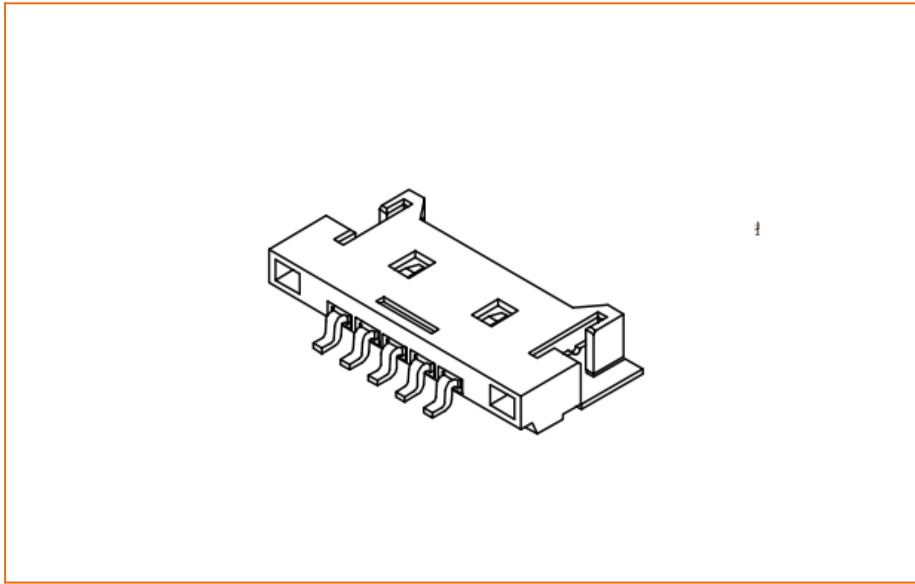


Product Specification

深圳市台华达科技有限公司

SHENZHENSHI THD Electronics Co., Ltd.



Product.No

THD1254 – xxRL – GF

Pitch=1.25mm Wafer Connector (Front-Flip Lower Contact)

A	Release
Rev.	Description

Approved Signatures

■Prepared By : JIM	■Date:2016.05.24
■Checked By : Jacky	■Date:2016.05.24
■Approved By : 黄德进	■Date:2016.05.24

■ Scope

This specification covers the 1.25 mm Pitch Wafer Connector THD 1254 series.

■ Ordering information

THD1254-xxRL-GF

① ② ③ ④

①	Series name : THD1254	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 : RL:Lower contact		

■ Rating

Item	Standard
Voltage Rating (Max.)	125VAC
Operating Temperature Range	-25°C ~ +85°C (Including terminal temperature rise)

■ Material

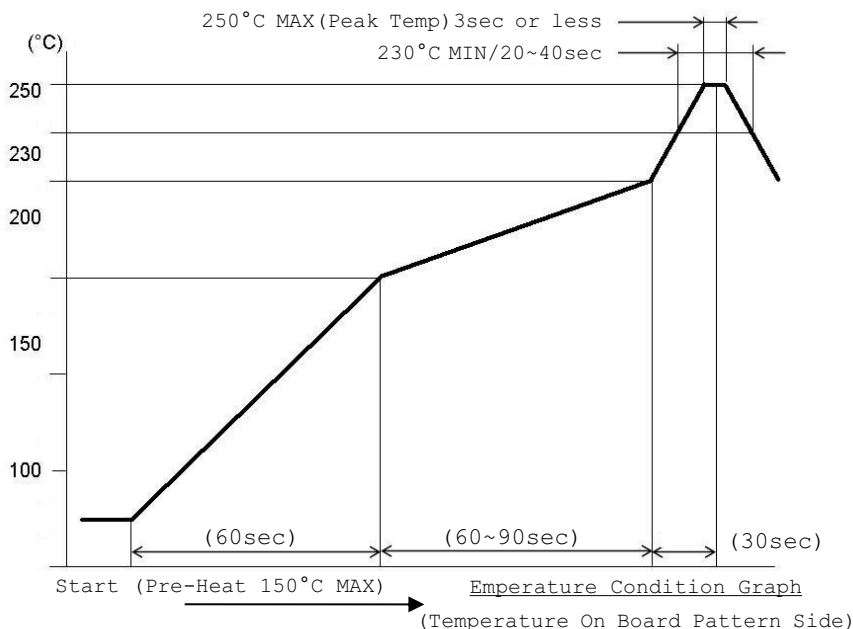
Housing	Actuator	Terminal	Solder pin	Plating
PA6T (UL94V-0)		Copper alloy	Copper alloy	Gold Flash
Color : White				

