NANP35X7AUS0R868G1F

868 MHz ISM / LoRa PCB Antenna

9001:2015 CERTIFIED

ROHS/REACH COMPLIANT HALOGEN FREE

NIC Components Corp.

Description

The NANP35X7AUS0R868G1F is a rigid PCB antenna designed for ISM / LoRa applications. It operates within the frequency ranges of 863 ~870 MHz making it perfect for use in Wireless alarm and security systems, Industrial monitoring and control, IOT applications and Smart Meters.

Features

- 868 ISM Protocol
- Customizable cable type and cable length
- Rigid PCB Type
- RoHS compliant

Part Number Breakdown

NANP 35X7 A U S 0R868G 1 X100AH F

- F — RoHS Compliant
- X100AH — Cable & Connector Format Codes
- 1 — Number of Frequency Bands
- 0R868G — Center Frequency
- S — Protocol Code
- U — Internal Production Code
- A — Adhesive Option Code
- 35X7 — Dimensions
- NANP — Series

Standard Part Number Listing

Part Number	Connector	Cable Length	Cable Type	Cable Orientation
NANP35X7AUS0R868G1X100AHF	IPEX MHF	100 mm	RF1.13	Horizontal

The table represents assembled part numbers available on www.niccomp.com from standard connector and cable options. For options not listed above please contact NIC"

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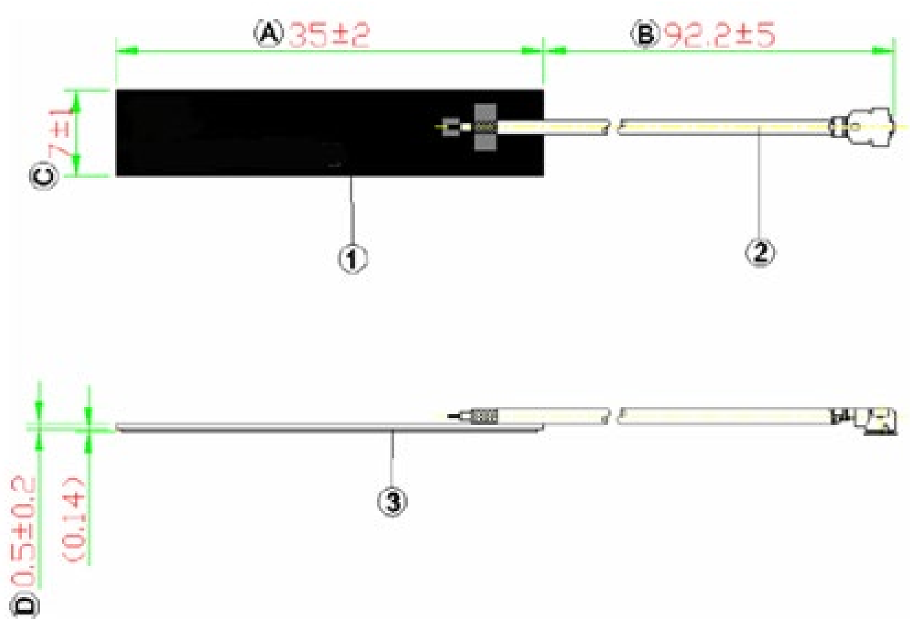
Specifications

