembly process of Signal connector 10022805 and 10051941-201LF and the tools involved in the process. Also referring to GS-12-307.

### 3.2 Connector definition

#### 3.2.1 Shielded right angle connector

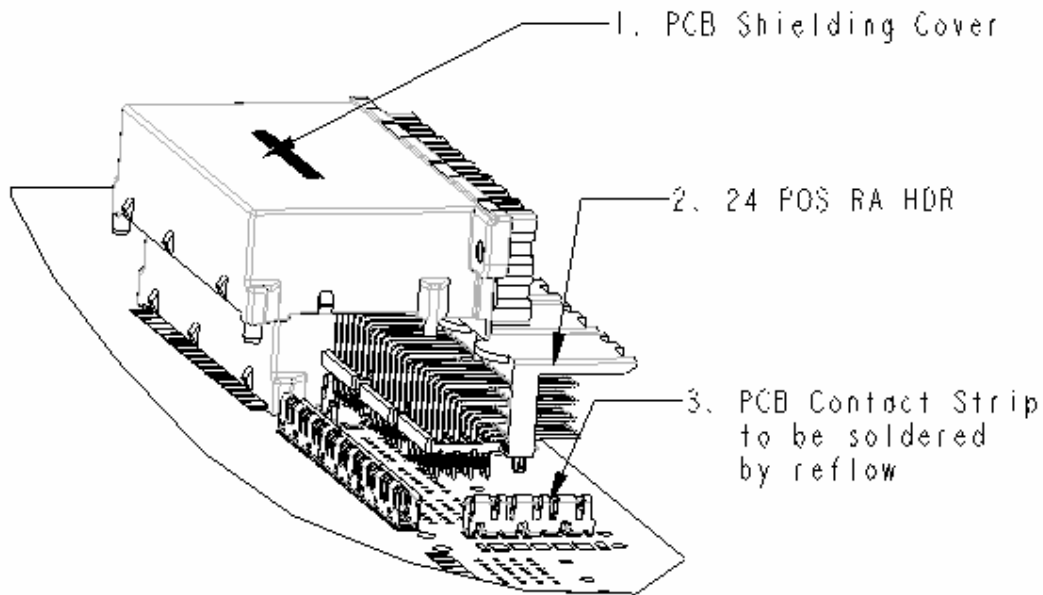



fig.1

#### 3.2.2. Component List

For the list of the components used in the assembly refer customer drawing.



	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
	TITLE <b>Metral Sofix®</b> P/N: 72860LF, 52088LF, 72844LF, 72858LF, 10022805LF, 10051941LF-201LF, 72846LF	PAGE <b>25 of 44</b>	REVISION <b>C</b>
		AUTHORIZED BY <b>J.Taron</b>	DATE (MM/DD/YY) <b>02/15/2007</b>
		STATUS <b>RELEASED</b>	

### 3.3 Front Face Board

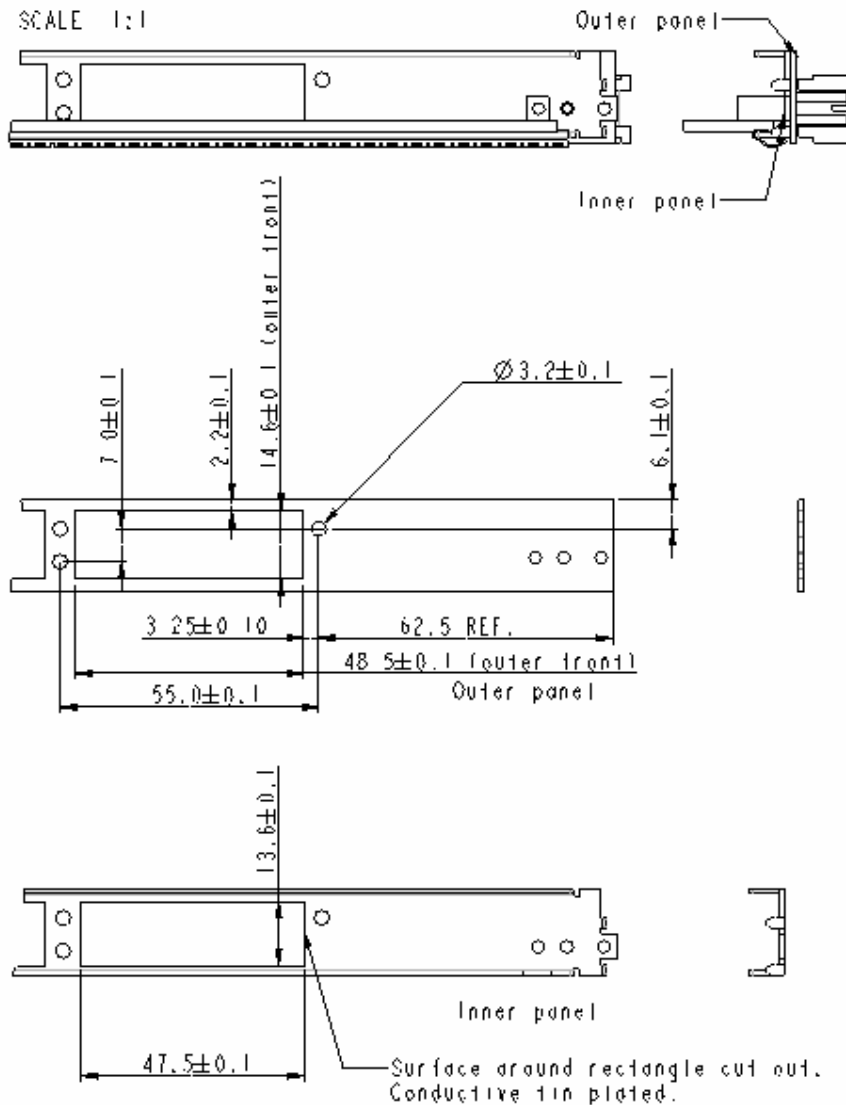



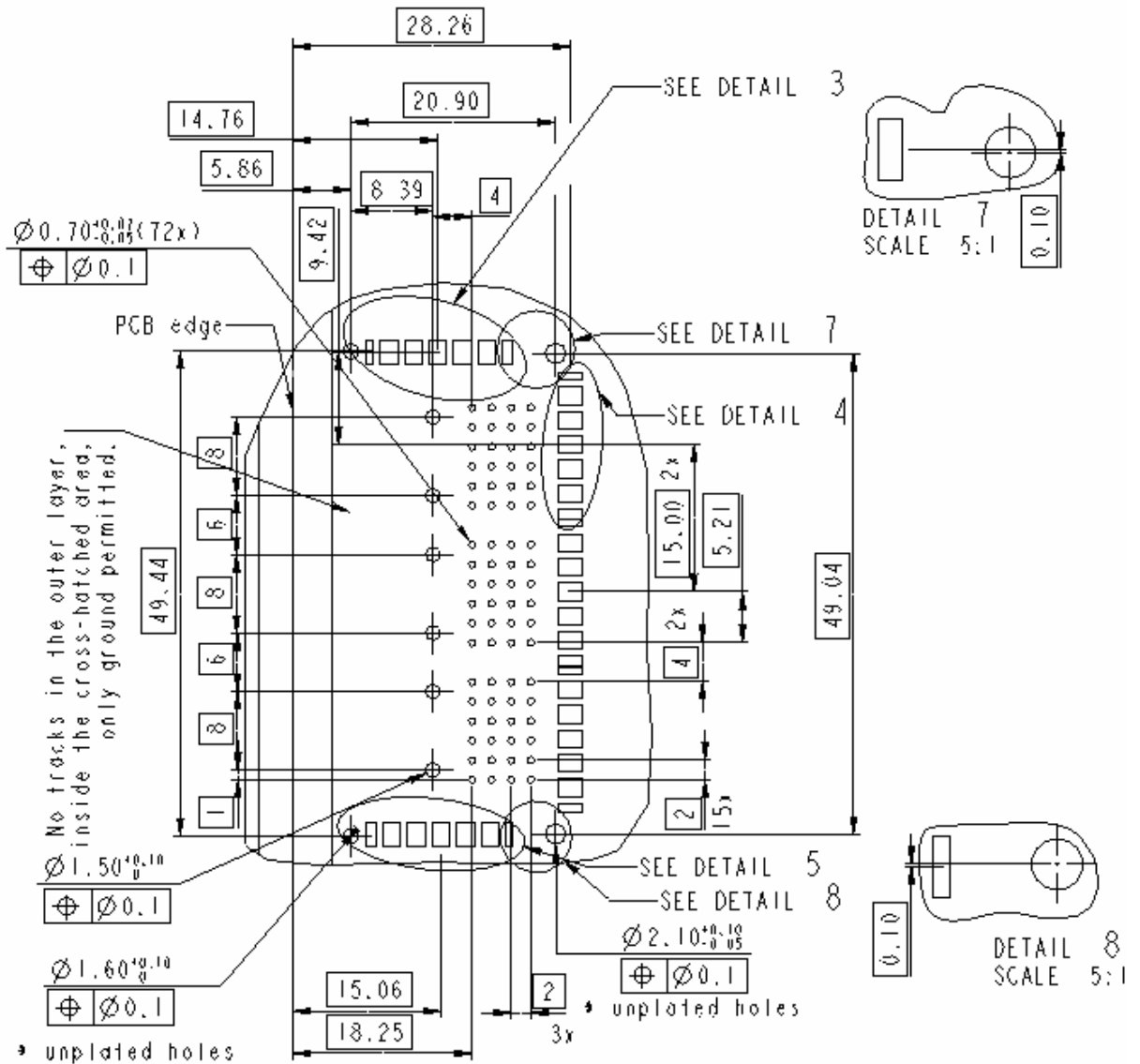
fig.2


	TYPE	NUMBER	
	APPLICATION SPECIFICATION	GS-20-049	
TITLE	PAGE	REVISION	
Metral Sofix®	26 of 44	C	
P/N: 72860LF, 52088LF, 72844LF, 72858LF, 10022805LF, 10051941LF-201LF, 72846LF	AUTHORIZED BY	DATE (MM/DD/YY)	
	J. Taron	02/15/2007	
	STATUS	RELEASED	

