

ELECTRICAL SPECIFICATION

PARAMETERS	VALUE	UNIT
Center Frequency	433	MHz
Bandwidth, typ	28	MHz
Peak Gain, typ	0.79	dBi
Return Loss, min	6.5	dB
Polarization	Linear	-
Azimuth Beamwidth	Omni-directional	-
Power, max	1	W
Impedance	50	Ω
Operating Temperature Range	-40 ~ +105	$^{\circ}\text{C}$

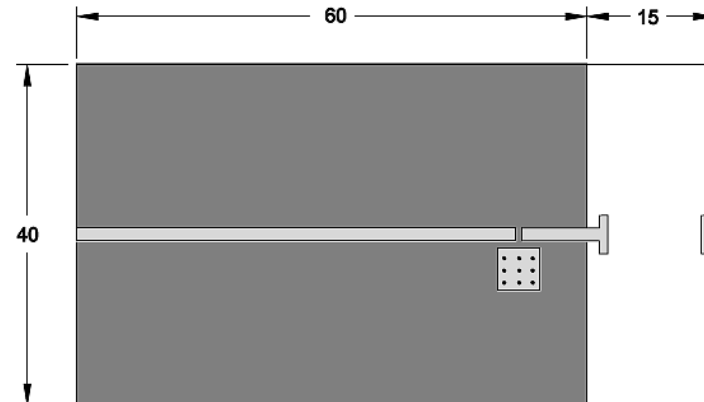
MECHANICAL SPECIFICATION

The mechanical drawing illustrates the chip antenna from four perspectives: a 3D perspective view, a Top View showing length (L) and width (W), a Side View showing thickness (T), and a Bottom View showing a small offset (A) and connection points (S1 and S2).

	L	W	T	A
Dimension (mm)	12.30 ± 0.20	4.00 ± 0.20	1.60 ± 0.20	0.50 ± 0.20

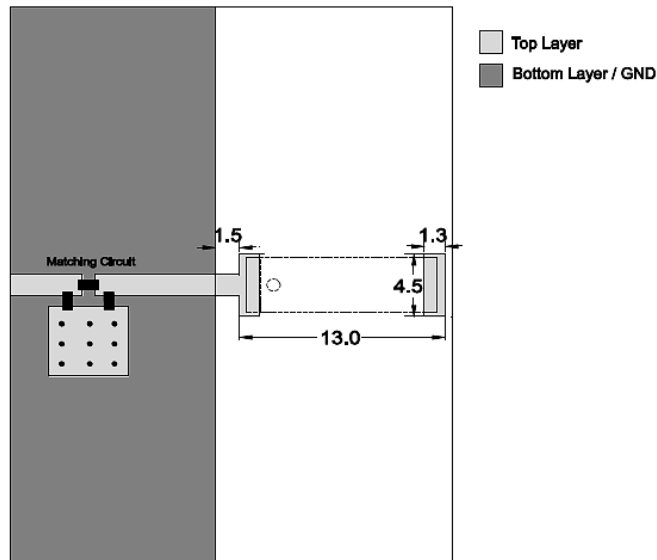
	S1	S2
Connection	Feeding	Soldering

EVALUATION BOARD



Unit: mm

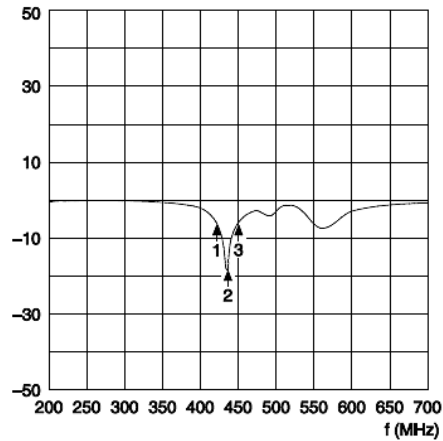
RECOMMENDED SOLDERING PATTERN



Unit: mm

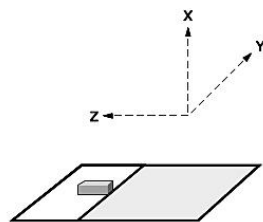
FREQUENCY CHARACTERISTICS

Return Loss

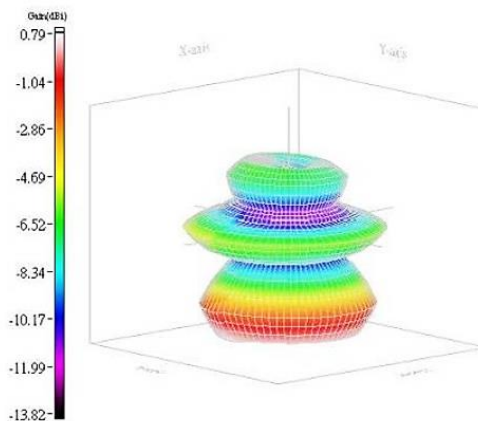


Marker data
 1. 419MHz, -6.5dB
 2. 433MHz, -16dB
 3. 447MHz, -6.5dB

RADIATION PATTERN



Evaluation board and XYZ direction



Frequency = 433 MHz
 Max gain = 0.79 dBi, at (150,330)
 MEG (mean effective gain) = -4.84 dBi
 Directivity (dB) = 6.35
 Efficiency = -5.56dB, 27.79 %



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CHIP ANTENNA

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RCA-W1A0-1204-Z-001

• **APPROVAL**

RALTRON	
DRAWN BY:	LP, June 08, 2017
APPROVED BY:	JL, June 08, 2017
REVISION:	A, Initial Release

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