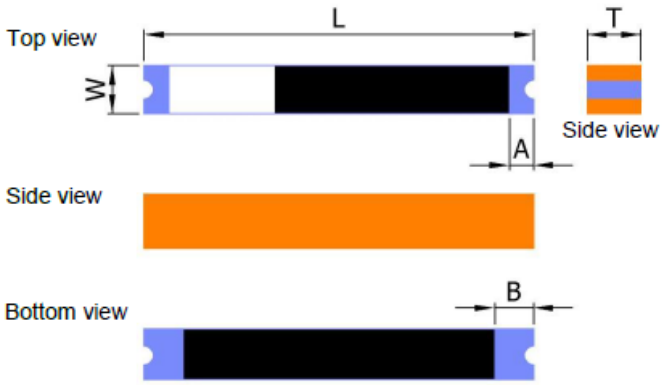
RCA-W2A1-8010-W-003

■ ELECTRICAL SPECIFICATION

PARAMETERS	VALUE	UNIT
Frequency Range	2400 ~ 2500	MHz
Bandwidth, min	±50	MHz
Return Loss, max	-9.6	dB
Peak Gain	2.37	dBi
Azimuth Beamwidth	Omni-Directional	-
Polarization	Linear	-
Impedance	50	Ω

■ MECHANICAL SPECIFICATION

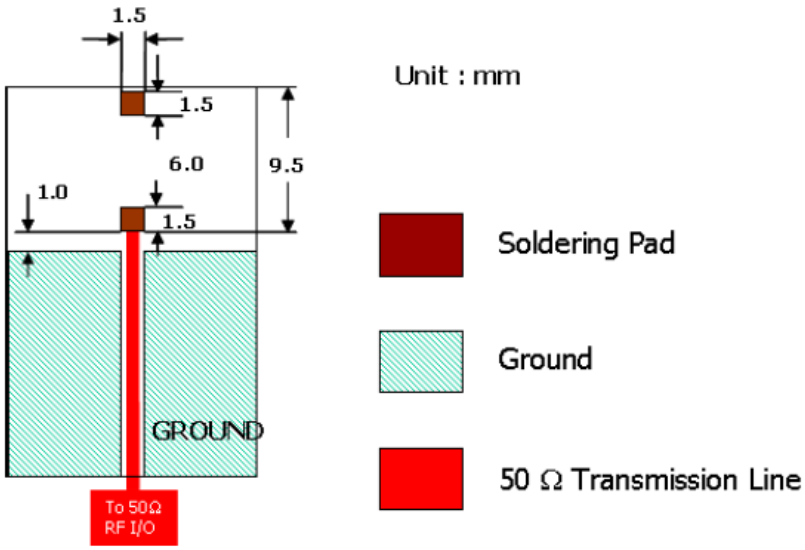


Symbol	Dimension (mm)
L	8.00 ± 0.20
W	1.00 ± 0.20
T	1.10 ± 0.20
A	0.50 ± 0.20
B	0.80 ± 0.20

CONSTRUCTION

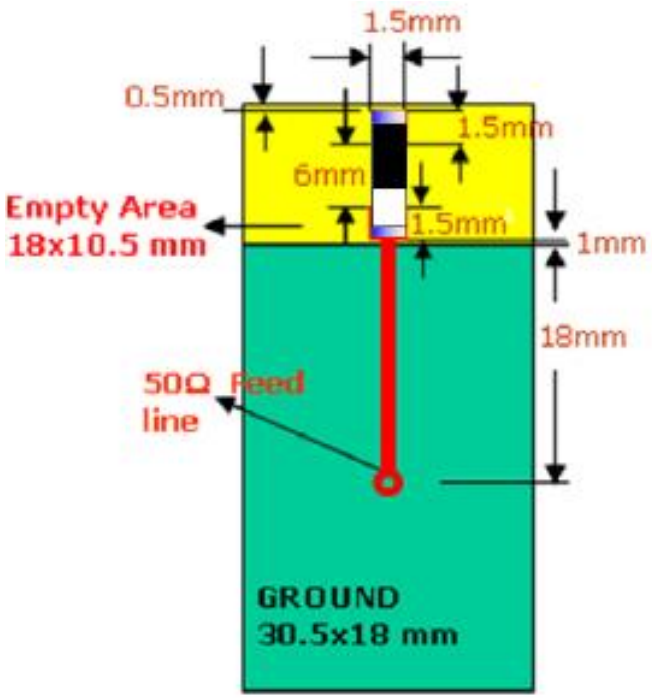
PIN	Connection
1	Feeding
2	Soldering terminal
3	Identification Mark

