

APPROVAL SHEET

MODEL :
YK2023-155

Review	Consent	Approval

Manufacturer

Ya-Kuan Technology Co., Ltd.

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1. Revision History

NO.	Before	After	Reason	Date
1			First issue	2017.04.20
2				
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2. Product Information

2.1 General Features

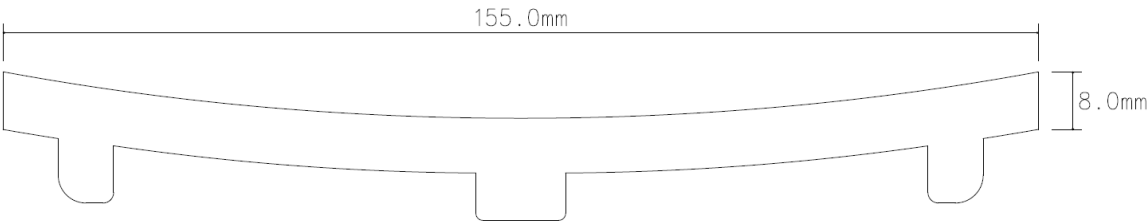
PART NUMBER	YK2023-155
ANTENNA TYPE	PCB Pattern
APPLICATIONS	2.4GHz ISM band

2.2 Electrical Specifications

Frequency Range (TX)		2400MHz~2485MHz	
Frequency Range (RX)		2400MHz~2485MHz	
IMPEDANCE		50 Ω	
Peak Gain		0dBi	
Bandwidth		100MHz (@V.S.W.R 2↓)	
V.S.W.R	TX	2400MHz	2485MHz
		2↓	2↓
	RX	2400MHz	2485MHz
		2↓	2↓
RADIATION PATTERN		Omni-directional	
POLARIZATION		Linear	

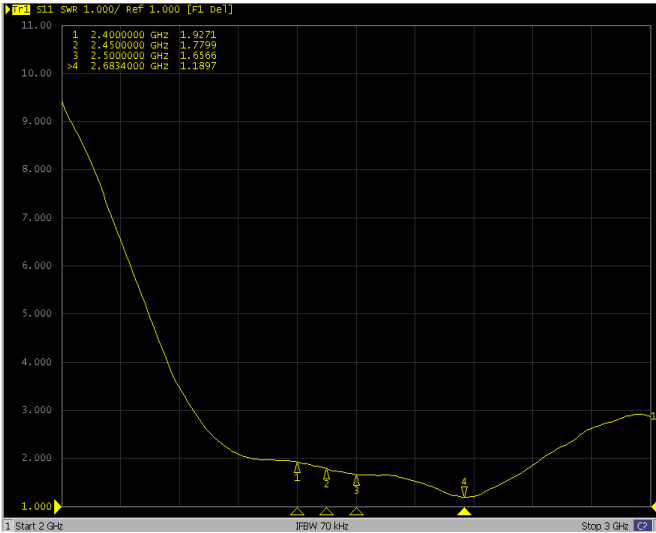
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3. Pattern Specifications

