

东莞市意畅达电子有限公司

Dongguan Yichangda Electronics Co., Ltd

承 认 书

APPROVAL SHEET

客 户 名 称

CUSTOMER NAME:

产 品 名 称 NAME: MHF 2.4G FPC TO 1.13Black CABLE L:85MM

PRODUCT OF ANTENNA

客 户 料 号

CUSTOMER P/N: 10304016800

意畅达料号

YCD P/N: YCD-2.4GFPC0065-002 REV: A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	Sam	
APPROVED BY:	hangxing. Liu	
DATE:	2025/08/24	

Dongguan Yichangda Electronics Co., Ltd

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1.Electrical Specification:

Characteristics	Specifications	Unit
Outline Dimensions	49.5x33.9x0.2 L=85	mm
Frequency	2400~2500	MHz
Impedance	50	Ω
VSWR	≤ 2.0	
Polarization	Linear Polarization	
Gain	>7	dBi
Efficiency	>35	%
Connector Type		
Operating temperature	-40℃~+110℃ (FPC背胶工作温度)	
Storage Temp	-40℃~+80℃	

2.Test Items and Equipment

	Test items	Test equipment
S Parameter	1.Return Loss 2.VSWR	Network analyzer (Agilent E5071B)
The whole machine of Passive parameters	1.Frequency 2.Gain 3.Radiation Pattern	1.3D microwave darkroom (5m*5m*5m) 2.Network analyzer (Agilent E5071B)
The whole machine of Active parameters	1.TRP 2.TIS	1.3D microwave darkroom (5m*5m*5m) 2.Comprehensive test instrument (CMW500)



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3.S-parameter test VSWR



4.Efficiency and Gain

Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Efficiency (dBi)	-2.82	-2.90	-2.89	-3.03	-3.21	-3.24	-3.31	-3.26	-3.28	-3.14	-3.13
Gain (dBi)	7.13	7.23	7.34	7.24	7.12	7.25	7.33	7.46	7.44	7.58	7.62
Efficiency (%)	52.19	51.24	51.45	59.72	47.73	47.37	46.63	47.25	47.01	48.48	48.67
Directivity (dB)	9.96	10.13	10.22	10.27	10.33	10.49	10.64	10.71	10.72	10.73	10.75
Peak Gain Position (Theta)	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00
Peak Gain Position (Phi)	240.00	240.00	240.00	240.00	225.00	225.00	225.00	225.00	225.00	225.00	225.00
Efficiency ThetaPol (%)	24.71	23.71	23.53	22.41	21.10	21.01	20.87	21.15	21.03	21.68	21.53
Efficiency PhiPol (%)	27.48	27.54	27.92	27.31	26.64	26.36	25.76	26.10	25.97	26.79	27.14
Upper Hem. Efficiency (%)	45.82	45.05	45.20	43.61	41.88	41.70	41.23	41.91	41.77	43.11	43.37
Lower Hem. Efficiency (%)	6.36	6.19	6.25	6.11	5.85	5.67	5.39	5.33	5.23	5.37	5.30