### 3.4. Layout Definition

#### 3.4.1. Hole Definition

##### 3.4.1.1. Solder to Board (STB)



	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
TITLE <b>Metral Sofix®</b> P/N: 72860LF, 52088LF, 72844LF, 72858LF, 10022805LF, 10051941LF-201LF, 72846LF	PAGE <b>27 of 44</b>	REVISION <b>C</b>	
	AUTHORIZED BY <b>J.Taron</b>	DATE (MM/DD/YY) <b>02/15/2007</b>	
STATUS <b>RELEASED</b>			

suite

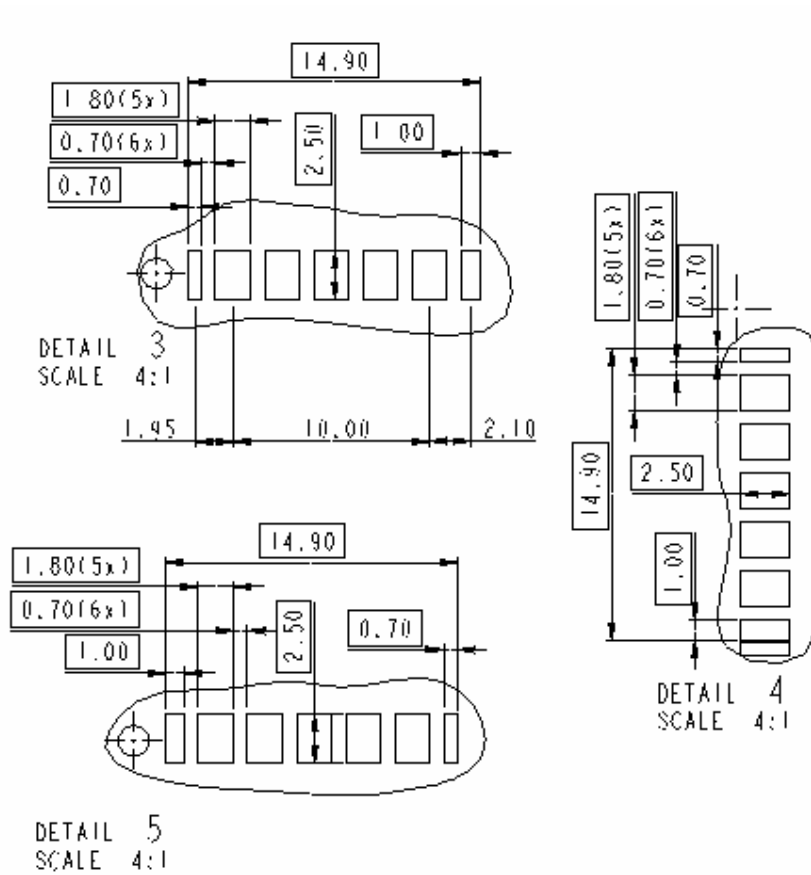

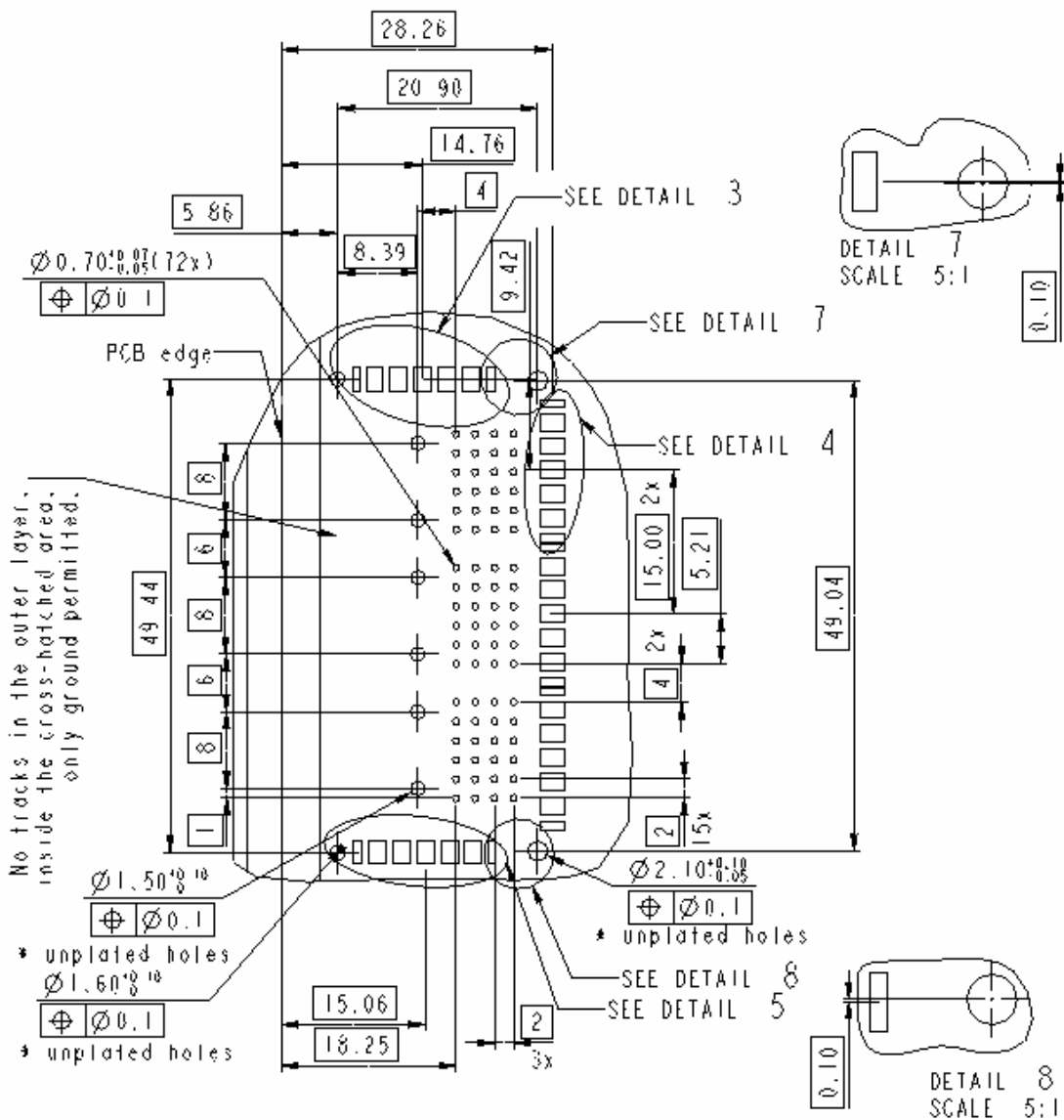



fig.3

	TYPE	NUMBER	
	APPLICATION SPECIFICATION	GS-20-049	
TITLE	PAGE	REVISION	
Metral Sofix®	28 of 44	C	
P/N: 72860LF, 52088LF, 72844LF, 72858LF, 10022805LF, 10051941LF-201LF, 72846LF	AUTHORIZED BY	DATE (MM/DD/YY)	
	J. Taron	02/15/2007	
	STATUS	RELEASED	

