



RoHS Compliant

includes all homogeneous materials
(see part numbering system for details)

FEATURES

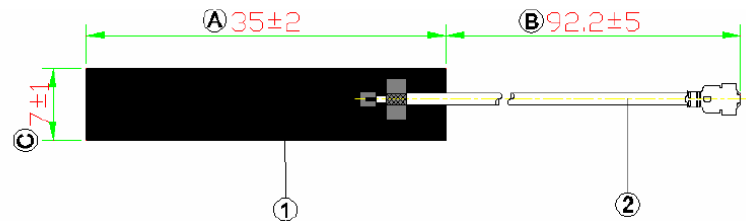
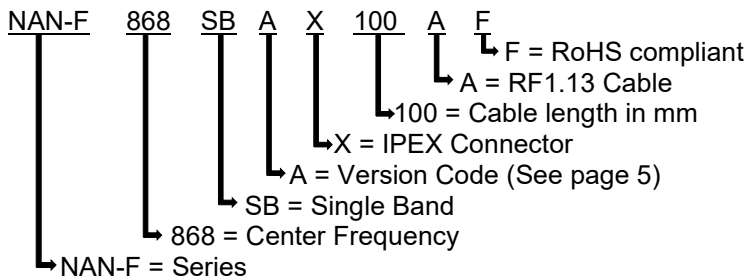
- Stable and reliable in performances
- Compact size
- RoHS compliant

APPLICATIONS

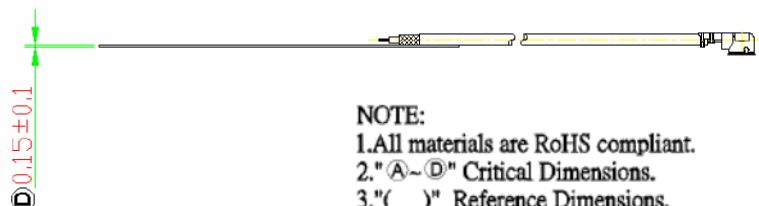
- ISM 868 Band
- Smart meters
- Wireless alarm and security system
- Industrial monitoring and control
- IOT applications

SPECIFICATIONS

Electrical	
Frequency Range	863 ~ 870 MHz
Center Frequency	868 MHz
Polarization	Linear
Peak Gain	1.9 dBi (typ.)
V.S.W.R	2.0 Max
Efficiency	61.1% (typ.)
Impedance	50Ω
Dimensions (mm):	
Body Length (A)	35 ± 2.0
Width (C)	7.0 ± 1.0
Thickness (D)	0.15 ± 0.1
Cable Length	100
Cable Type	RF1.13
Connector Type	IPEX



Item	Name	Material	Color
1	NAN-F_FPC	PI	Black
2	I-PEX & RF1.13	FEP	Gray

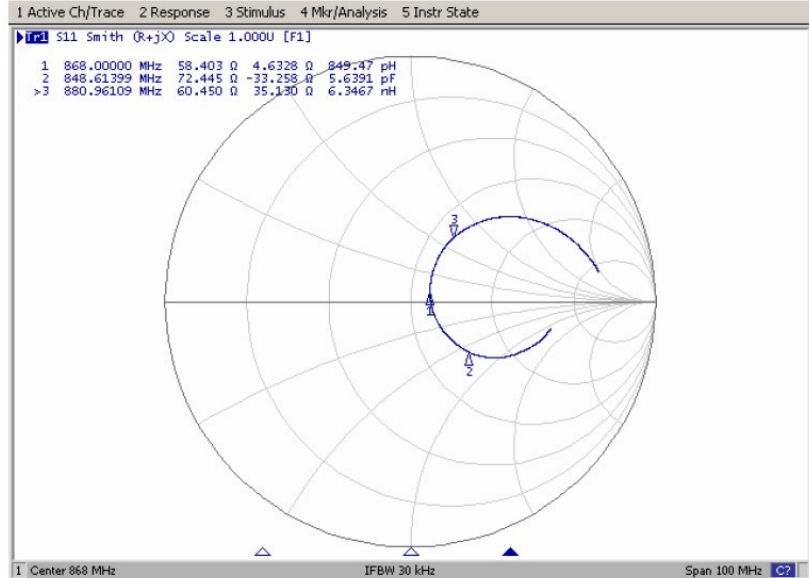
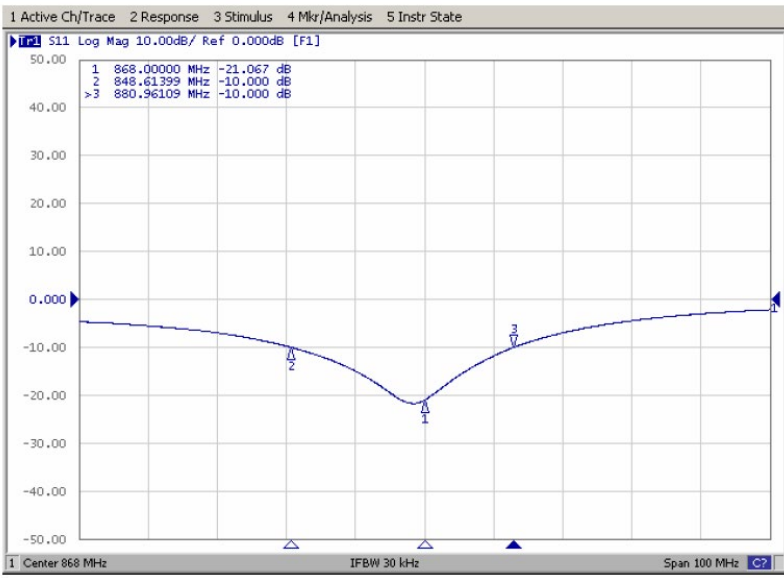


