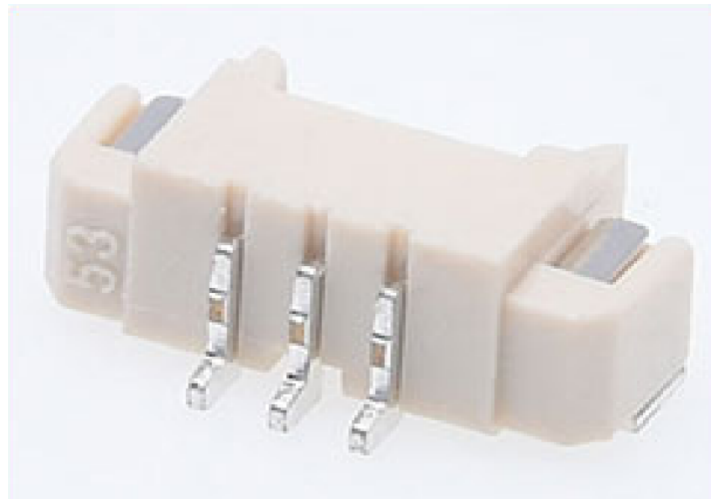


Product Specification

深圳臺華達科技有限公司

SHENZHEN THD Electronics Co., Ltd.



Product.No

THD1252 – xxWR – SN

Pitch=1.25mm Wafer Connector (Mated Height Contact)

A	Release
Rev.	Description
Approved Signatures	
■Prepared By : JIM	■Date: 2012.05.24
■Checked By : JIM	■Date: 2012.05.24
■Approved By : 黄德进	■Date: 2012.05.24

■ Scope

This specification covers the 1.25 mm Pitch Wafer Connector **THD1252** series.

■ Ordering information

THD1252 - xx wR- SN

① ② ③ ④

①	Series name : HC601	④	Plating : GF= 1μ"~3μ" Gold Flash G3= 3μ" Gold over Nickel G5= 5μ" Gold over Nickel SN= Tin(Lead Free) over Nickel
②	Number of contacts : 2 TO 20		
③	Contact type : WR:Right Angle SMT WV:Vertical Angle SMT		

■ Rating

Item	Standard
Voltage Rating (Max.)	50V AC
Current Rating (Max.)	0.5A DC
Operating Temperature Range	-55°C ~ +85°C (Including terminal temperature rise)

■ Material

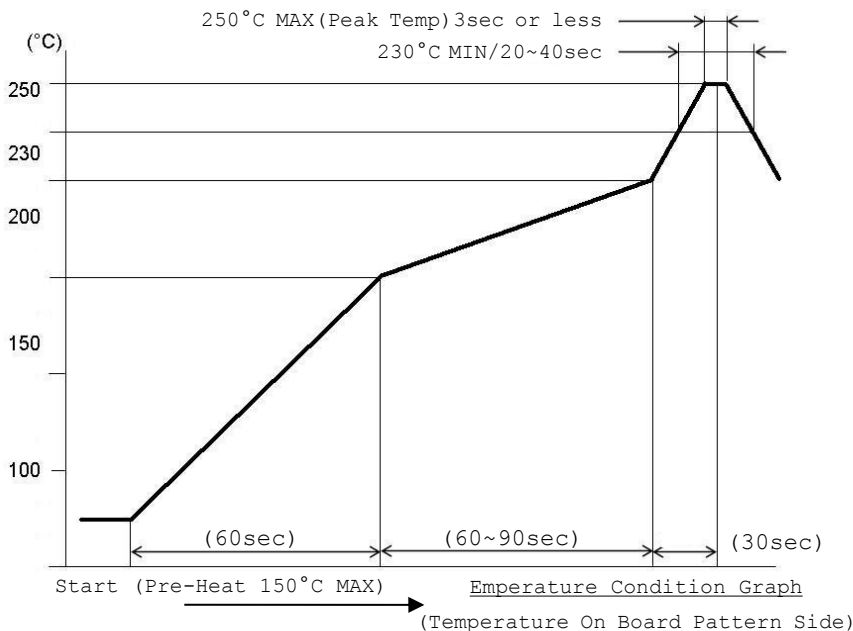
Housing	Actuator	Terminal	Solder pin	Plating
L.C.P (UL94V-0)		Copper alloy	Copper alloy	Tin(Lead Free) over Nickel
Color : White				