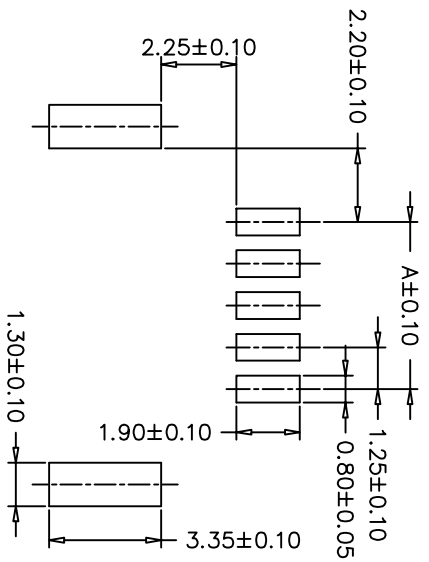
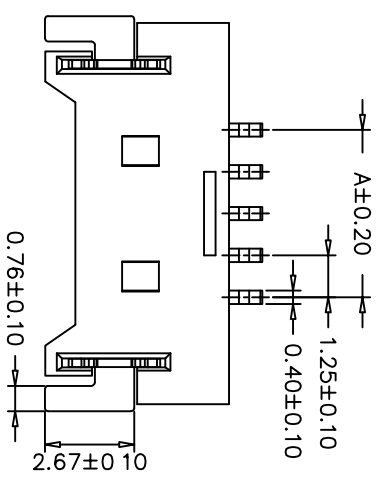
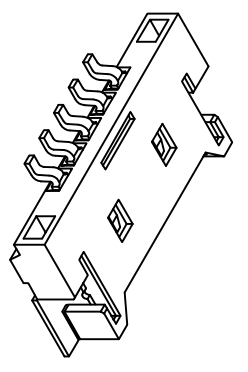
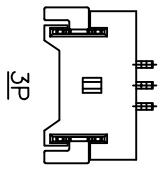
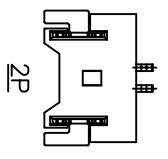
■ Performance

Item	Test Condition	Specification	
Contact Resistance	Mate applicable FPC and measure by dry circuit, 20mV Max, 1mA.	20mΩMax.	
Insulation Resistance	Mate applicable FPC and apply 500V DC between adjacent terminal or ground.	100MΩMin.	
Dielectric Strength	Mate applicable FPC, apply 500VAC (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±3mm/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	50mΩMax.
		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	50mΩMax.
		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	50mΩMax.

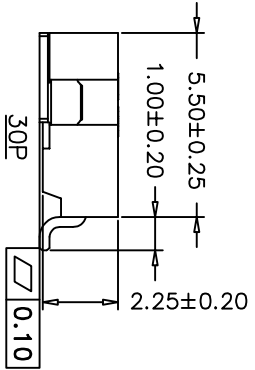
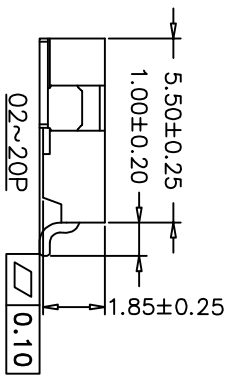
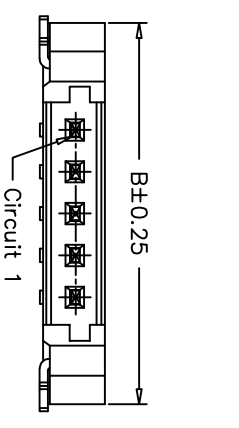
Item	Test Condition	Specification	
Heat Resistance	Mate applicable FPC and expose to 85±2°C for 96 hours. Upon completion of the exposure period, the test specimens shall be conditioned at ambient room conditions for 1 to 2 hours, after which the specified measurements shall be performed.	Appearance	No Damage
		Contact Resistance	50mΩMax.
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	50mΩMax.
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	50mΩMax.
		Dielectric Strength	No Breakdown
		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	50mΩMax.
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 <i>Soldering iron method</i> 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