### 3.4.1.2. Pin in Paste



	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
TITLE <b>Metral Sofix®</b> P/N: 72860LF, 52088LF, 72844LF, 72858LF, 10022805LF, 10051941LF-201LF, 72846LF	PAGE <b>29 of 44</b>	REVISION <b>C</b>	
	AUTHORIZED BY <b>J.Taron</b>	DATE (MM/DD/YY) <b>02/15/2007</b>	
STATUS <b>RELEASED</b>			

suite

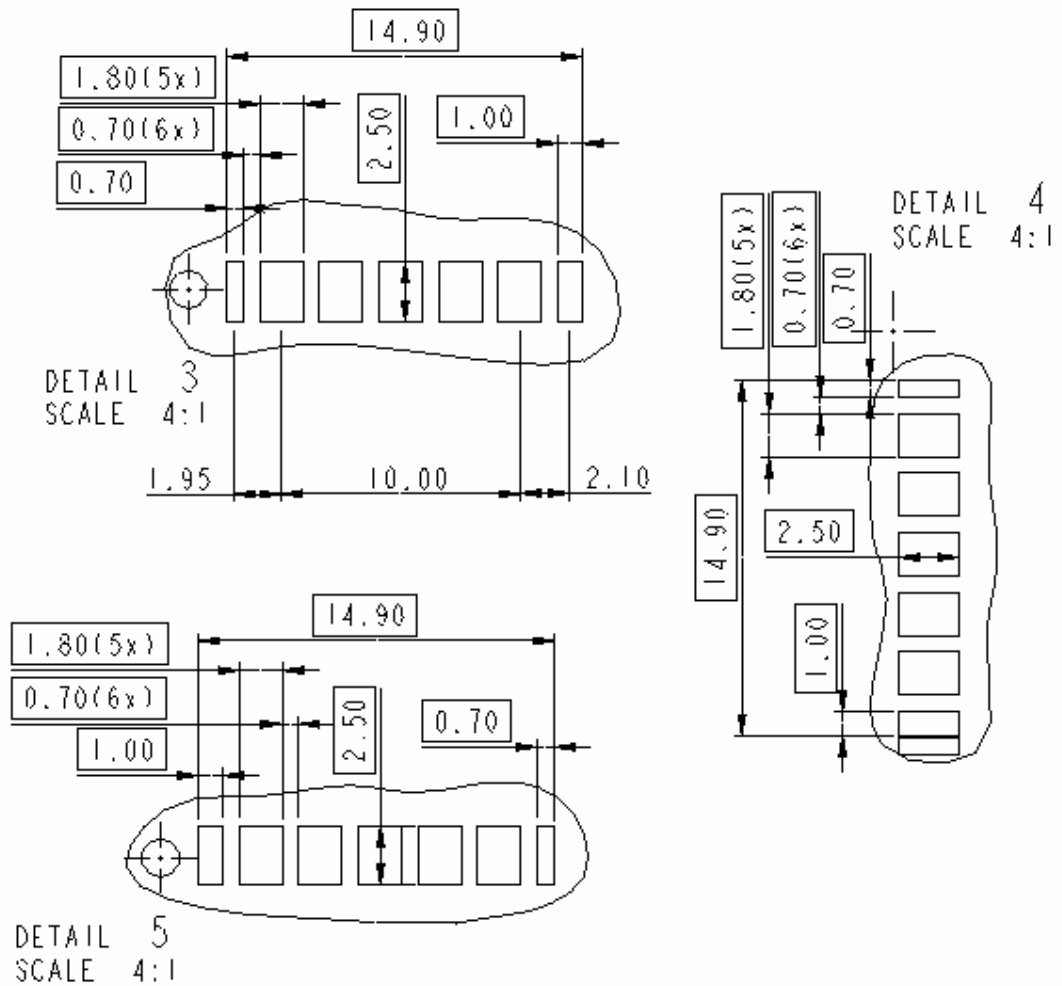

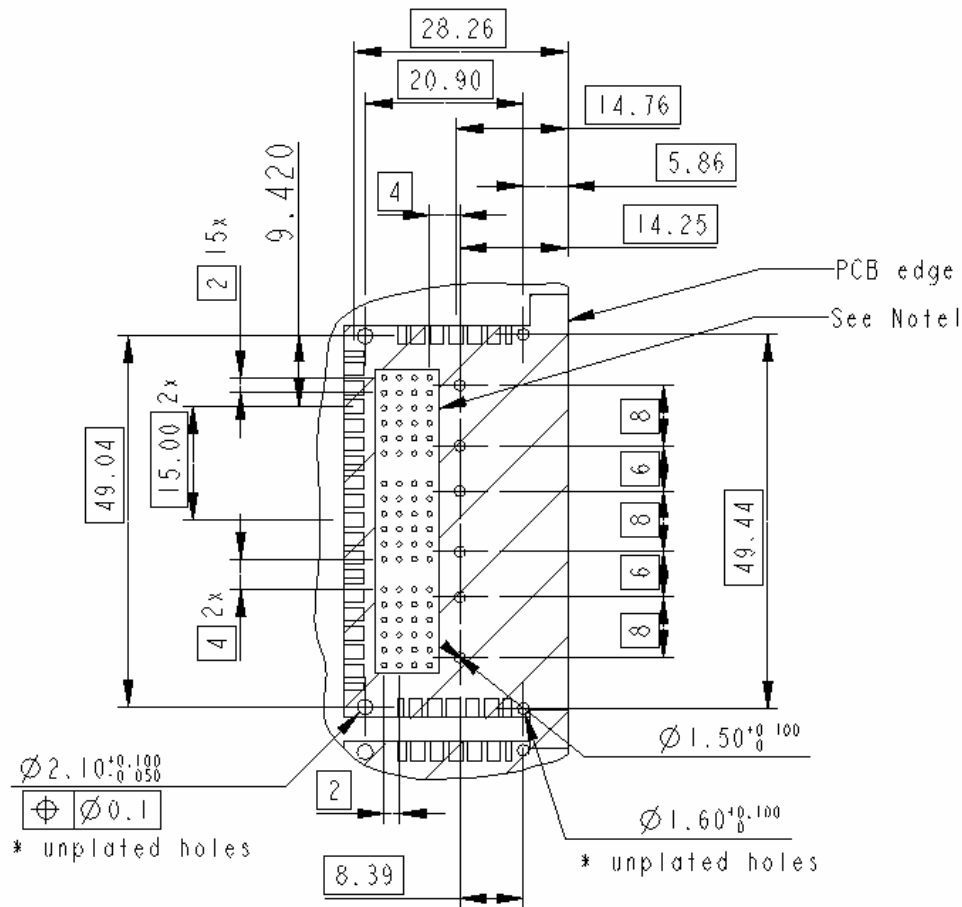


fig.4

	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
TITLE <b>Metral Sofix®</b> P/N: 72860LF,52088LF,72844LF,72858LF,10022805LF,10051941LF-201LF,72846LF		PAGE <b>30 of 44</b>	REVISION <b>C</b>
		AUTHORIZED BY <b>J.Taron</b>	DATE (MM/DD/YY) <b>02/15/2007</b>
		STATUS <b>RELEASED</b>	


### 3.4.2 Pad Definition

#### 3.4.2.1. Solder to Board(STB)



Note  
1.No tracks in the outer layer  
inside the cross-hatched area,  
only ground permitted.

fig.5

	TYPE	NUMBER	
	APPLICATION SPECIFICATION	GS-20-049	
TITLE	PAGE	REVISION	
Metral Sofix®	31 of 44	C	
P/N: 72860LF, 52088LF, 72844LF, 72858LF, 10022805LF, 10051941LF-201LF, 72846LF	AUTHORIZED BY	DATE (MM/DD/YY)	
	J. Taron	02/15/2007	
	STATUS	RELEASED	