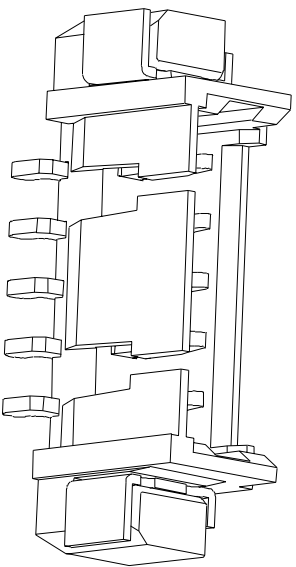
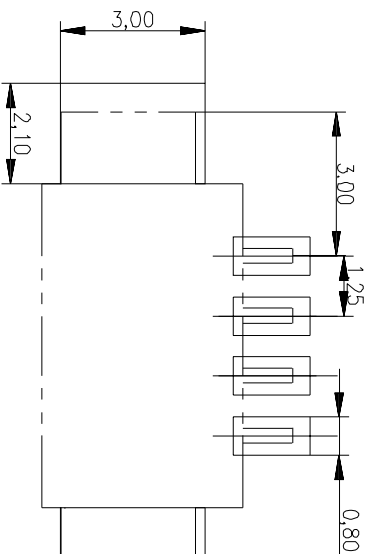
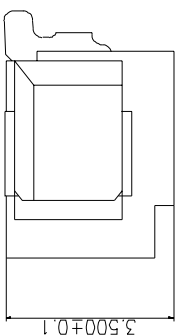
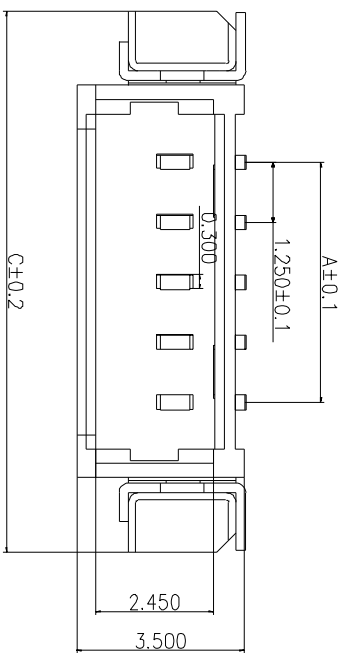
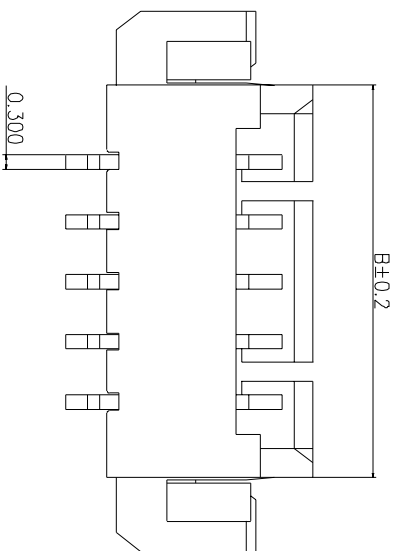
■ Performance

Item	Test Condition	Specification	
Contact Resistance	Mate applicable FPC and measure by dry circuit, 20mV Max, 1mA.	100 mΩ Max.	
Insulation Resistance	Mate applicable FPC and apply 500V DC between adjacent terminal or ground.	50 MΩ Min.	
Dielectric Strength	Mate applicable FPC, apply 250V AC(rms) for 1 minute between adjacent terminal or ground.	No Breakdown	
FPC Retention Force	Insert the actuator, pull the FPC at a rate of 25±3mm per minute.	Per pin x 0.15N Min.	
Terminal Retention Force	Apply axial pull out force at the rate of 25±3 mm/minute on the terminal assembled in the housing.	Per pin x 0.06Kgf {0.6N} Min.	
Vibration	Mate connectors and subject to the following vibration conditions, for period of 2 hours in each of 3 mutually perpendicular axes, passing DC 1mA during the test. Amplitude : 1.5mm P-P Frequency : 10~55~10 Hz in 1 minute. Duration : 2 hours in each of X,Y,Z axes.	Appearance	No Damage
		Contact Resistance	100 mΩ Max.
		Discontinuity	1 μsec Max.
Shock	Mate applicable FPC and subject to the following shock conditions. 3 times of shocks shall be applied for each 6 directions along 3 mutually perpendicular axes, passing DC 1 mA current during the test. Peak value : 490m/s ² {50G}	Appearance	No Damage
		Contact Resistance	100 mΩ Max.
		Discontinuity	1 μsec Max.
Salt Spray	Mate applicable FPC and expose to the following salt mist conditions. Upon completion of the exposure period, salt deposits shall be removed by a gentle wash or dip in running water, after which the specified measurements shall be performed. NaCl solution Concentration : 5 ± 1% Spray time : 48 ± 4 hours Ambient temperature : 35 ± 2°C	Appearance	No Damage
		Contact Resistance	100 mΩ Max.