P.C.B. LAYOUT



- 技术指标:
1. 零件表面应无污染、无毛边、无明显收缩、抽丝、翘纹等现象。
 2. 温度范围: -25° ~ 85° C。
 3. 储存温度: -25° C~85° C。
 4. 额定电压: 50V, AC/DC。
 5. Voltage rating: 50V AC/DC(rms)
 6. 接触电阻: ≤30mΩ。
 7. Contact resistance: ≤30mΩ max.
 8. 绝缘电阻: ≥100MΩ。
 9. Insulation resistance: ≥100MΩ min
 10. 额定电流: 1A, AC/DC。
 11. Current rating: 1A AC/DC
 12. 耐电压: AC 500V/1分钟
 13. Withstanding Voltage: 500V AC/minute
 14. WIP保持力: 0.5N/pin min
 15. Pin Retention Force: 0.5N/pin min
 16. 主体材料: LCP/PBT
 17. Housing material: LCP/PBT
 18. 端子材料: 黄铜C2680, 镀镍40μ", 镀金0.8μ"
 19. Terminal material: Brass C2680, plating Ni 40μ", GF 0.8μ"
 20. 铜片材料: 黄铜C2680, 镀镍40μ", 镀金0.8μ"
 21. Solder tab material: Brass C2680, plating Ni 40μ", GF 0.8μ"

TABLE:

PIN	Dimension mm	
	A	B
2	1.25	7.65
3	2.50	8.90
4	3.75	10.15
5	5.00	11.30
6	6.25	12.65
7	7.50	13.90
8	8.75	15.15
9	10.00	16.40
10	11.25	17.65
11	12.50	18.90
12	13.75	20.15
13	15.00	21.40
14	16.25	22.65
15	17.50	23.90
20	23.75	30.15
30	36.25	42.65

CUSTOMER

SHENZHENSHI THD TECHNOLOGY CO., LTD.

深圳市壹華達科技有限公司

SHENZHENSHI THD TECHNOLOGY CO., LTD.

DRAWN: Kevin 2016.06.26

CHECKED: 胡文 2016.06.26

APPROVED: 黄德进 2016.06.26

TITLE: 1.25W APER 超薄贴片

GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED

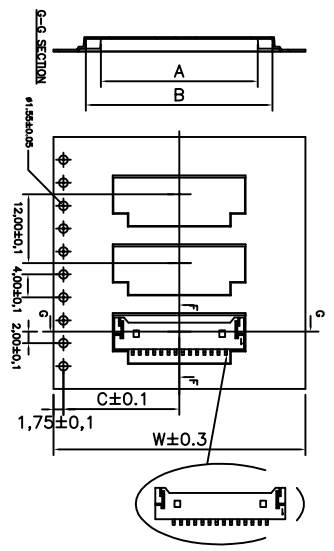
XX	±0.20
X.XX	±0.15
X.XXX	±0.10
ANG.	±2°

