

Product Name :	Golden Finger Signal Socket	
Product Model :	C0304050FG15SBSJ0284	
Plastics Housing Name :	Golden finger cable connector-50-Female-Plug-Straight-C rimp to cable-3A-/mm-/-ROHS	

The product completely meet ROHS requirement.

Contents

I. Edition Management.....	3
II. Product Specification.....	4
1. Scope.....	4
2. Reference Standard.....	4
3. Detailed Requirement.....	4
4. Electrical Performance	4
5. Mechanical Performance	5
6. Environment Ageing Test	5
7. Reliability	5
III. Test Sequence	7
IV. Product Naming & Material BOM Sheet.....	8
V. Product Name	9
VI. PCB Board Outline Dimensions.....	11
VII. Edition Revised Explanation.....	11

II. Product Specification

1. Scope

The Specification applies to the golden finger signal socket of PCB with thickness 1.6mm.

2. Reference Standard

MIL-STD-202 Test Method : apply to electronics and electronic parts

MIL-STD-1344A Test Method : apply to electronic connectors

3. Detailed Requirement

3.1 Design & Manufacture

Product design、 manufacture、 physical dimensions must meet the requirement of drawing.

3.2 Materials & Plate Coat

a) Plastic Housing : PBT+30%GF , E202G30 , UL94-VO

3.3 Main specification

a) Rating Voltage : 380V /DC

b) Rating Current : 3A/pin

c) Work Temperature : -55 -105

d) Storage Temperature : -55 -105 , Humidity : 15-85%RH

3.4 Appearance Requirement

Plastic Parts :Surface clean and polishing ,color of plate coat without obvious difference ,no crack, no scratch、 no color mixture.

4. Electrical Performance

Item	Description	Test Method & Condition	Standard
4.1	Insulate Resistance	Refer to MIL-STD-1344A standard of 3004.1; Test insulate resistance of borderline contact position within one minutes (Under 500V DC)	5000MΩ(Min)
4.2	Insulator Withstand	Connectors refer to MIL-STD-1344A standard of 3001.1 。 Conduct withstand voltage among	Insulator without phenomena electricity breakdown electricity arc

	Voltage	borderline pins /between upper and down pins under 1500V/ DC Test time : 60s±5s	
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5. Mechanical Performance

Item	Description	Test Method & Condition	Standard
5.1	Insert-Withdraw lifecycle	Use the matching PCB board to insert and withdraw it with 500times;pre-insert about5 times before test. Speed :insert-withdraw about15 times /minute	After500CYCinsert parts of reed without distortion , shell without damage , Contact Resistance≤30 mΩ , Insert-Withdraw force lose less than3% ,

5.2	Insert-Withdraw force between PCB board and signal socket	Refer to MIL-STD-1344A standard , Test the insert-withdraw force of signal socket used the matching PCB board	Insert-Withdraw force≤3kg
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6. Environment Ageing Test

Item	Description	Test Condition	Standard
6.1	Heat & humidity Test	Unassembled connectors referred to MIL-STD-1344AStandard,Model1,Condition B, Method 1002.2 : Temperature : 30°C+2°C , Humidity : 95±2% (RH) , Continuous Time : Conduct withstand voltage test immediately after 48hrs under 707V DC.	After test , the appearance of connector without distortion , cracks , dimensions without variation ,Contact Resistance less than 30mΩ , Insulate Resistance over 5000MΩ ,
6.2	High-Low Temperature Shock Test	Test of connectors must refer to the below methods:-40°C (30 minutes) ~ +70°C (30 minutes) , Recycle over 10 times	
6.3	Salt-Spray Test	Test of connectors must refer to GB/T2423.17 : Temperature : 35±2°C , Concentration of Salt water : 5±1% , Continuous time : 72H	Contact Resistance less than 50mΩ , Insulate Resistance over 5000MΩ , Plate Gold area permit ≤5% square erosion
6.4	High Temperature Test	Test must refer to MIL-STD-1344A,Method 1005.1 , Testing under70°C with 96hrs	After test, shell without damage , Contact Resistance≤30 mΩ
	Low Temperature test	Testing under-40°C with 96 hrs , and then leave it in natural environment with 1hr , and then conduct test again	

7. Reliability

7.1	Shake test	Frequency 10 ~ 55-10HZ (Feature Level 2) ,Swing : 1.52mm through axis X/Y/Z , under accelerate speed of 50m/s2 with 30minutes	Instant Stop < 1μs , after test , structure without looseness , solder-loose , loose contact , mechanical damage , Contact Resistance ≤30mΩ ,
7.2	Shock test	Pulse : Half-sinusoid ; Accelerate : 490m/s2, X/Y/Z six views 3 times each Cycle : 11ms	