### 3.4.2.2. Pin in Paste(PIP)

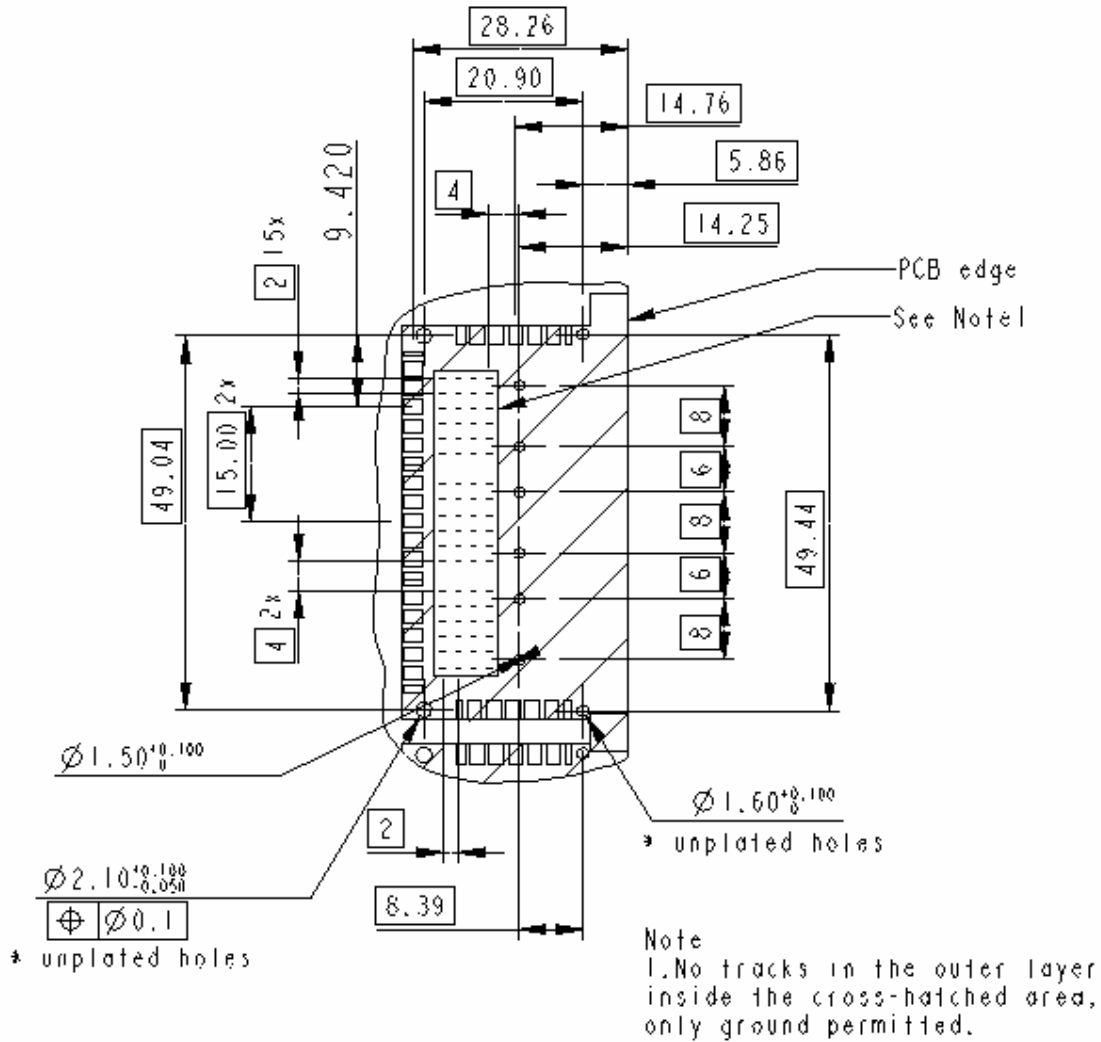



fig.6

	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
	TITLE <b>Metral Sofix®</b> P/N: 72860LF,52088LF,72844LF,72858LF,10022805LF,10051941LF-201LF,72846LF	PAGE <b>32 of 44</b>	REVISION <b>C</b>
	AUTHORIZED BY <b>J.Taron</b>	DATE (MM/DD/YY) <b>02/15/2007</b>	
	STATUS <b>RELEASED</b>		

### 3.5. Instructions

#### 3.5.1. Surface mounting of contact strip

In common production the contact strip is automatically mounted in surface mounting machine after the screen printing process.  
 After re-flow soldering the contact strip shall be controlled according to mounting tolerances in fig.7.

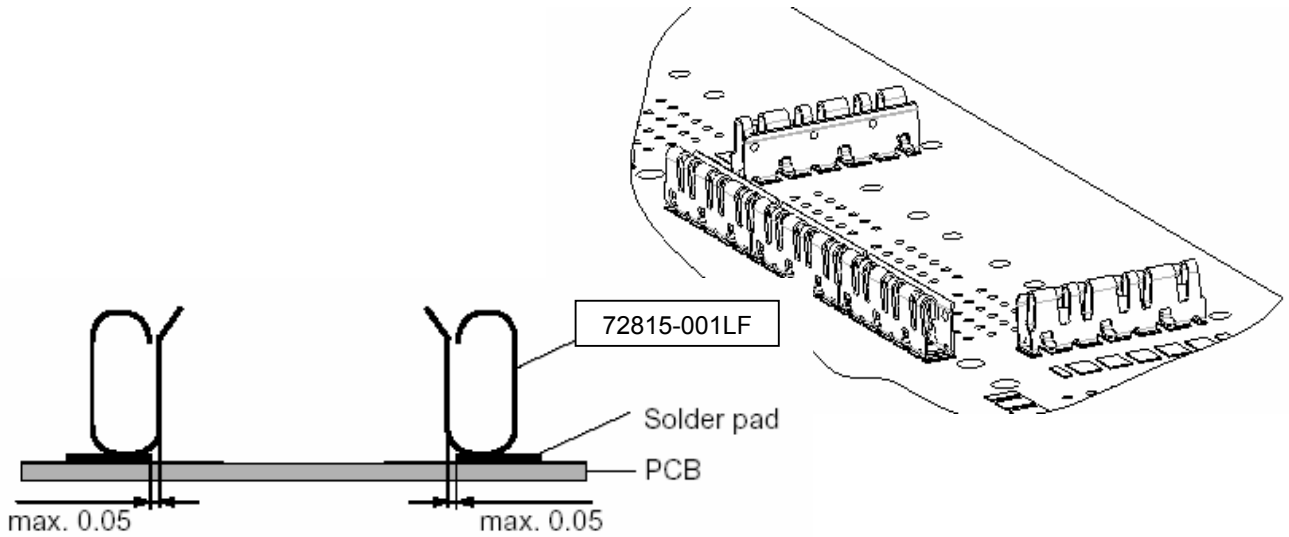
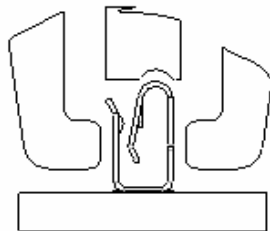


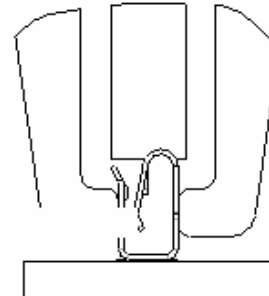
fig.7

#### GRIPPER FOR CONTACT STRIP

Principle design




SCALE 4:1



Principle design for gripper in pick and place equipment to place P/N 72815-001 on printed board

fig.8



	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
	TITLE <b>Metral Sofix®</b> P/N: 72860LF,52088LF,72844LF,72858LF,10022805LF,10051941LF-201LF,72846LF	PAGE <b>33 of 44</b>	REVISION <b>C</b>
		AUTHORIZED BY <b>J.Taron</b>	DATE (MM/DD/YY) <b>02/15/2007</b>
		STATUS <b>RELEASED</b>	

### 3.5.2 Mounting Header

If the height of the connector is missing in the process control, before wave soldering, a soldering fixture with a pressure mechanism over the connector is used to secure the correct mounting of the connector. After wave soldering the connector shall be controlled according to mounting tolerances

#### 3.5.2.1 Solder To Board (STB)

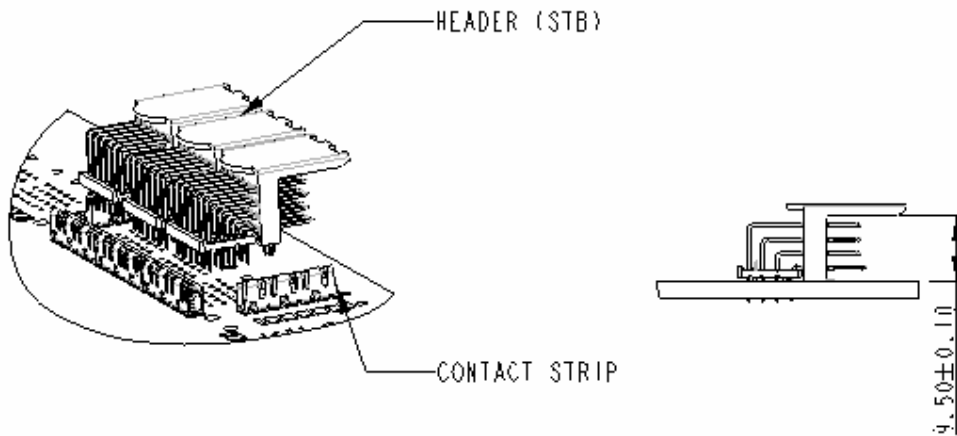


fig.9

#### 3.5.2.2 Pin in Paste(PIP)

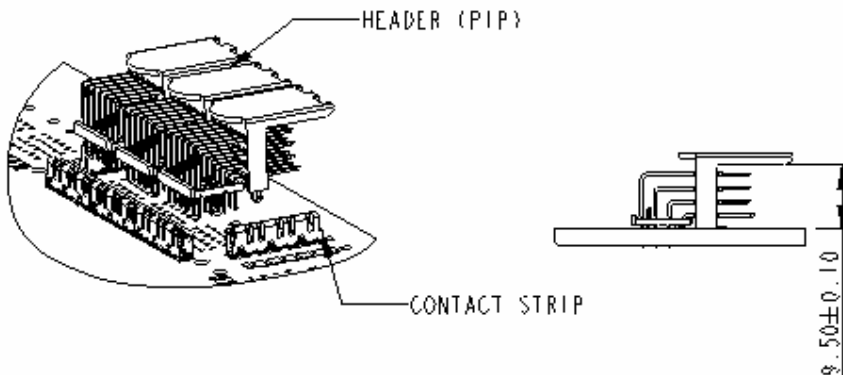

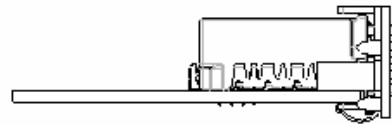
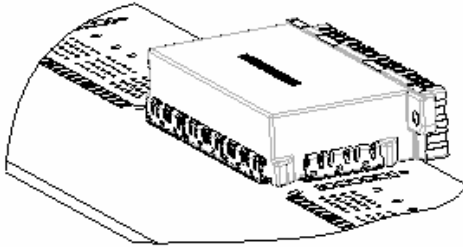


fig.10

	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
TITLE <b>Metral Sofix®</b> P/N: 72860LF, 52088LF, 72844LF, 72858LF, 10022805LF, 10051941LF - 201LF, 72846LF		PAGE <b>34 of 44</b>	REVISION <b>C</b>
		AUTHORIZED BY <b>J. Taron</b>	DATE (MM/DD/YY) <b>02/15/2007</b>
		STATUS <b>RELEASED</b>	


### 3.5.3. Mounting Cover

Metal cover with contact strip is mounted together with front mechanics.