Item	Test Condition	Specification	
Heat Resistance	Mate applicable FPC and expose to 85±2°C for 96 hours. Upon completion of the exposure period, the test specimens shall be conditioned at ambient room conditions for 1 to 2 hours, after which the specified measurements shall be performed.	Appearance	No Damage
		Contact Resistance	100 mΩ Max.
Cold Resistance	Mate applicable FPC and expose to -40±2°C for 96 hours. Upon completion of the exposure period, the test specimens shall be conditioned at ambient room conditions for 1 to 2 hours, after which the specified measurements shall be performed.	Appearance	No Damage
		Contact Resistance	100 mΩ Max.
Humidity	Mate applicable FPC and expose to 60 ± 2°C, relative humidity 90 to 95% for 96 hours. Upon completion of the exposure period, the test specimens shall be conditioned at ambient room conditions for 1 to 2 hours, after which the specified measurements shall be performed.	Appearance	No Damage
		Contact Resistance	100 mΩ Max.
		Dielectric Strength	No Breakdown
Insulation Resistance		Insulation Resistance	50 MΩ Min.
Temperature Rise	Mate applicable FPC and measure the temperature rise of contact when the maximum AC rated current is passed.	Temperature rise	30°C Max.
Temperature Cycling	Mate applicable FPC and subject to the following conditions for 5 cycles. Upon completion of the exposure period, the test specimens shall be conditioned at ambient room conditions for 1 to 2 hours, after which the specified measurements shall be performed. 1 cycle a) -55±3°C 30minutes b) +85±3°C 30minutes (Transit time shall be with in 3 minutes)	Appearance	No Damage
		Contact Resistance	100 mΩ Max.
Solderability	Tip of solder tails and fitting nails into the molten solder (held at 245±5°C) up to 0.1mm from the bottom of the housing for 3±0.5 seconds.	Solder Wetting	95% of immersed area must show no voids, pin holes.
Resistance to Soldering	When reflowing refer to Infrared reflow condition <u>Soldering iron method</u> 0.2mm from terminal tip and fitting nail tip. Soldering time : 5 seconds Max. Solder temperature : 370~400°C	Appearance	No Damage

■ Recommended Temperature Profile





序号	材料名称	数量	材质	镀层	REMARK
A	插针	n	黄铜	镀金, 镀锡	GP PASS
B	底座	1	LCP 树脂	UL 94V-0	GP PASS
C	焊片	2	黄铜	镀金, 镀锡	GP PASS

REV.	REVISIONS	CHK.	DATE

Circuit	A-(mm)	B-(mm)	C-(mm)
2P	1.25mm	4.30mm	7.50mm
3P	2.50mm	5.55mm	8.75mm
4P	3.75mm	6.80mm	10.00mm
5P	5.00mm	8.05mm	11.25mm
6P	6.25mm	9.30mm	12.50mm
7P	7.50mm	10.55mm	13.75mm
8P	8.75mm	11.80mm	15.00mm
9P	10.00mm	13.05mm	16.25mm
10P	11.25mm	14.30mm	17.50mm
11P	12.50mm	15.55mm	18.75mm
12P	13.75mm	16.80mm	20.00mm
13P	15.00mm	18.05mm	21.25mm
14P	16.25mm	19.30mm	22.50mm
15P	17.50mm	20.55mm	23.25mm
16P	18.75mm	21.80mm	24.50mm