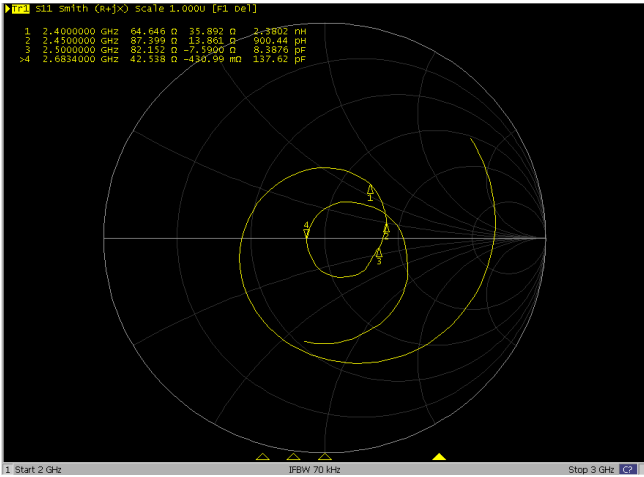


4. Electrical Characteristics

5.1 VSWR



5.2 SMITH CHART



5. Passive Measurement

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Frequency(MHz)	2400	2405	2410	2415	2420	2425	2430	2435	2440
Efficiency(dB)	-4.74	-4.69	-4.54	-4.54	-4.59	-4.31	-4.36	-4.22	-4.5
Efficiency(%)	33.54	33.93	35.18	35.13	34.73	37.05	36.66	37.87	35.49
TRG(dB)	-4.74	-4.69	-4.54	-4.54	-4.59	-4.31	-4.36	-4.22	-4.5
TRG _{Theta} (dB)	-9.71	-9.59	-9.34	-9.43	-9.47	-9.24	-9.12	-8.95	-9.22
TRG _{Phi} (dB)	-6.41	-6.39	-6.28	-6.25	-6.3	-6	-6.13	-6	-6.28
UHRG(dB)	-7.51	-7.44	-7.27	-7.28	-7.28	-7	-7.06	-6.88	-7.18
UHRG/TRG(%)	52.85	53.12	53.28	53.3	53.85	53.86	53.7	54.1	53.92
H-Plane	-12.28	-12.15	-12.2	-12.57	-12.54	-12.68	-12.28	-12.37	-12.79
E1-Plane,AVG(dB)	-13.87	-13.83	-13.67	-14.16	-14.15	-14.21	-13.95	-14.11	-14.47
E2-Plane, AVG(dB)	-5.82	-5.67	-5.38	-5.42	-5.36	-5.12	-4.95	-4.75	-4.94
Peak Gain(dB)	-0.36	-0.27	-0.21	-0.29	-0.12	-0.08	-0.27	0	-0.45
Directivity(dB)	4.84	4.88	4.78	4.72	4.93	4.7	4.55	4.67	4.51
Minimum Gain(dB)	-19.2	-18.11	-18.55	-18.73	-18.54	-19.45	-19.12	-19.65	-20.44

Frequency(MHz)	2445	2450	2455	2460	2465	2470	2475	2480	2485
Efficiency(dB)	-4.44	-4.51	-4.22	-4.3	-4.37	-4.4	-4.12	-4.09	-4.04
Efficiency(%)	35.96	35.38	37.87	37.13	36.53	36.27	38.74	39.01	39.45
TRG(dB)	-4.44	-4.51	-4.22	-4.3	-4.37	-4.4	-4.12	-4.09	-4.04
TRG _{Theta} (dB)	-9.18	-9.28	-8.9	-9.12	-9.12	-9.14	-8.9	-8.91	-8.86
TRG _{Phi} (dB)	-6.22	-6.27	-6.02	-6.04	-6.15	-6.18	-5.87	-5.82	-5.78
UHRG(dB)	-7.14	-7.19	-6.97	-7.02	-7.09	-7.15	-6.89	-6.86	-6.79
UHRG/TRG(%)	53.7	54.02	53.08	53.49	53.48	53.16	52.85	52.84	53.06
H-Plane	-12.97	-13.27	-12.83	-13.35	-13.3	-13.32	-13.06	-13.35	-13.21
E1-Plane, AVG(dB)	-14.62	-14.58	-14.15	-14.89	-14.49	-14.52	-14.24	-14.53	-14.14
E2-Plane, AVG(dB)	-4.91	-5.02	-4.54	-4.73	-4.75	-4.75	-4.56	-4.59	-4.6
Peak Gain(dB)	-0.27	-0.4	-0.35	-0.2	-0.36	-0.56	-0.53	-0.03	-0.16
Directivity(dB)	4.63	4.57	4.32	4.56	4.47	4.3	4.05	4.51	4.34
Minimum Gain(dB)	-20.63	-19.95	-19.66	-19.78	-22.34	-21.12	-20.67	-22.06	-20.85

Average Efficiency	-4.34dB	36.80%
Average Peak Gain	-0.27dB	