AT5375A1306AT ANTENNA SPECIFICATION

Rev. A

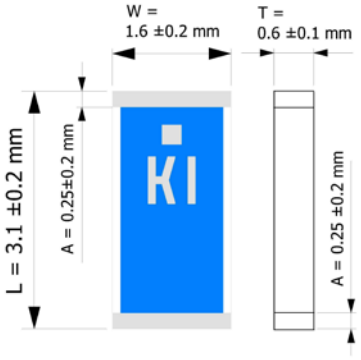
PRODUCT FEATURES

1. Surface mount ceramic antenna with a small size of 3.2 X 1.6 X 0.6 mm.
2. Highly stable under temperature and humidity changes.
3. Superior performance in a compact size, RoHS compliant.

RF CHARACTERISTICS

PN AT5375A1306AT	Specification
Working Frequency Range	4.9-5.85GHz
Gain	2.8 dBi(Typical)
Return Loss	-10 dB min
Polarization	Linear
Radiation Pattern	Omni-directional
Impedance	50Ω
Rated Power	1W
Operating Temperature	-40˚C to +85˚C

PHYSICAL DIMENSIONS



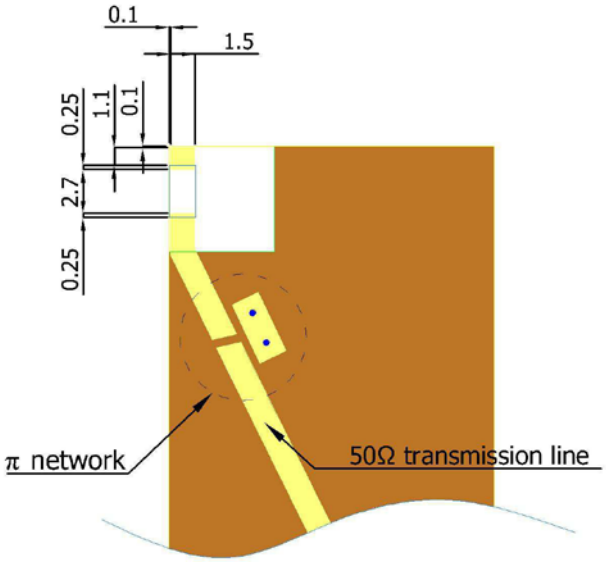
Symbol	Dimension (mm)
L	3.1 ± 0.20
W	1.6 ± 0.20
T	0.6 ± 0.10
A	0.25 ± 0.20

TERMINAL CONFIGURATION



PIN	Connection
P1	Feeding
P2	Soldering terminal

PCB DESIGN/LAYOUT CONSIDERATION



Unit : mm

TEST BOARD DESIGN



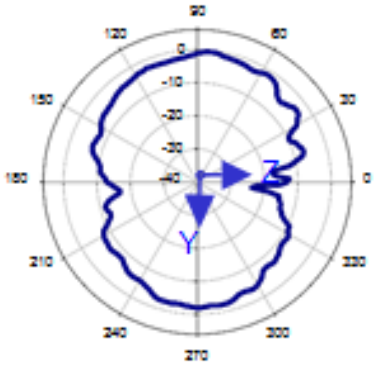
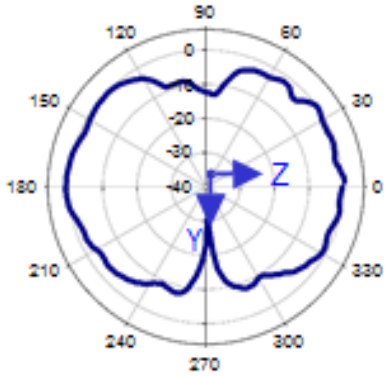
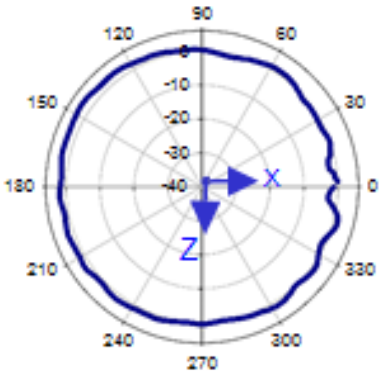
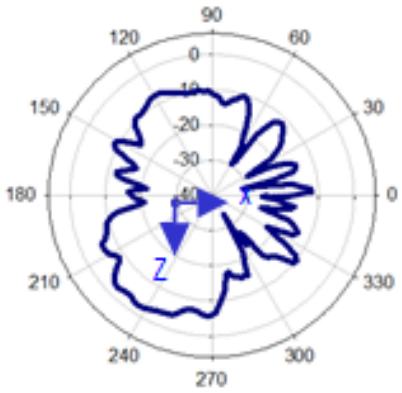
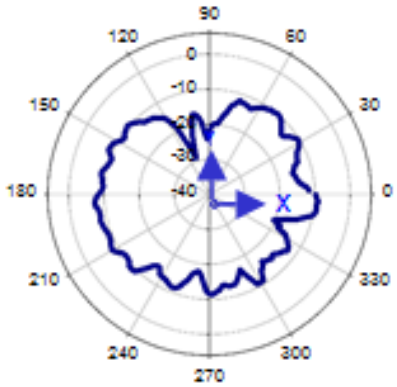
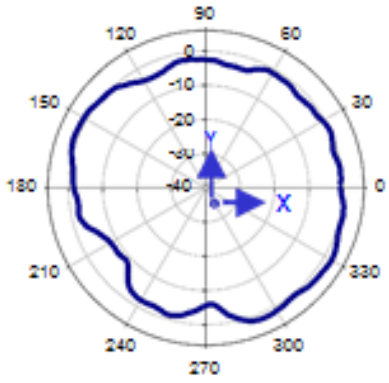
Antenna S11 on Test Board



RADIATION PATTERNS

The test board orientation is defined as:



	Vertical	Horizontal
Y - Z Plane Average Gain= -0.751 dBi	 Peak Gain =-0.55 dBi Average Gain = -4.9 dBi	 Peak Gain= 0.73 dBi Average Gain=-2.86 dBi
X - Z Plane Average Gain= 1.233 dBi	 Peak Gain= 2.86 dBi Average Gain= 0.86 dBi	 Peak Gain= -2.49 dBi Average Gain= -9.61 dBi
X - Y Plane Average Gain= -0.744 dBi	 Peak Gain= -7.42 dBi Average Gain= -11.78 dBi	 Peak Gain= 2.3 dBi Average Gain= -1.1 dBi