SOLDER LAND PATTERN



ANTENNA ON TEST BOARD

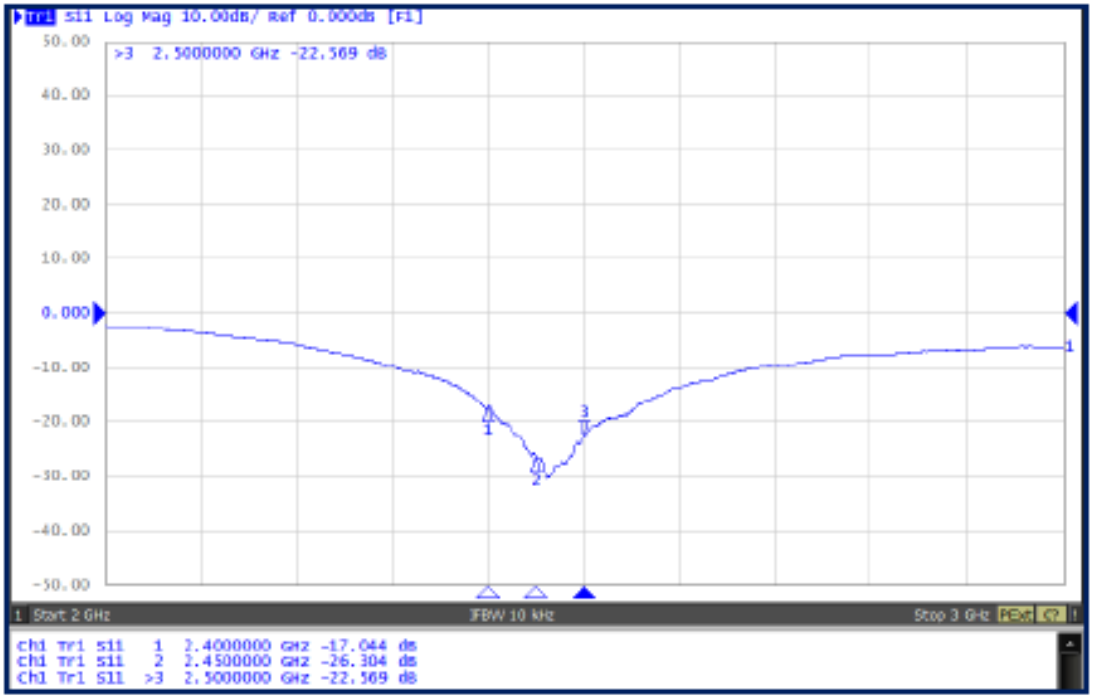
FR4 Thickness 0.8mm



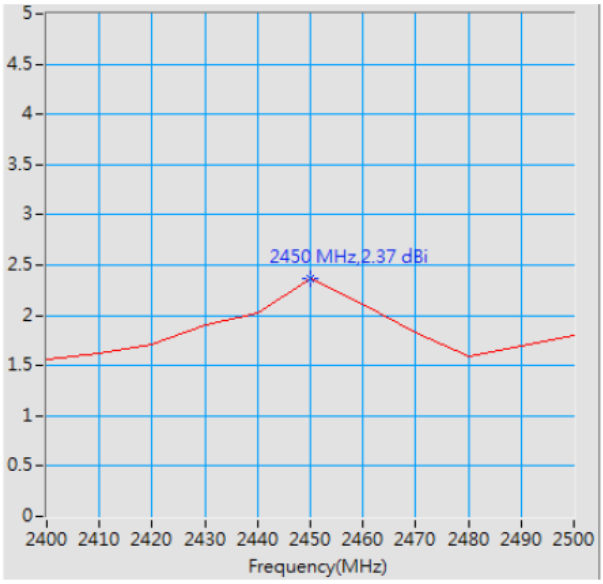
EVALUATION BOARD MATCHING CIRCUITS

FREQUENCY CHARACTERISTICS

Return Loss

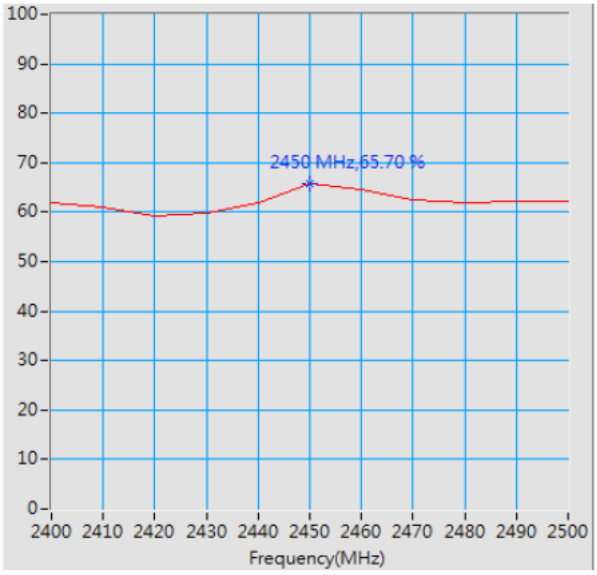


Antenna Peak Gain



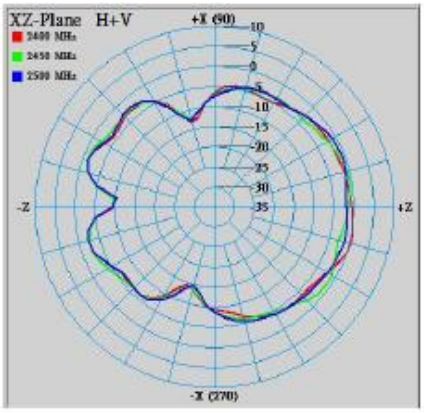
Maximum Peak Gain at 2450 MHz : 2.37dBi

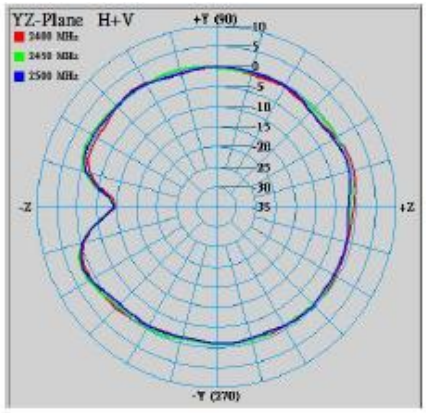
Antenna Efficiency

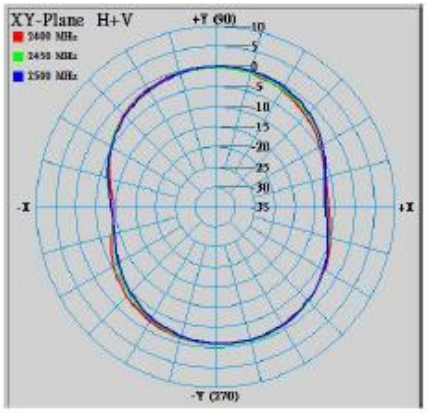


Maximum Efficiency at 2450 MHz : 65.7%

RADIATION PATTERN







	ZX plane		ZY plane		XY plane	
Frequency [MHz]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]
2400	0.56	-3.83	1.34	-0.54	-0.11	-2.70
2450	-0.37	-3.85	2.21	-0.32	-0.30	-2.76
2500	-0.51	-3.87	1.76	-0.66	0.21	-2.73

ENVIRONMENTAL

PARAMETER	VALUE
RoHS	Compliant
REACH SVHC	Compliant
HALOGEN-FREE	Compliant

APPROVAL

RALTRON	
DRAWN BY:	AR, July 17, 2024
APPROVED BY:	CP, July 17, 2024
REVISION:	A, Initial Release