SHIELD COVER  
WITHOUT SPRINGS

fig.11

	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
	TITLE <b>Metral Sofix®</b> P/N: 72860LF, 52088LF, 72844LF, 72858LF, 10022805LF, 10051941LF-201LF, 72846LF	PAGE <b>35 of 44</b>	REVISION <b>C</b>
	AUTHORIZED BY <b>J. Taron</b>	DATE (MM/DD/YY) <b>02/15/2007</b>	
	STATUS <b>RELEASED</b>		

### 3.5.4 Position of ground spring and connector in final assembly from front panel

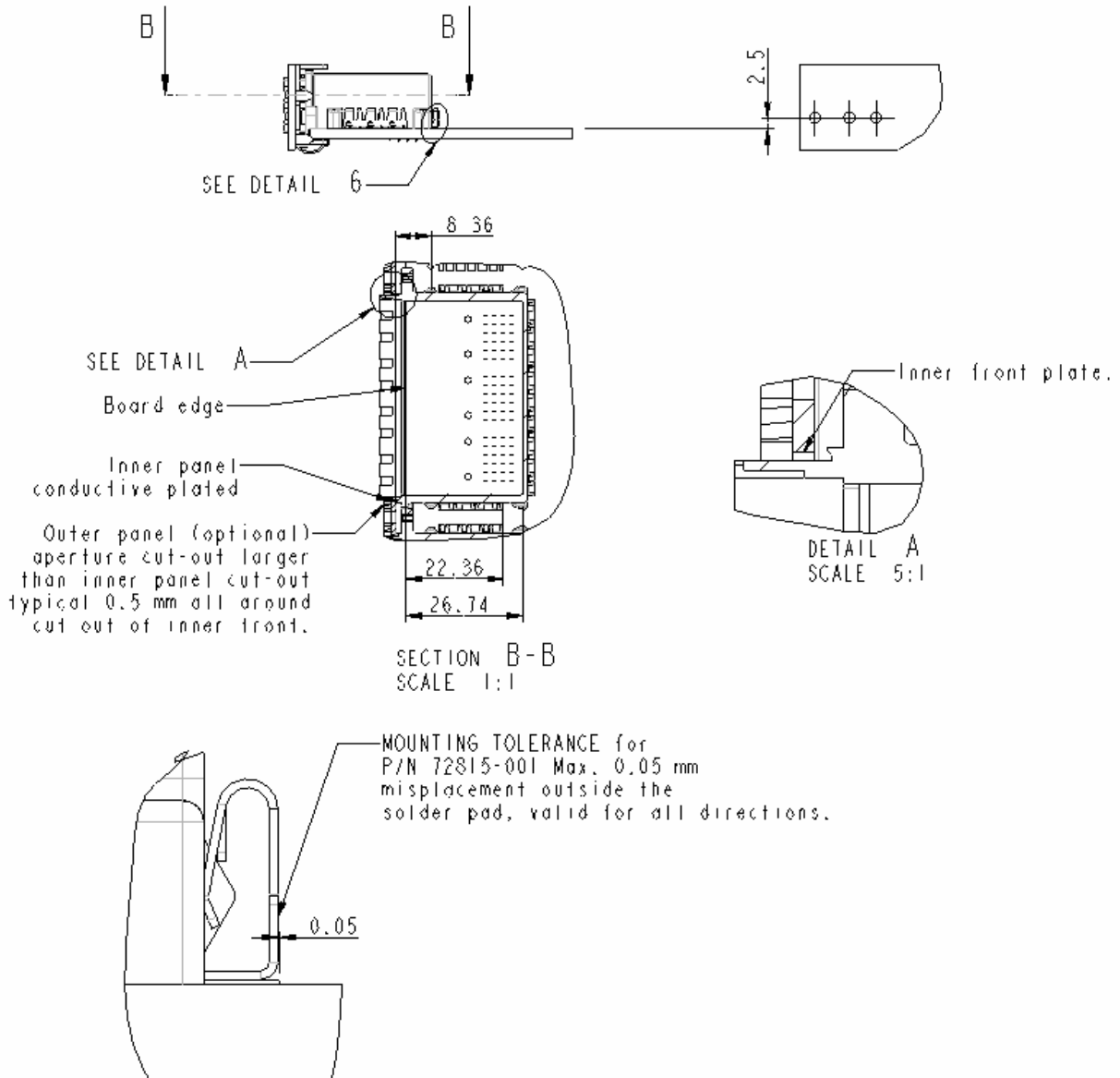



fig.12

	TYPE	NUMBER	
	APPLICATION SPECIFICATION	GS-20-049	
TITLE <b>Metral Sofix®</b> P/N: 72860LF,52088LF,72844LF,72858LF,10022805LF,10051941LF-201LF,72846LF	PAGE	36 of 44	REVISION
	AUTHORIZED BY	J.Taron	DATE (MM/DD/YY)
	STATUS		

## PART D- POWER

### 4.1 General

#### 4.1.1 General Information

The specification is valid for the Lead Free/RoHS compatible products.  
 This document describes the assembly process of Signal connector 72844LF and 72858LF and the tools involved in the process. Also referring to GS-12-307.

### 4.2 Connector definition

#### 4.2.1 Power connector

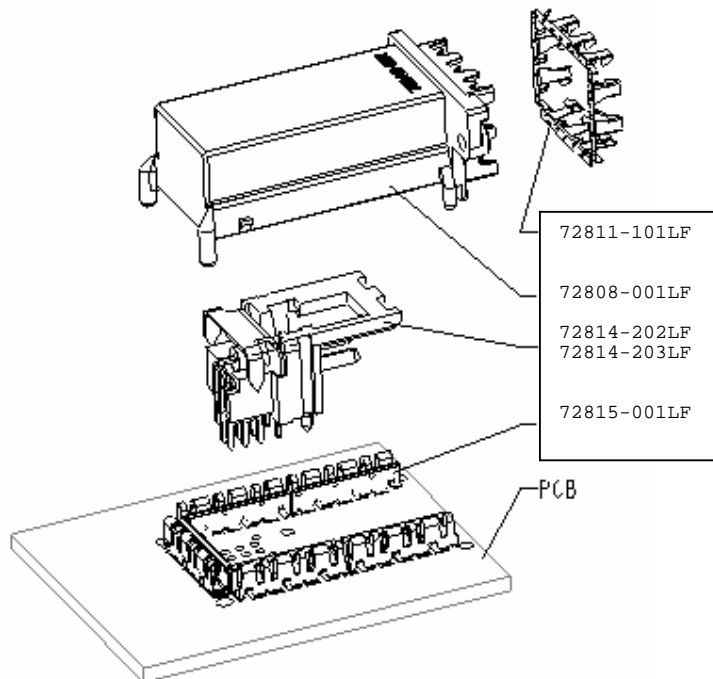



fig :1

#### 4.2.2. Component List

For the list of the components used in the assembly refer customer drawing.