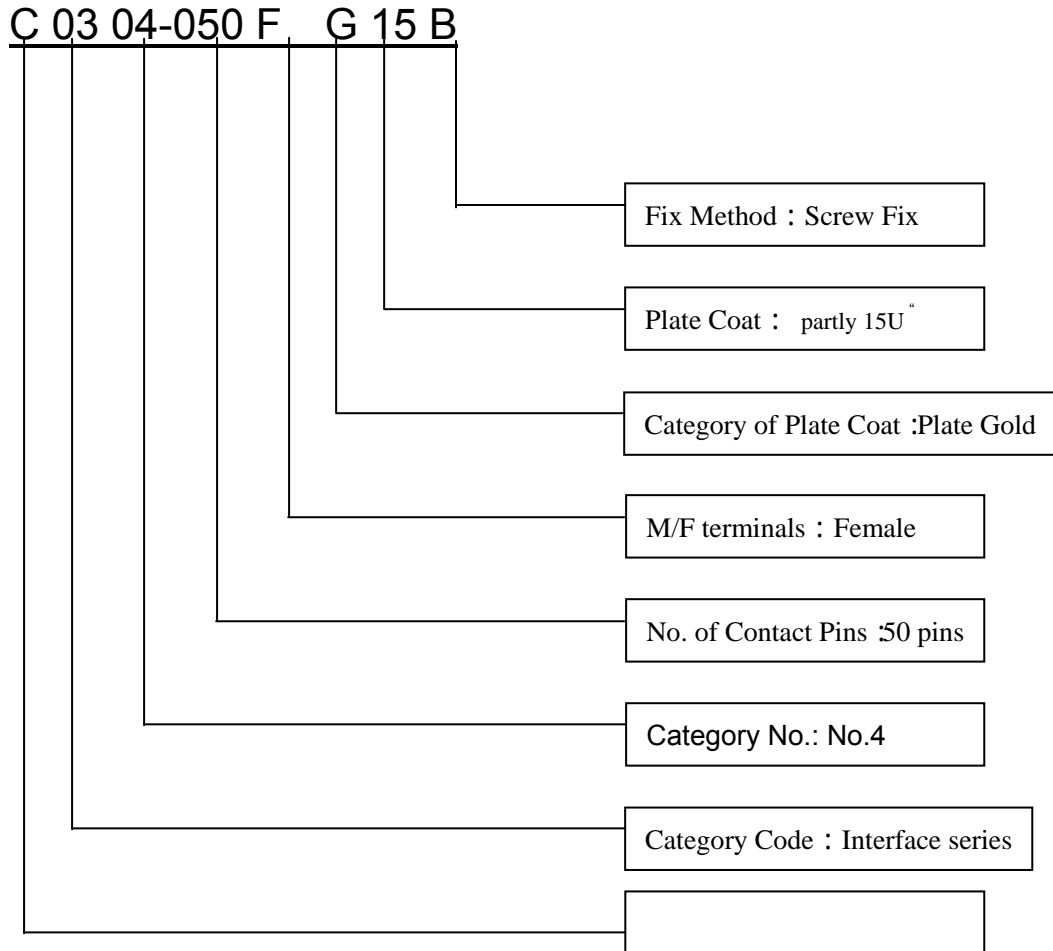
III. Test Sequence

Test Description		Test Group								
		A	B	C	D	E	F	G	H	I
		Test Sequence								
1	Product Test	1 , 9	1 , 9	1 , 9	1 , 9	1 , 9	1 , 9	1 , 9	1 , 9	1,9
2	Contact Resistance	4 , 8	2 , 6	2 , 6	2 , 6	2 , 6	2 , 6	2 , 6	2 , 6	2,6
3	Withstand Volt		4 , 8	4 , 8	4 , 8	4,8	4 , 8	4 , 8	4 , 8	4 , 8
4	Insulate Resistance		3 , 7	3 , 7	3 , 7	3,7	3 , 7	3 , 7	3 , 7	3 , 7
8	Heat & Humidity Test		5							
9	High-Low Temperature shock test			5						
10	High-Low Temperature Test				5					
11	Salt-Spray Test					5				
14	Shake Test								5	
15	Shock Test									5

Attached : all test excluding special requirements listed in above sheets are conducted under normal room temperature; choose test samples randomly from production line;5 pcs sample out of each test group; can't repeatedly use the tested sample after test.