NOTE:
 1.All materials are RoHS compliant.
 2."A~D" Critical Dimensions.
 3."()" Reference Dimensions.

RETURN LOSS AND SMITH CHART

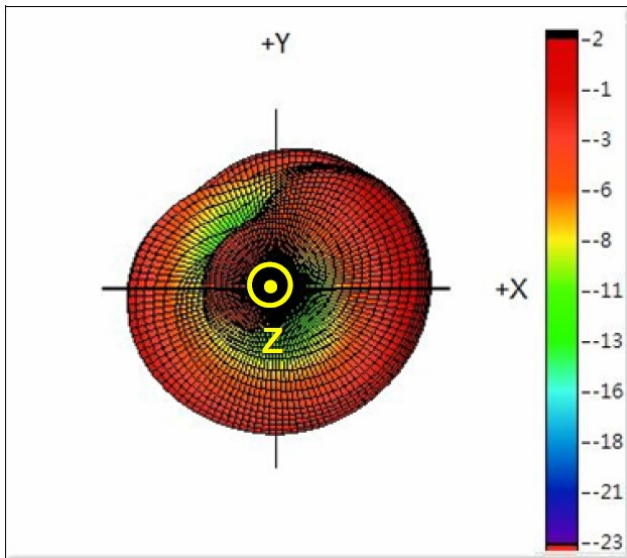
Return Loss

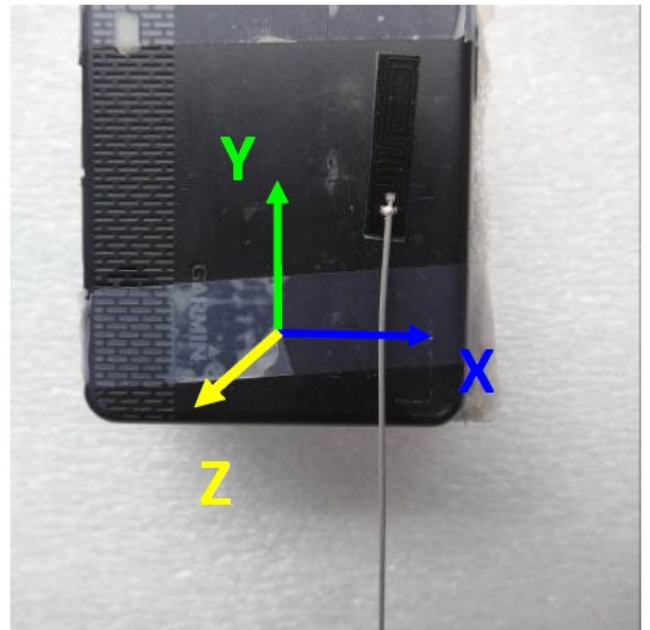
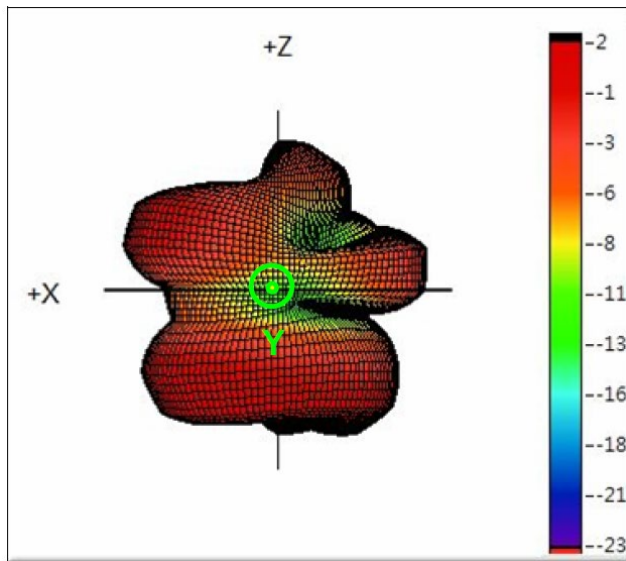
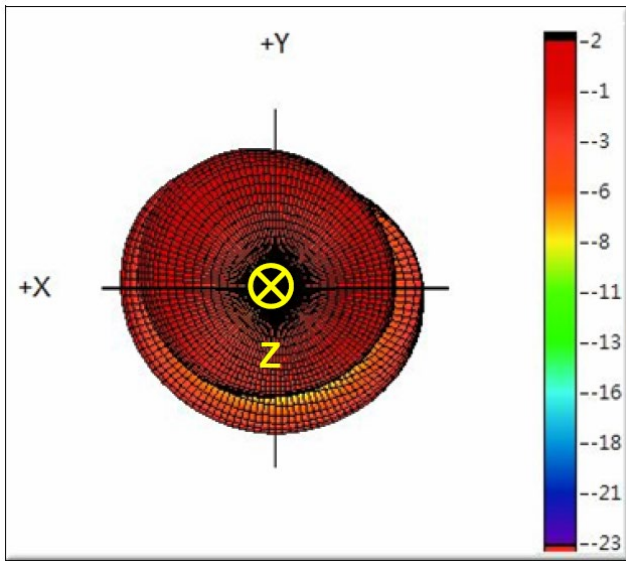
Smith Chart