	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
	TITLE <b>Metral Sofix®</b> P/N: 72860LF, 52088LF, 72844LF, 72858LF, 10022805LF, 10051941LF-201LF, 72846LF	PAGE <b>37 of 44</b>	REVISION <b>C</b>
		AUTHORIZED BY <b>J. Taron</b>	DATE (MM/DD/YY) <b>02/15/2007</b>
		STATUS <b>RELEASED</b>	

### 4.3 Front Face Board

#### FRONT LAYOUT

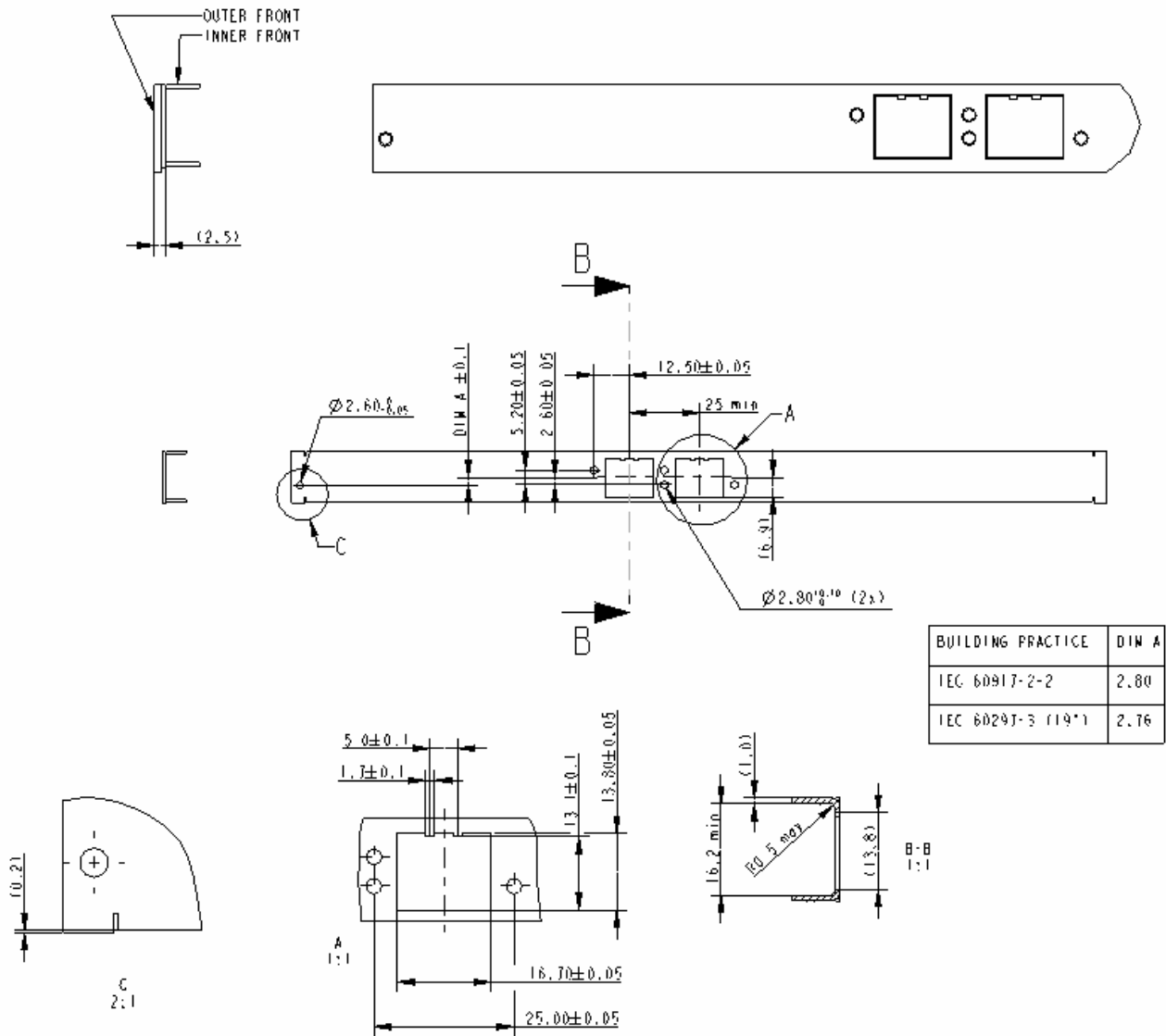



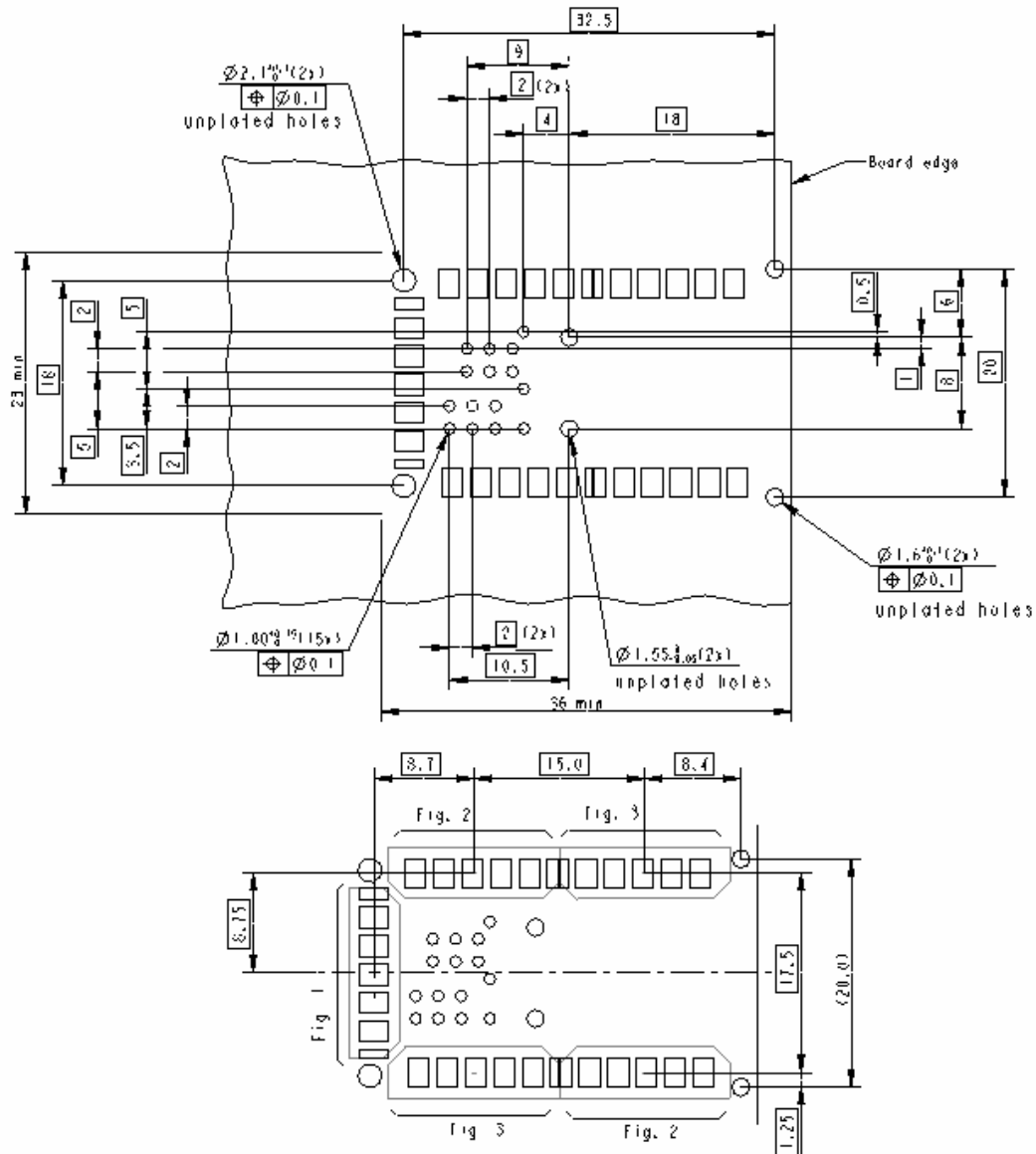
fig :2


	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
	TITLE <b>Metral Sofix®</b> P/N: 72860LF, 52088LF, 72844LF, 72858LF, 10022805LF, 10051941LF-201LF, 72846LF	PAGE <b>38 of 44</b>	REVISION <b>C</b>
		AUTHORIZED BY <b>J.Taron</b>	DATE (MM/DD/YY) <b>02/15/2007</b>
		STATUS <b>RELEASED</b>	

## 4.4. Layout Definition

### 4.4.1. Hole Definition (Solder to Board (STB))

PCB LAYOUT  
(FROM COMPONENTS SIDE)



	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
	TITLE <b>Metral Sofix®</b> P/N: 72860LF, 52088LF, 72844LF, 72858LF, 10022805LF, 10051941LF-201LF, 72846LF	PAGE <b>39 of 44</b>	REVISION <b>C</b>
		AUTHORIZED BY <b>J.Taron</b>	DATE (MM/DD/YY) <b>02/15/2007</b>
		STATUS <b>RELEASED</b>	