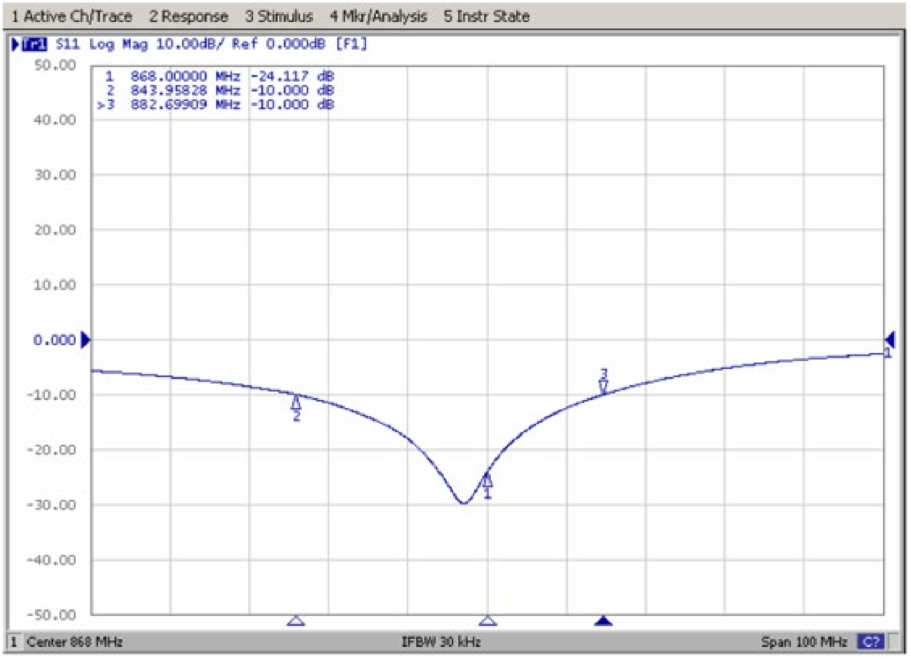
Frequency Ranges	863 ~870 MHz
Center Frequency	868 MHz
Gain	1.7 dBi
V.S.W.R	2.0 max.
Efficiency	64.6%
Polarization	Linear
Impedance	50Ω
Operating Temperature Range	-40°C ~ 85°C
Storage Temperature	-5°C ~ 40°C
Relative Humidity	10 ~ 70%
Mounting Method	Adhesive
RoHS Complaint	Yes