- 备注:
- 电气性能:
 - 1-1. 额定流: 1.0A
 - 1-2. 额定电压: 125V
 - 1-3. 耐电压: 250V
 - 1-4. 接触电阻: 20mΩ
 - 1-5. 绝缘电阻: 100mΩ
 - 工作温度: -25℃~+85℃

工艺要求

电镀: PIN针表面镀金
 焊片: 黄铜镀锡
 耐热性: 适合焊接状态: 85±2℃均空气中;
 成型96小时; 再回到室温中放置
 1-2小时85±2℃, 96小时 外观无损伤

耐腐蚀性: 适合焊接状态: 35±2℃, 5±1%的
 盐水喷雾24小时; 试验后常温水洗;
 再高温干燥, 外观无损伤, 无腐蚀;

CUSTOMER

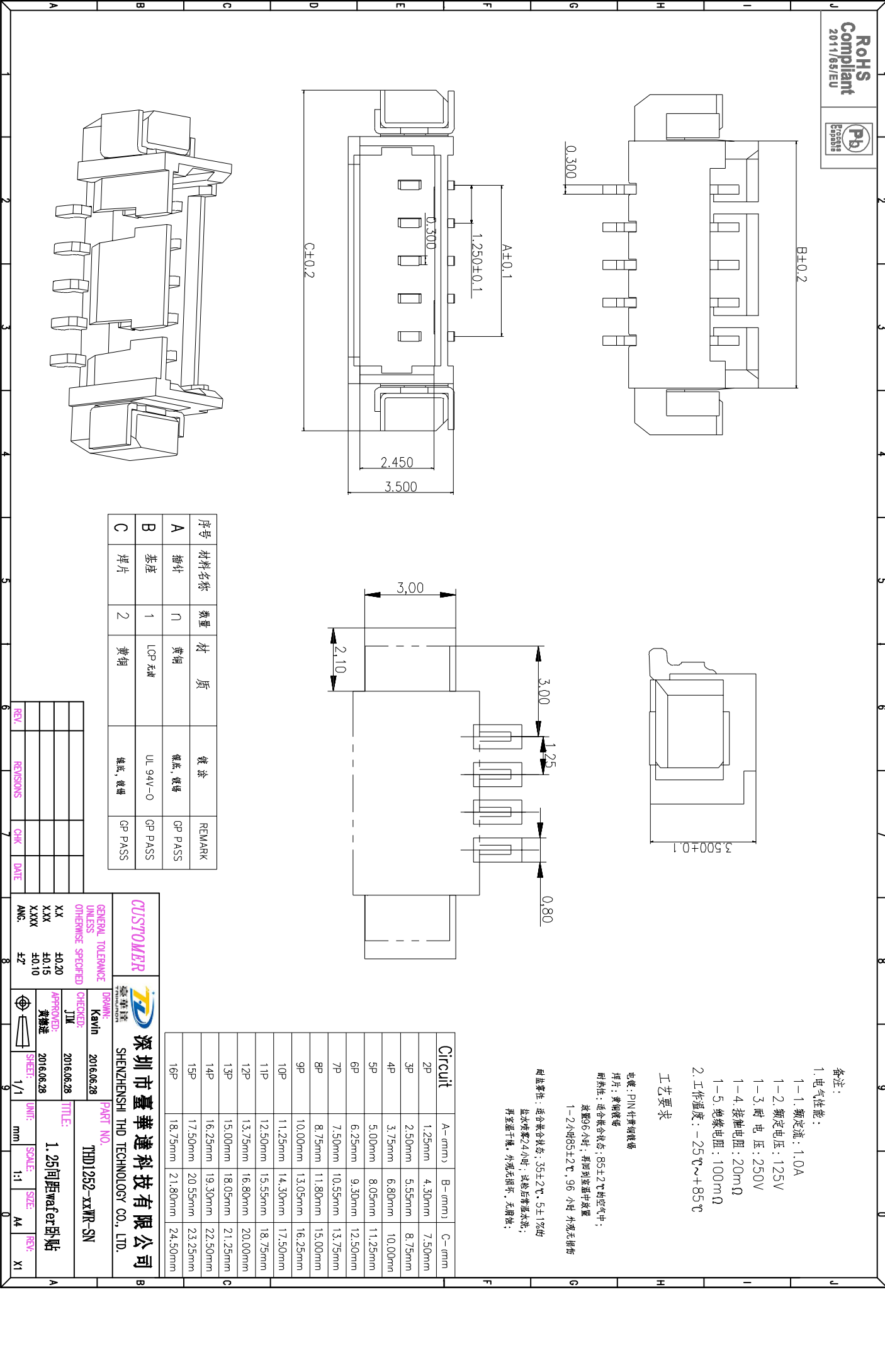
 壹華達
 SHENZHENSHI THD TECHNOLOGY CO., LTD.