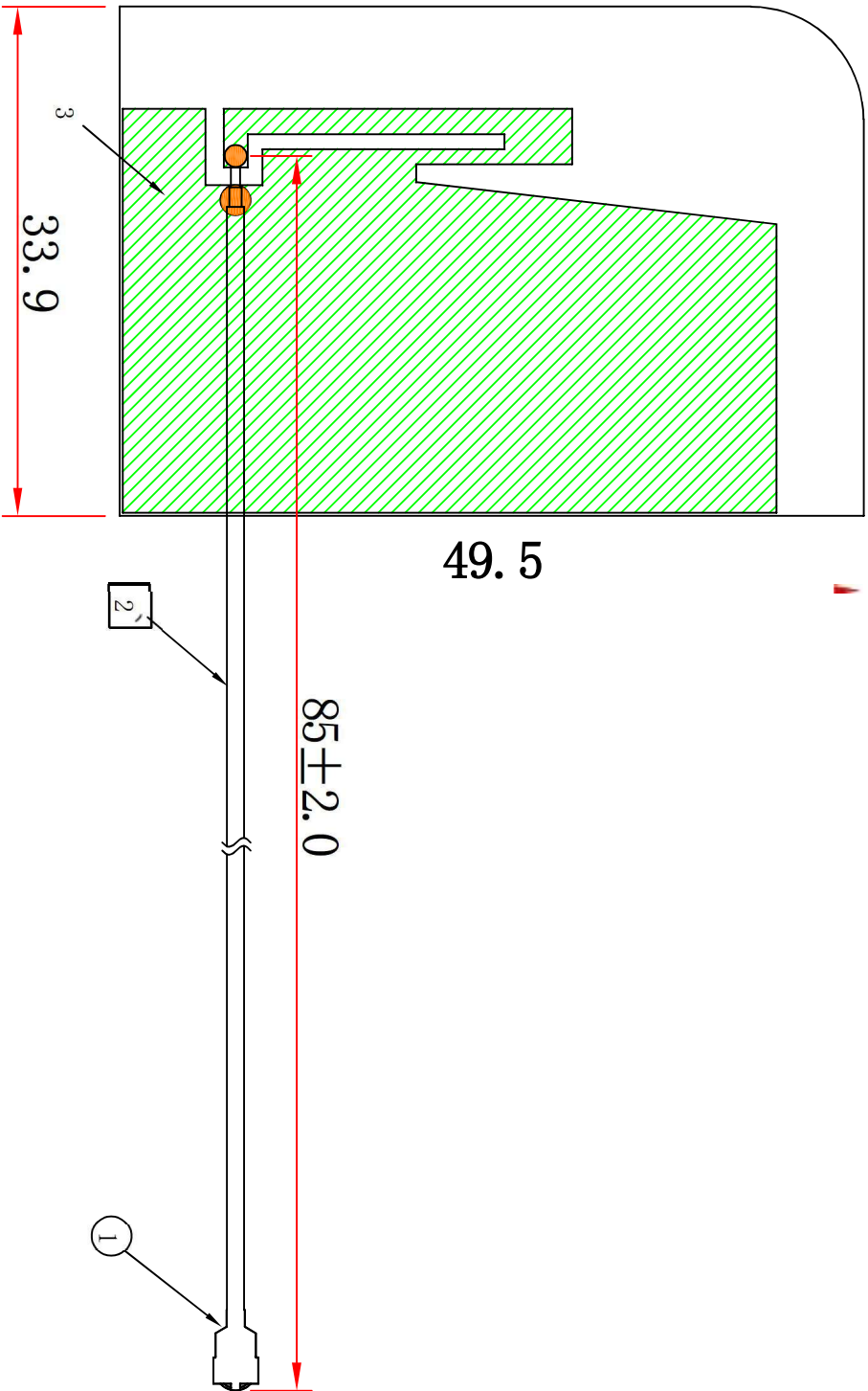
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5.Active testing TRP/TIS

WIFI	信道	TRP	TIS
B（11M）	CH1	15.28	-85.13
	CH6	15.75	-85.04
	CH11	15.36	-84.31
G（54M）	CH1	14.94	-71.18
	CH6	15.09	-72.99
	CH11	14.71	-72.49
N（MCS7）	CH1	14.27	-64.06
	CH6	14.58	-65.05
	CH11	14.38	-64.42

LTR.	REV.	RECORD	DATE
A	NEW		2025.07.29



TYPICAL SPECIFICATIONS

1.ELECTRICAL DATA:

- 1.1 FREQUENCY RANGE---2400~2500MHz
- 1.2 IMPEDANCE-----50 Ohms
- 1.3 VSWR---<2.0
- 1.4 RETURN LOSS : <-10dB
- 1.5 OVERALL CABLE INSERTION LOSS : <1.5 dB
- 1.6 DIELECTRIC WITHSTANDING VOLTAGE--- 335 Vrms
- 1.7 WORKING VOLTAGE---500 Vrms MAX
- 1.8 INSULATION RESISTANCE---2000 Mega-Ohms
- 1.9 CENTER CONTACT RESISTANCE ---10.0 Ohms max
- 2.0 OUTER CONTACT RESISTANCE---20 Ohms max

2.MECHANICAL DATA:

- 2.1 MHF:
- 2.1.1 COUPLING METHOD---PUSH ON/PULL OFF
- 2.1.2 DURABILITY (MATING/UNMATING)---30 CYCLES
- 2.1.3 PULL FORCE MIN. 2.2 lbs

3.ENVIRONMENTAL DATA:

- 3.1 TEMPERATURE RANGE--- -40° TO 85°

4.OTHERS:

- 4.1 PACKAGE REFERENCE STANDARD
- 4.2 REMOVED ALL BURRS & BREAK ALL SHARP EDGES
- 4.3 ALL CORNERS TO BE R0.1 MAX

东莞市意畅达电子有限公司					DESCRIPTION		DWG. NO.		MHF 5.86 FPC TO 1.13H JACK CABLE L:85MM	
Dongguan Yichangda Electronics Co., Ltd					AUTHORITY		SIGNATURE		DATE	
DWN.					CHK.		APVD.		UNIT: mm	
DWG. KIND:					CUSTOMER		R		AEV.	
					SCALE		None		SHEET	
					ANGLES		±3°		1 OF 1	
YCD-2.4 GPPC065-002					TOLERANCE UNLESS OTHERWISE SPECIFIED		L.±0.30 .XX±0.20 .XXX±0.10			
Copper/Pl/3M					Finish		Gold			
Black					Qty		1			
1.13 Coaxial Cable L:85mm Color: Black					Description		IP EX MHF Connector			
FPC Board 49.5. 0x33. 9x0. 2mm					NO.		1			

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7. Antenna installation diagram