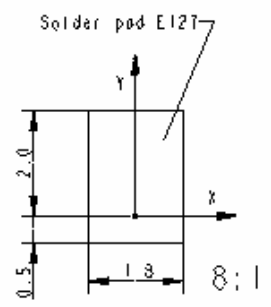
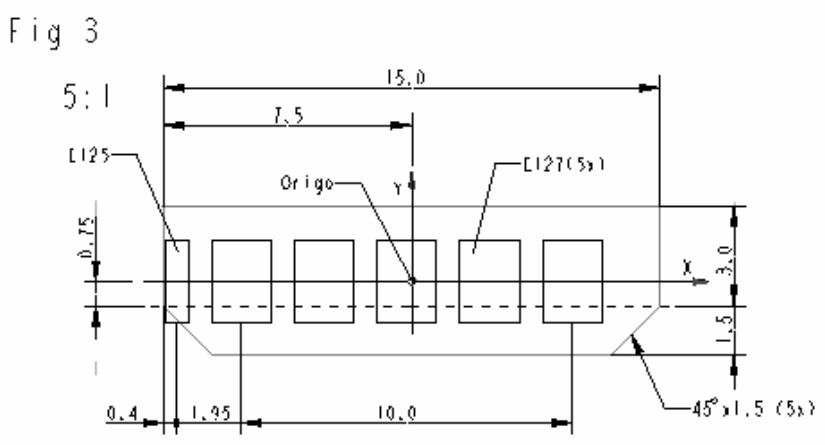
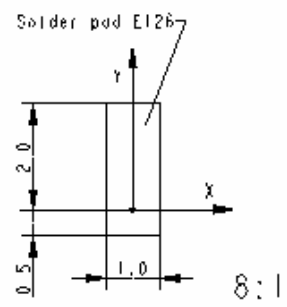
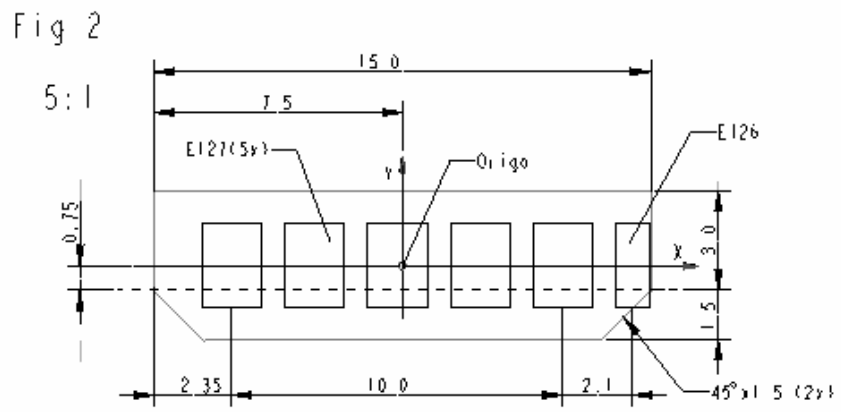
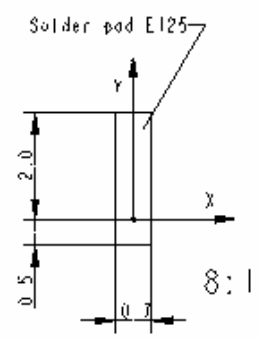
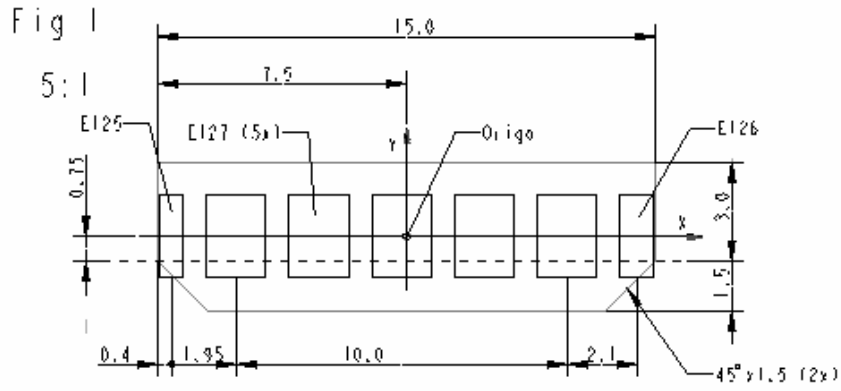



fig :3

	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
	TITLE <b>Metral Sofix®</b> P/N: 72860LF, 52088LF, 72844LF, 72858LF, 10022805LF, 10051941LF- 201LF, 72846LF	PAGE <b>40 of 44</b>	REVISION <b>C</b>
		AUTHORIZED BY <b>J.Taron</b>	DATE (MM/DD/YY) <b>02/15/2007</b>
		STATUS <b>RELEASED</b>	

#### 4.4.2 Pad Definition

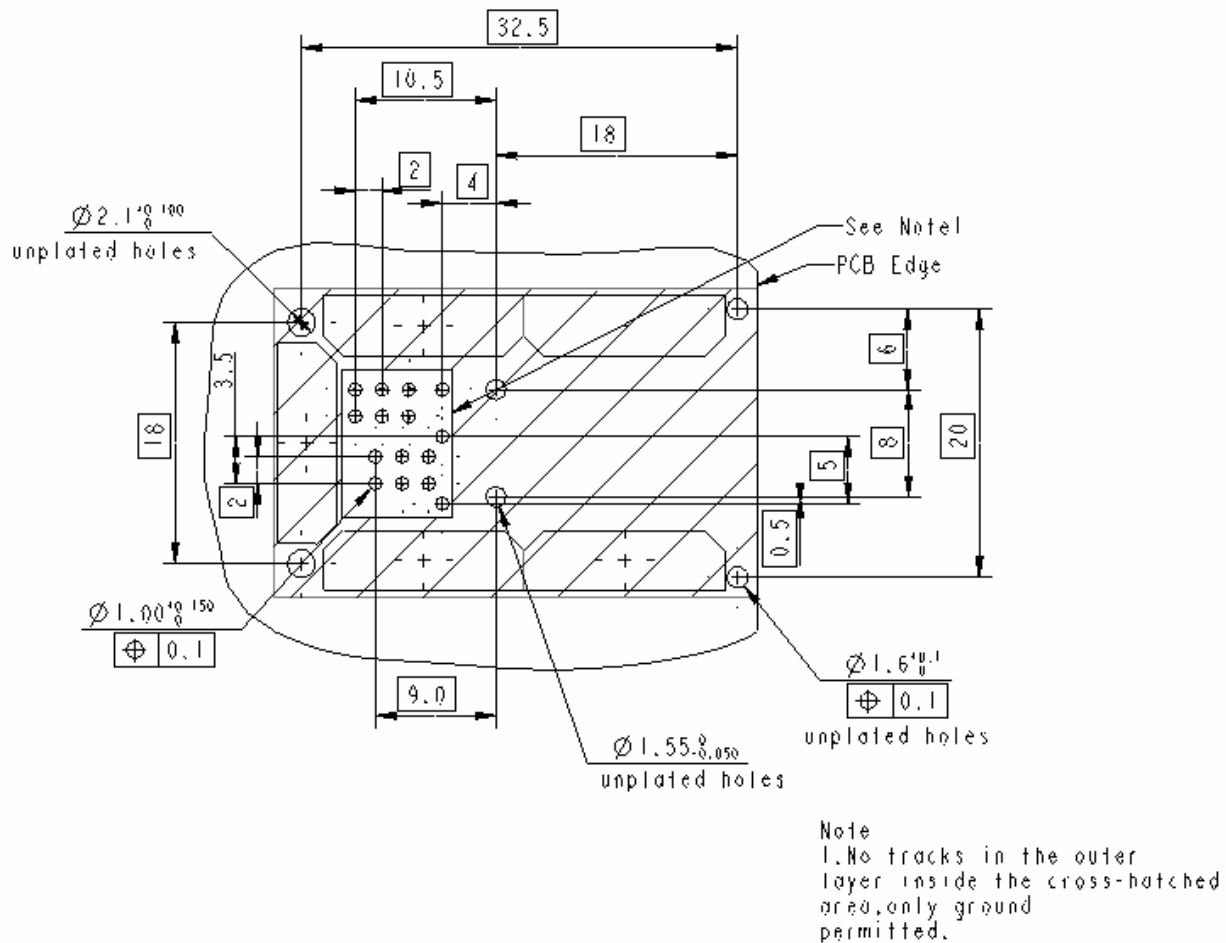



fig :4

#### 4.5 Instructions



	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
	TITLE <b>Metral Sofix®</b> P/N: 72860LF,52088LF,72844LF,72858LF,10022805LF,10051941LF-201LF,72846LF	PAGE <b>41 of 44</b>	REVISION <b>C</b>
		AUTHORIZED BY <b>J.Taron</b>	DATE (MM/DD/YY) <b>02/15/2007</b>
		STATUS <b>RELEASED</b>	

#### 4.5.1.Surface mounting of contact strip

In common production the contact strip is automatically mounted in surface mounting machine after the screen printing process.

After re-flow soldering the contact strip shall be controlled according to mounting tolerances in fig.5.