Dimensions

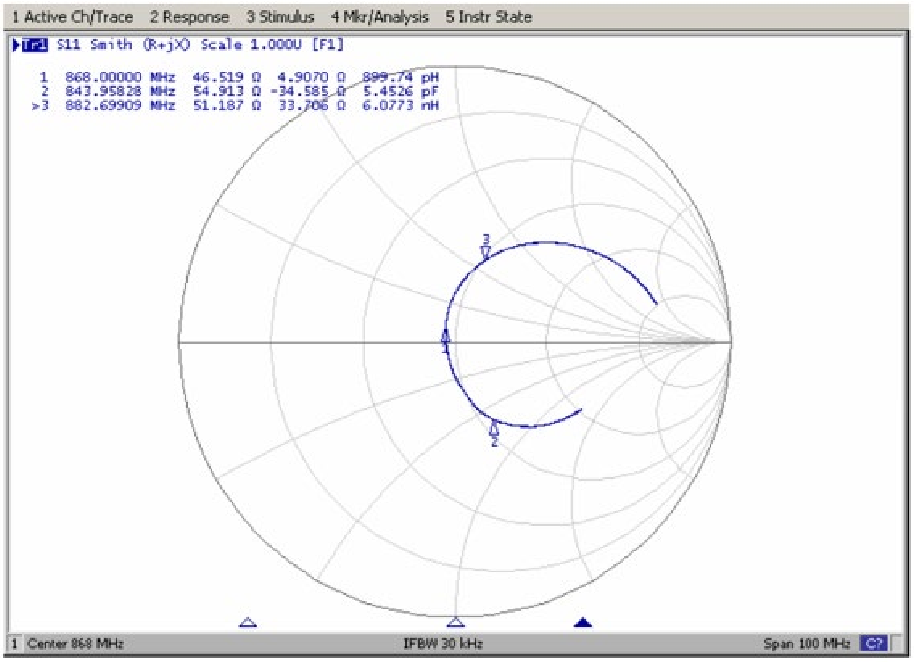


Return Loss and Smith Chart

Return Loss

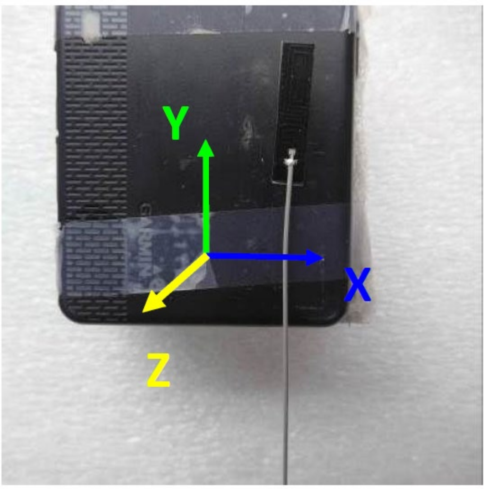


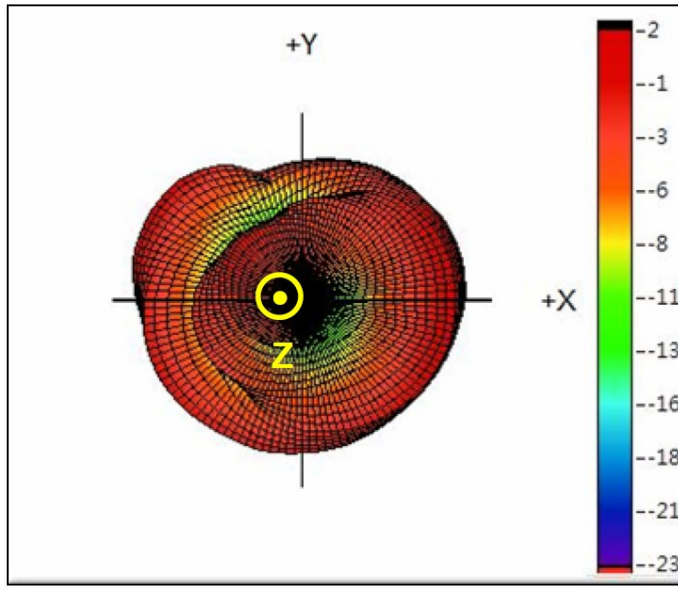
Smith Chart

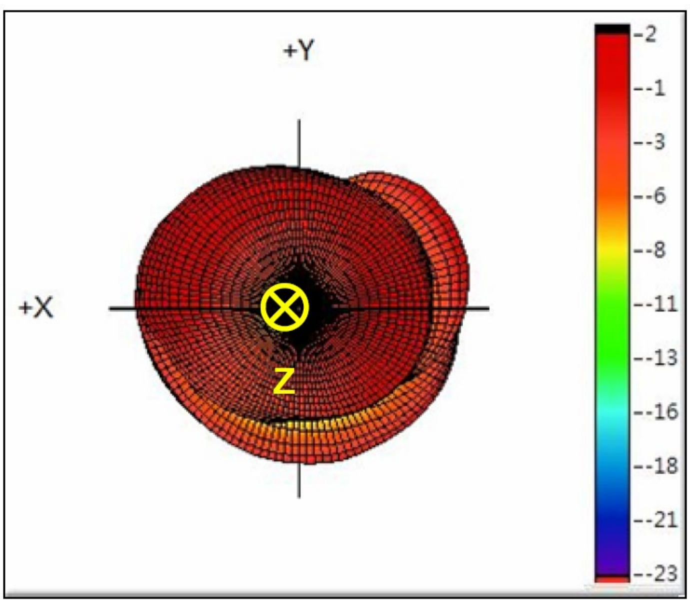


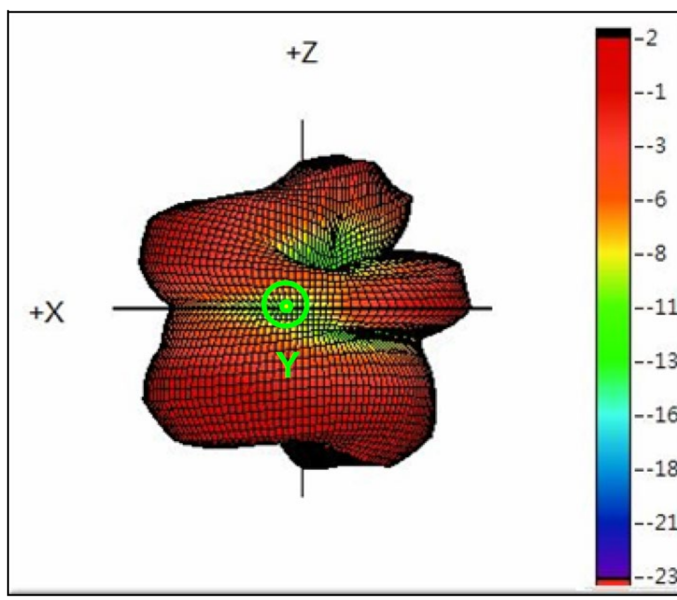
Radiation Patterns

3D Gain Patterns @ 868 MHz









Efficiency Table

Frequency(MHz)	863	864	865	866	867	868	869	870	871	872	873
Efficiency(dB)	-2.1	-2.1	-2.1	-2.1	-2.0	-1.9	-1.8	-1.7	-1.6	-1.6	-1.6
Efficiency (%)	62.2	61.5	61.8	61.8	62.7	64.6	65.9	67.6	68.4	68.9	69.4
Peak Gain (dBi)	1.7	1.6	1.6	1.6	1.6	1.7	1.8	1.8	1.9	1.9	1.9

Efficiency Vs. Frequency