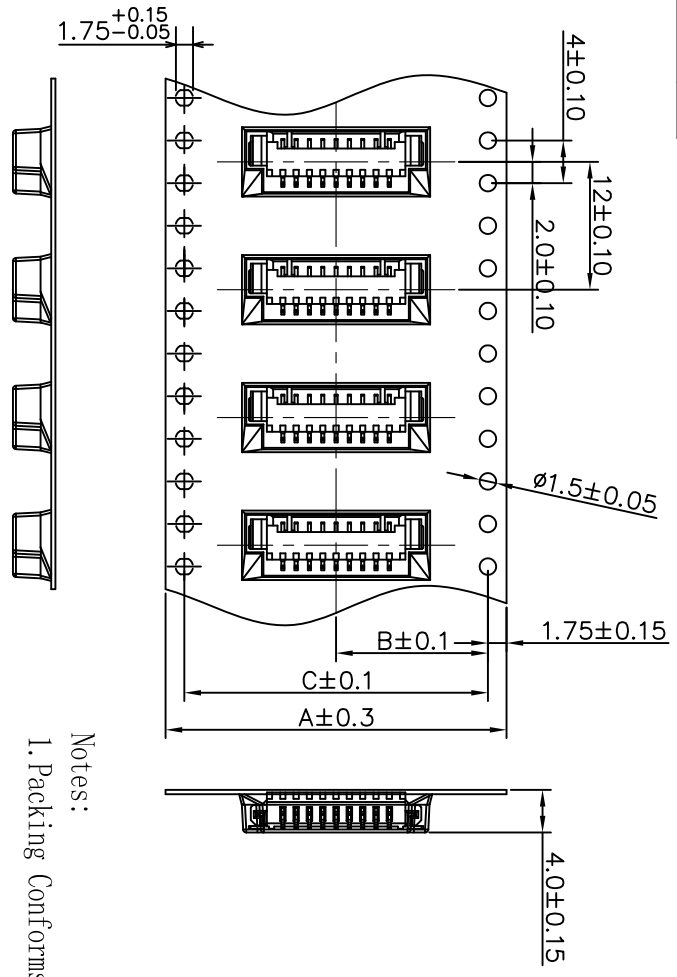
GENERAL TOLERANCE
 UNLESS OTHERWISE SPECIFIED
 XX ±0.20
 XXX ±0.15
 XXXX ±0.10
 ANG. ±2'