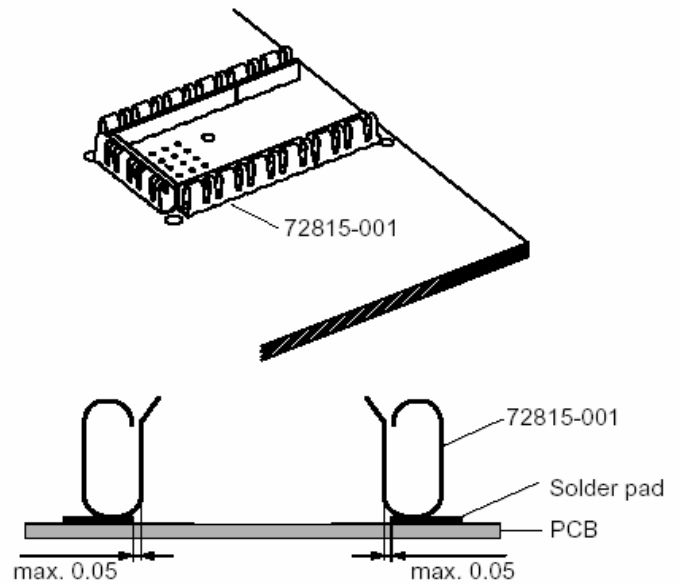
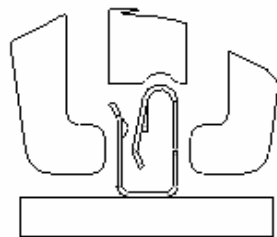
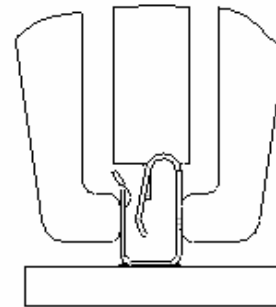


fig :5

GRIPPER FOR P/N 72815-001




SCALE 4:1



Principle design for gripper in pick and place equipment to place P/N 72815-001 on printed board

fig :6

#### 4.5.2 Mounting Header

	TYPE	NUMBER	
	APPLICATION SPECIFICATION	GS-20-049	
TITLE <b>Metral Sofix®</b> P/N: 72860LF,52088LF,72844LF,72858LF,10022805LF,10051941LF-201LF,72846LF	PAGE	42 of 44	REVISION
	AUTHORIZED BY	J.Taron	DATE (MM/DD/YY)
	STATUS	RELEASED	

As soon as possible after the mounting process the connector 72814-201LF is to be wave soldered, to avoid mounting problems. If the height of the connector is missing in the process control, before wave soldering, see fig. 6,a soldering fixture with a pressure mechanism.

After wave soldering the connector shall be controlled according to mounting tolerances

#### 4.5.2.1 Solder to Board (STB)

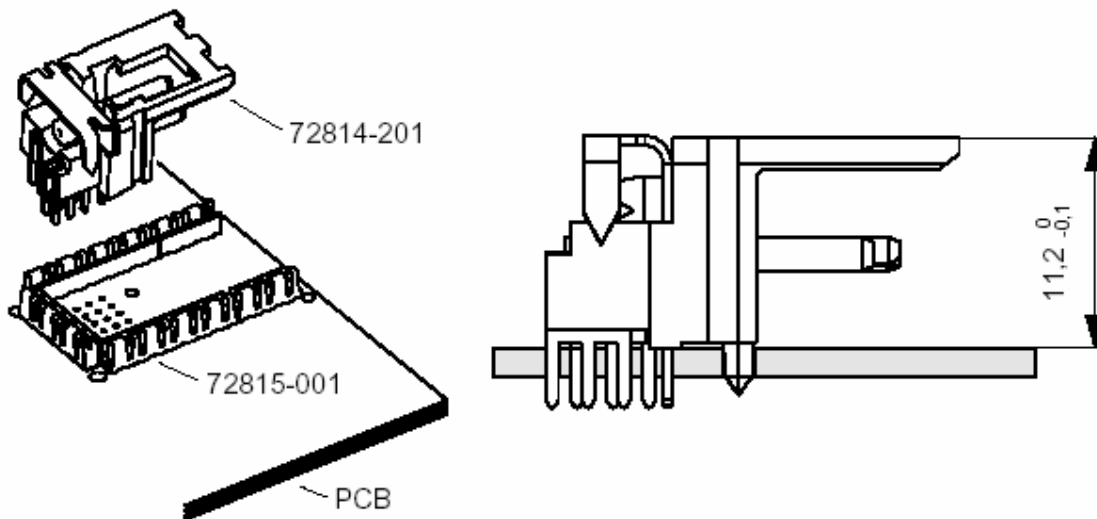


fig :7

#### 4.5.3. Mounting Cover

Metal cover 72808-001LF and contact strip 72811-001LF is mounted together with other front mechanics.

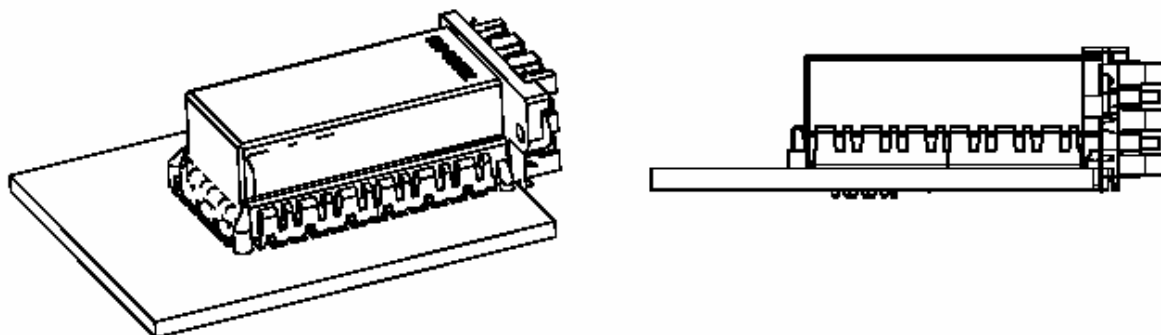

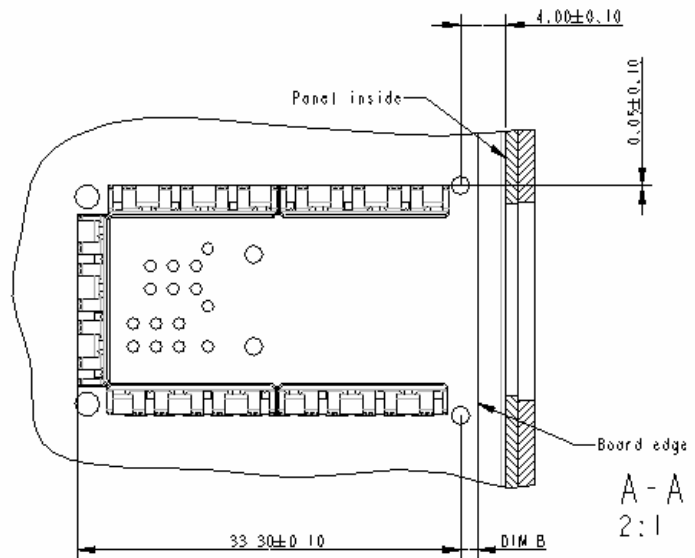
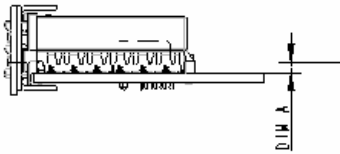


fig :8

#### 4.5.4 Position of ground spring and connector in final assembly from front panel


	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
	TITLE <b>Metral Sofix®</b> P/N: 72860LF, 52088LF, 72844LF, 72858LF, 10022805LF, 10051941LF-201LF, 72846LF	PAGE <b>43 of 44</b>	REVISION <b>C</b>
		AUTHORIZED BY <b>J. Taron</b>	DATE (MM/DD/YY) <b>02/15/2007</b>
		STATUS <b>RELEASED</b>	

ASSEMBLY LAYOUT



BUILDING PRACTICE	DIM A	DIM B
IEC 60917-2-2	2.5	1.5
IEC 60297-3 (19")	2.54	1.46

fig :9

	TYPE <b>APPLICATION SPECIFICATION</b>	NUMBER <b>GS-20-049</b>	
	TITLE <b>Metral Sofix®</b> P/N: 72860LF,52088LF,72844LF,72858LF,10022805LF,10051941LF- 201LF,72846LF	PAGE <b>44 of 44</b>	REVISION <b>C</b>
AUTHORIZED BY <b>J.Taron</b>		DATE (MM/DD/YY) <b>02/15/2007</b>	
STATUS <b>RELEASED</b>			

## 5.Document Revision Information

REV	PAGE	DESCRIPTION	EC #	DATE
A	ALL	NEW DOCUMENT	LS05-0014	01-05-2005
B	ALL	NEW LOGO	LS06-0109	07-04-2006
C	ALL	UPDATE DOCUMENT FOR LF PN ADDED	LS07-0045	02-15-2007