RADIATION PATTERNS

3D Gain Patterns @ 868 MHz

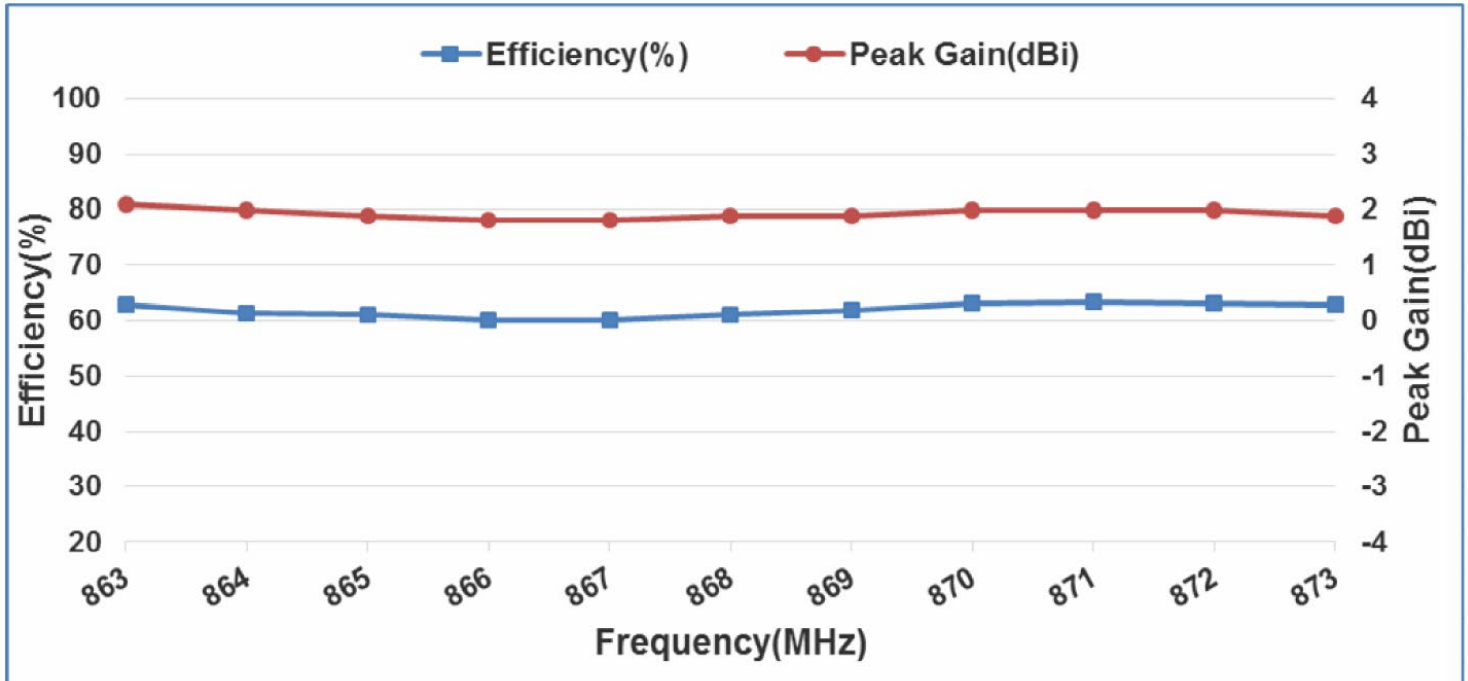




EFFICIENCY TABLE

Frequency(MHz)	863	864	865	866	867	868	869	870	871	872	873
Efficiency(dB)	-2.0	-2.1	-2.2	-2.2	-2.2	-2.1	-2.1	-2.0	-2.0	-2.0	-2.0
Efficiency (%)	62.8	61.4	60.9	60.1	60.1	61.1	61.9	63.1	63.4	63.1	62.7
Peak Gain (dBi)	2.1	2.0	1.9	1.8	1.8	1.9	1.9	2.0	2.0	2.0	1.9

EFFICIENCY VS. FREQUENCY



Version History and Status

Version	Date Issued	Details	Status
A	Sept 29 th , 2021	Initial Release	Supported

Please reach out to NIC for any customization requests and other inquiries:

- NIC Technical Support: tpmg@niccomp.com
- Compliance Support: rohs@niccomp.com