DRAWN: 2016.06.28
 CHECKED: JIM
 APPROVED: 2016.06.28
 黄德进

PART NO. THD1252-xxWR-SN
 TITLE: 1.25间距water贴片

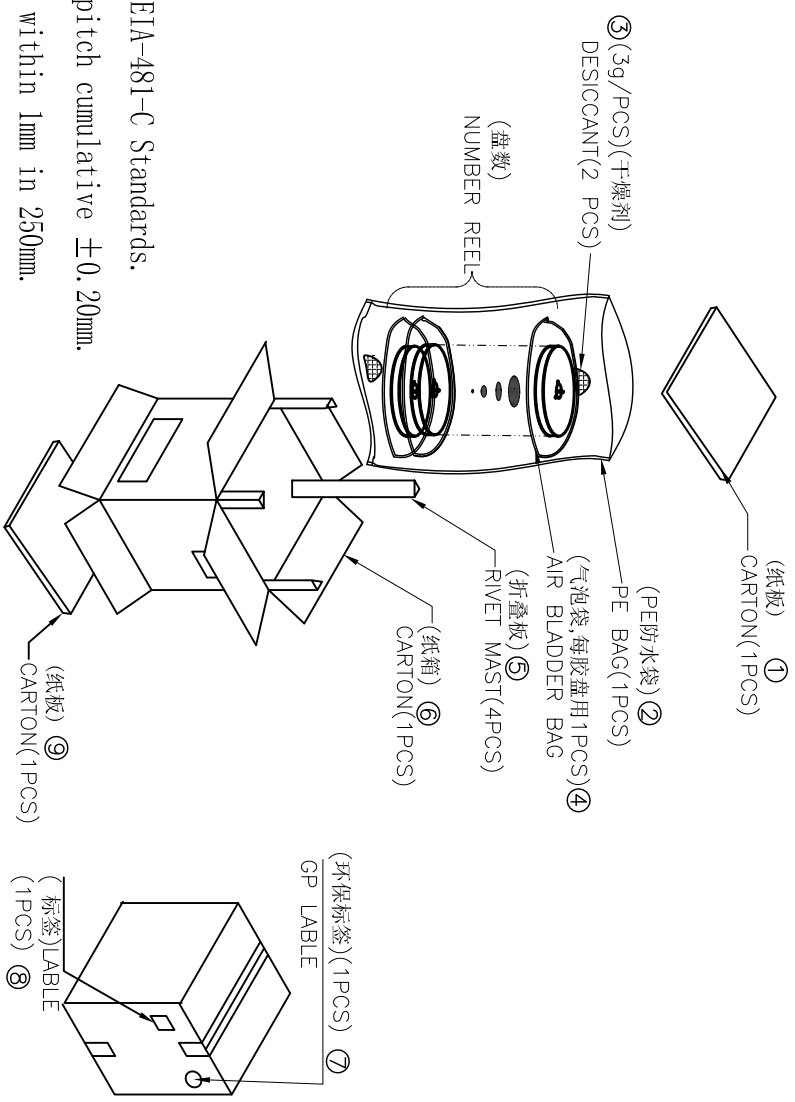
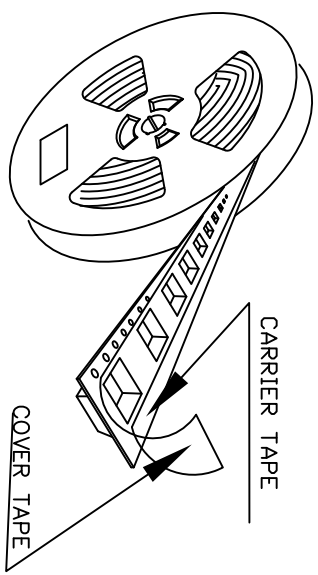
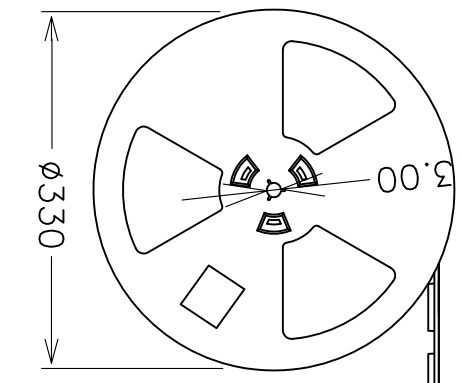
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 REV: X1





Notes:

1. Packing Conforms EIA-481-C Standards.
2. 10 sprocket hole pitch cumulative $\pm 0.20\text{mm}$.
3. Carrier camber is within 1mm in 250mm .
4. Material: Black Conductive Polystyrene Alloy.
5. packing length per 13" reel: 18.5 Meters.
6. Component load per 13" reel: 2000 Pcs



Part NO.	Dimension		
	A	B	C
THD1252 2WR~3WR	16.00	7.25	—
THD1252 4WR~8WR	24.00	11.25	—
THD1252 9WR~12WR	32.00	14.25	28.50
THD1252 13WR~16WR	44.00	20.25	40.50

CUSTOMER

SHENZHENSHI THD TECHNOLOGY CO., LTD.

深圳市臺華達科技有限公司

DRW: Kavin

DATE: 2016.06.28

CHECKED: 胡文

DATE: 2016.06.28

APPROVED: 黄德进

DATE: 2016.06.28

TITLE: THD1252-xxWR-SN

1.25Pitch 3.5H 90°Water SMT CONN.

REV.	REVISIONS	CHK	DATE