IV. Product Naming & Material BOM Sheet

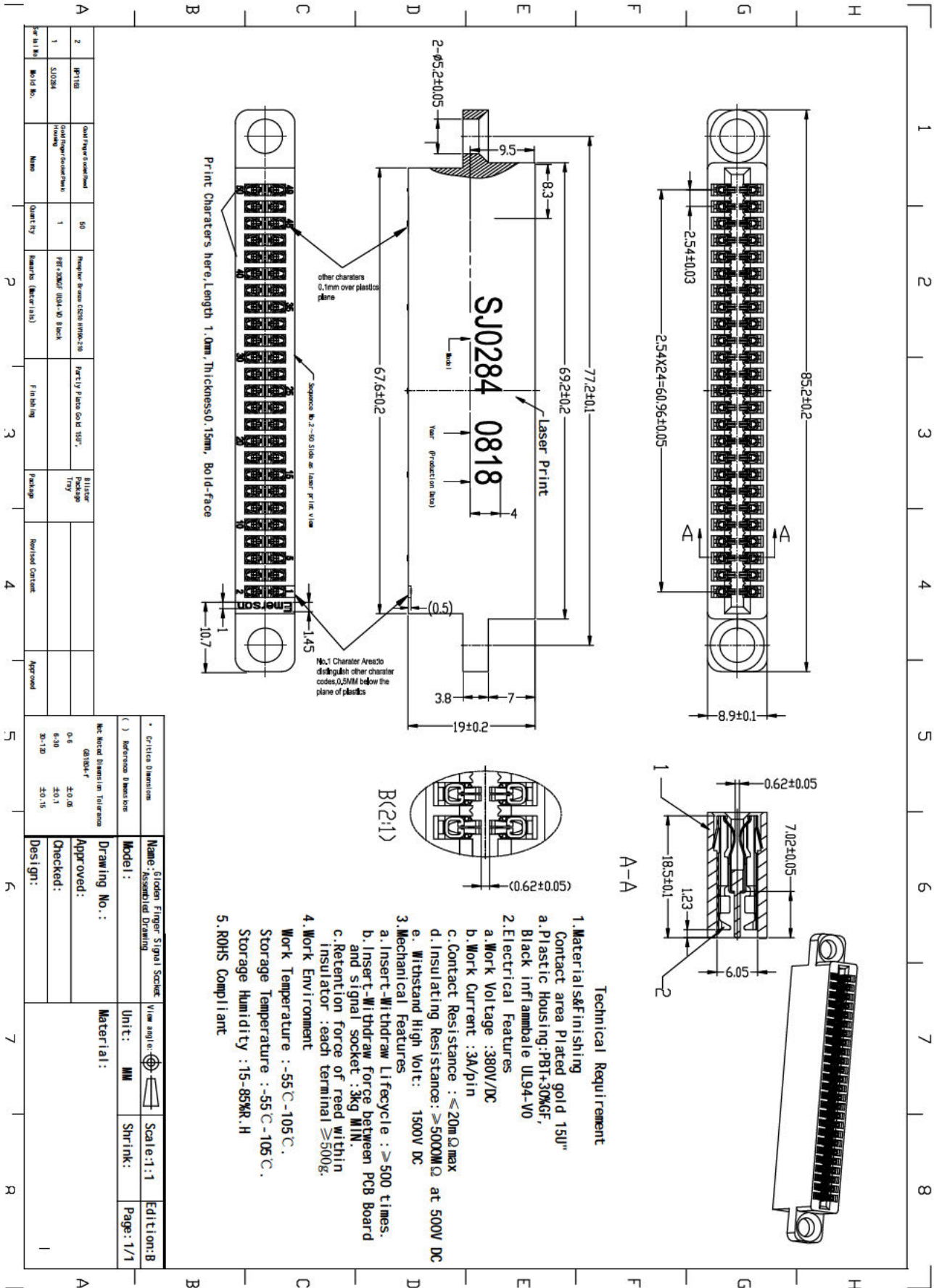
1. Naming Method : (Whole parts of connector)



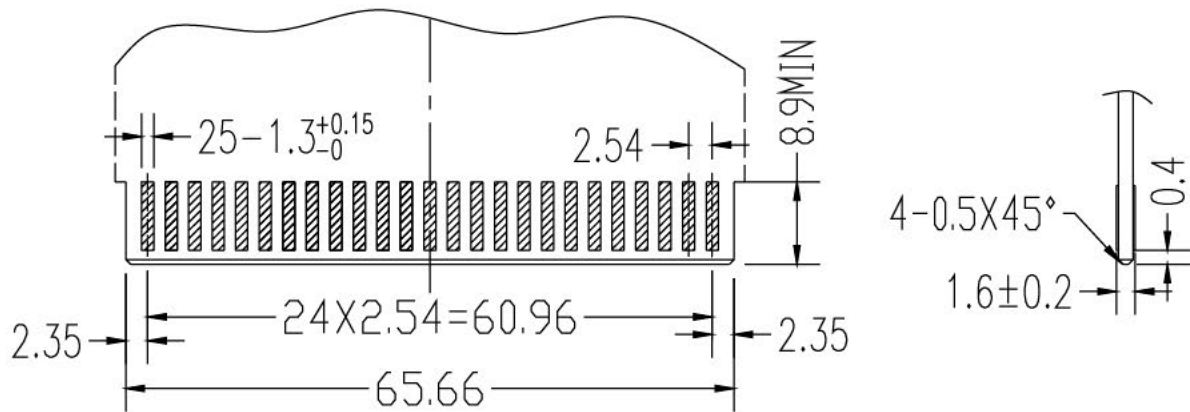
2. Assembled Parts Model& Materials BOM Sheet

Parts Name	Model	Material Name	Brand Name	Quantity	UL
Plastic Housing	SJ0284	PBT+30%GF	E202G30	1	E107536

V. Product Name



VI. PCB Board Outline Dimensions



- Note: 1、 PCB Board Thickness: 1.6 ± 0.20
2、 Not noted tolerance ± 0.15

VII. Edition Revised Explanation

Edition B :Mainly Revised Contents as below:

- 1、 Housing Surface: added Laser Character Print.