REV. REVISIONS CHK DATE

SCALE: 1:1 SIZE: A4 REV: X1



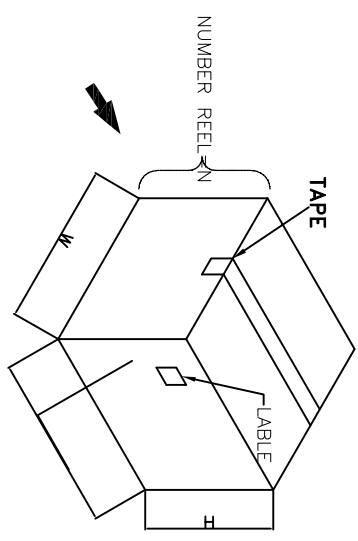
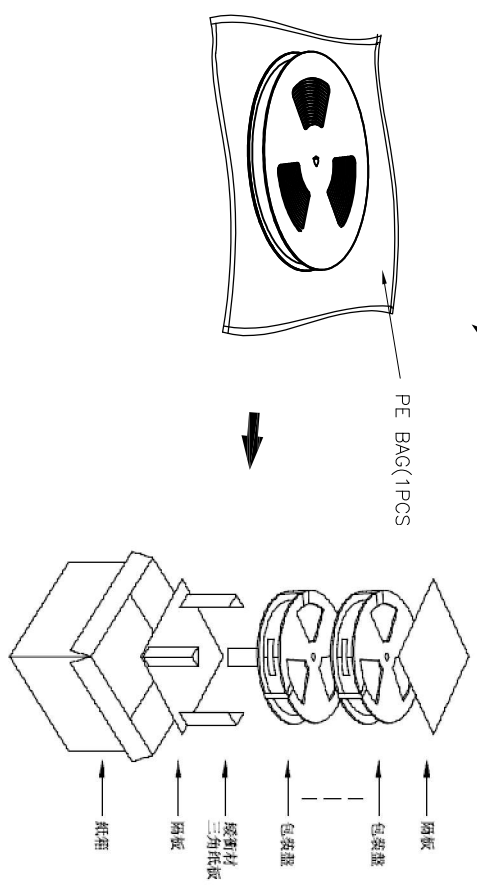
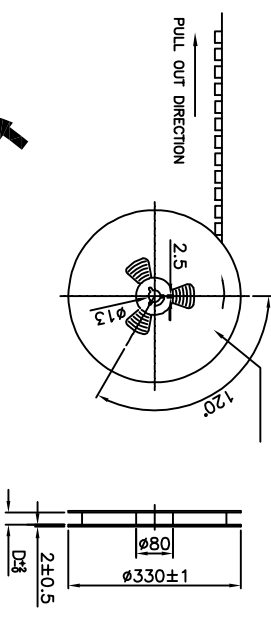
START	LEADER 240mm MIN. 20PCS	PRODUCT 24000mm 2000PCS	TRAILER 240mm MIN. 20PCS	END
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9	11.50	16.70			
8	10.25	15.45			
7	9.00	14.20			
6	7.75	12.95	11.50	24.40	24.00
5	6.50	11.70			
4	5.25	10.45			
3	4.00	9.20			
2	2.75	7.95	7.50	16.40	16.00
CKT	A	B	C	D	W

NOTES :
1. CARTON SPEC. : L350 *W350 *H300mm(OUT DIM) ,
PAPER THICKNESS =5mm
2. COMPONENT LOAD PER 13" REEL : 2000 PCS.

PIN NO.	PCS /REEL	REEL/CARTON	SUM(PCS)
2PIN~3PIN	2000	12	24000
4PIN~9PIN	2000	10	20000



REV.	REVISIONS	CHK	DATE

CUSTOMER

SHENZHENSHI THD TECHNOLOGY CO., LTD.

深圳市臺華達科技有限公司

SHENZHENSHI THD TECHNOLOGY CO., LTD.

GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED

CHECKED: 胡文

APPROVED: 黃德進

DRAWN: Kavin

DATE: 2016.06.26

PART NO. THD1254-10RL-GF

TITLE: 1. 25PITCH 超薄貼

SCALE: 1:1

UNIT: mm

SIZE: A4

REV: X1