



Product Name: Low Profile 2G/3G Cellular SMD Dielectric Antenna

Part Number: SPCB0001-A-C01

Feature:

- 2G/3G Cellular Bands 824-960 MHz, 1710-2170 MHz Supported
- High Efficiency Surface-Mount Antenna

Application:

- Smart Metering
- Vehicle Telematics
- Smart Home
- Gateways and Routers



Low Profile 2G / 3G Cellular SMD Dielectric Antenna

MODEL: SPCB0001-A-C01

WI-RD-D-228 V1.1

I. Specifications:

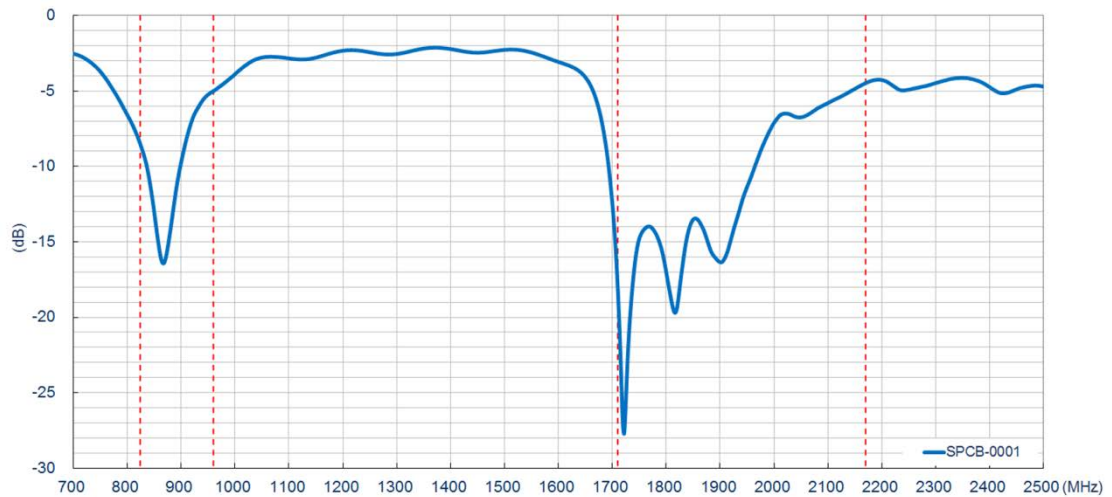
Category	Specifications				
Application Band	GSM 850	GSM 900	DCS	PCS	UMTS1
Frequency (MHz)	824~ 894	880~ 960	1710~ 1880	1850~ 1990	1920~ 2170
Efficiency(%)					
SPCB-0001	31.77	26.08	54.79	61.28	46.38
Average Gain(dBi)					
SPCB-0001	-4.98	-5.84	-2.61	-2.13	-3.34
Peak Gain(dBi)					
SPCB-0001	-0.11	-0.16	3.32	3.67	3.67
VSWR	< 3.5				
Return loss	< -4				
Test Condition	EVB board with 100mm ground plane				
Impedance	50Ω				
Dimension	35.0 x 7.0 x 3.2 mm				
Polarization	Linear				
Operation Temperature	-40~85℃				
Storage Temperature	-40~85℃				

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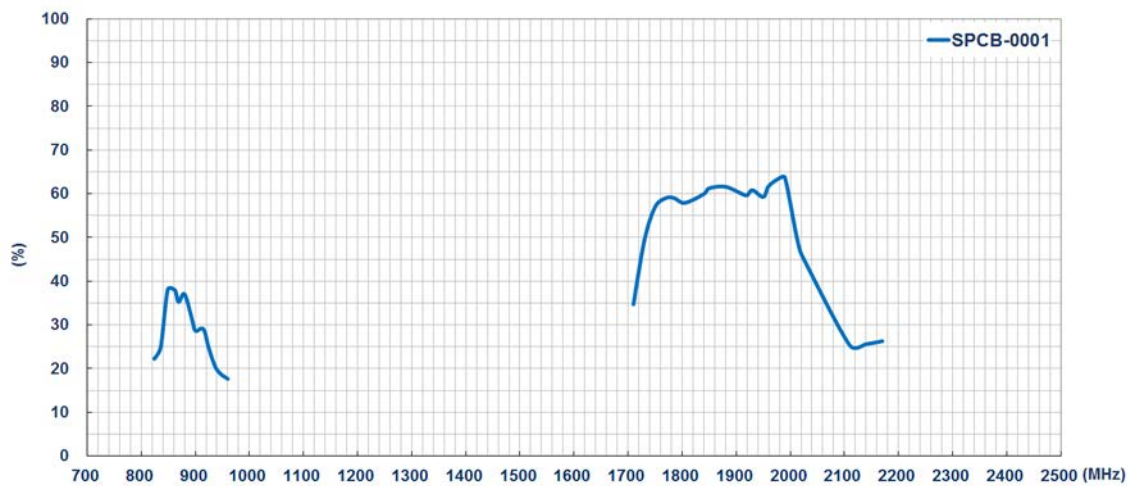


II. Antenna Technical Parameters:

S-parameters:



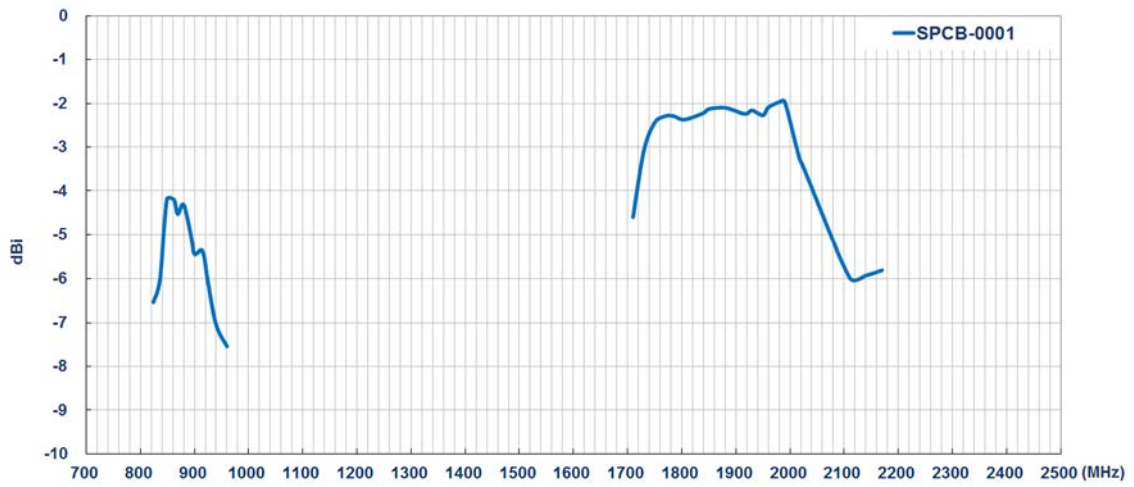
Efficiency:



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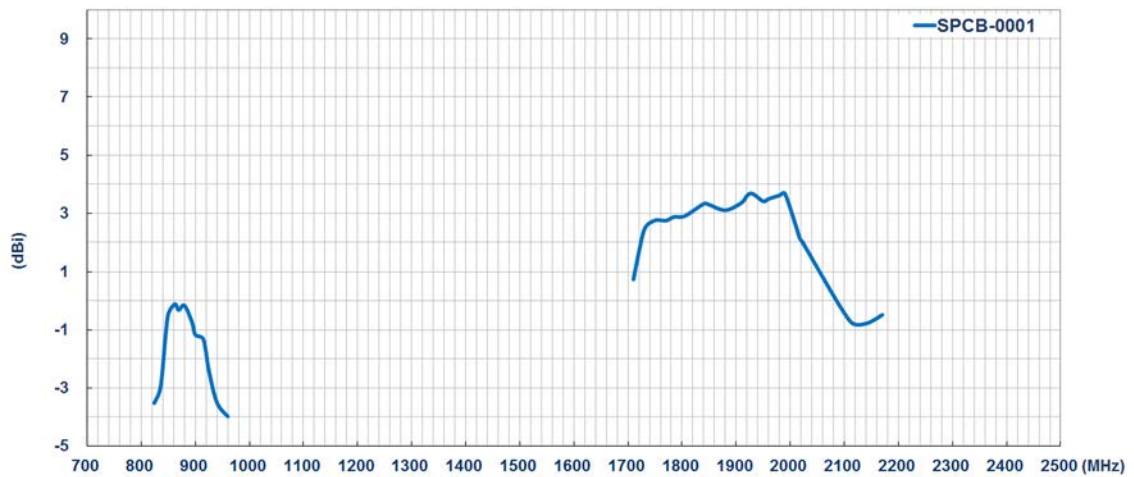


Average Gain:

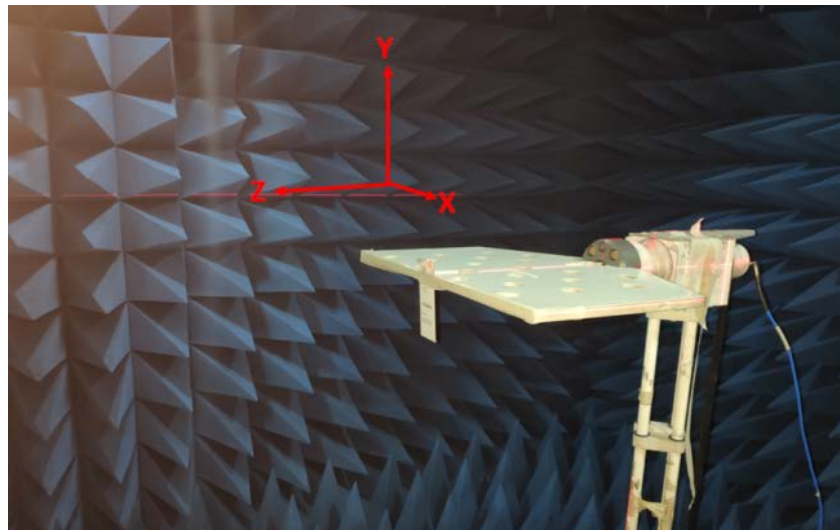


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Peak Gain:

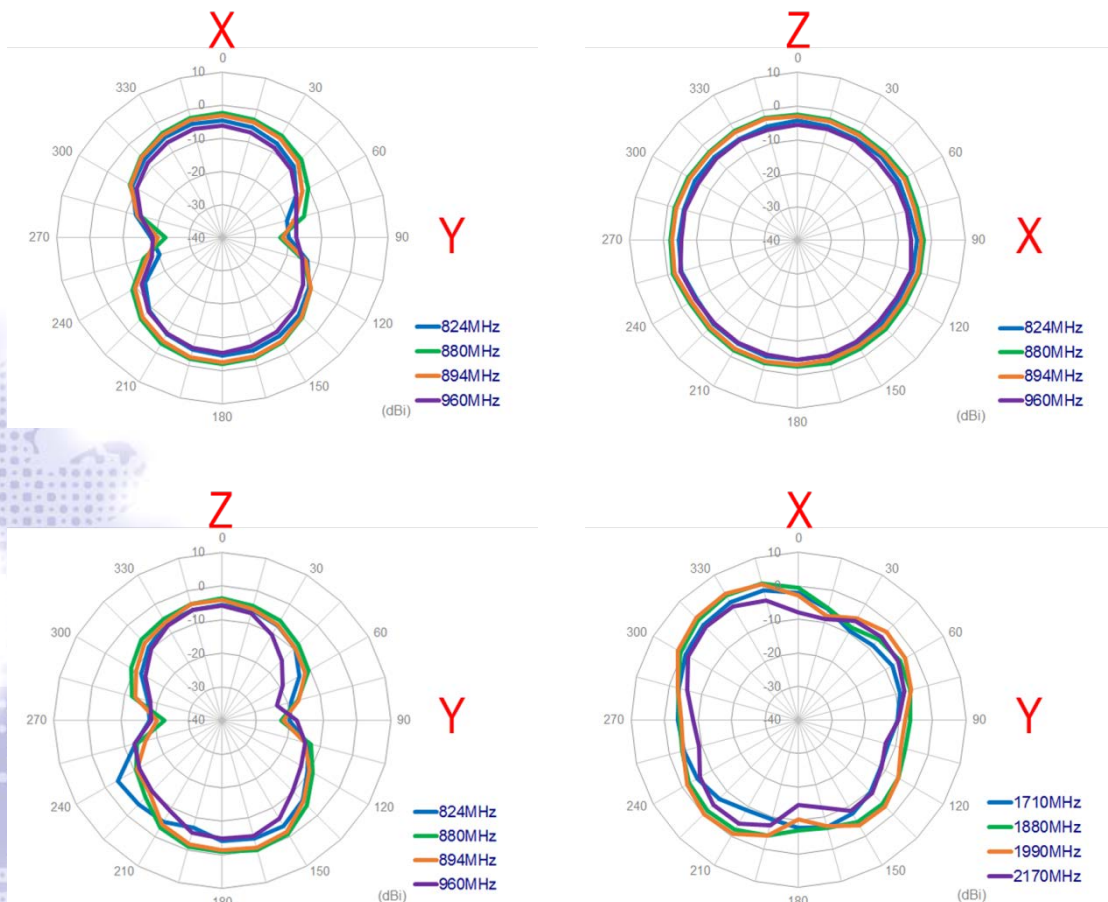


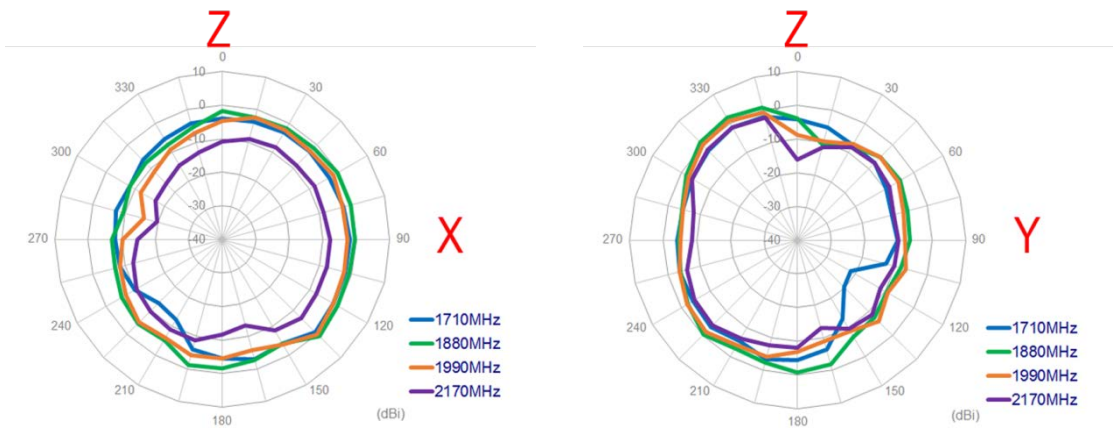
III. Antenna Radiation Pattern Measurement:



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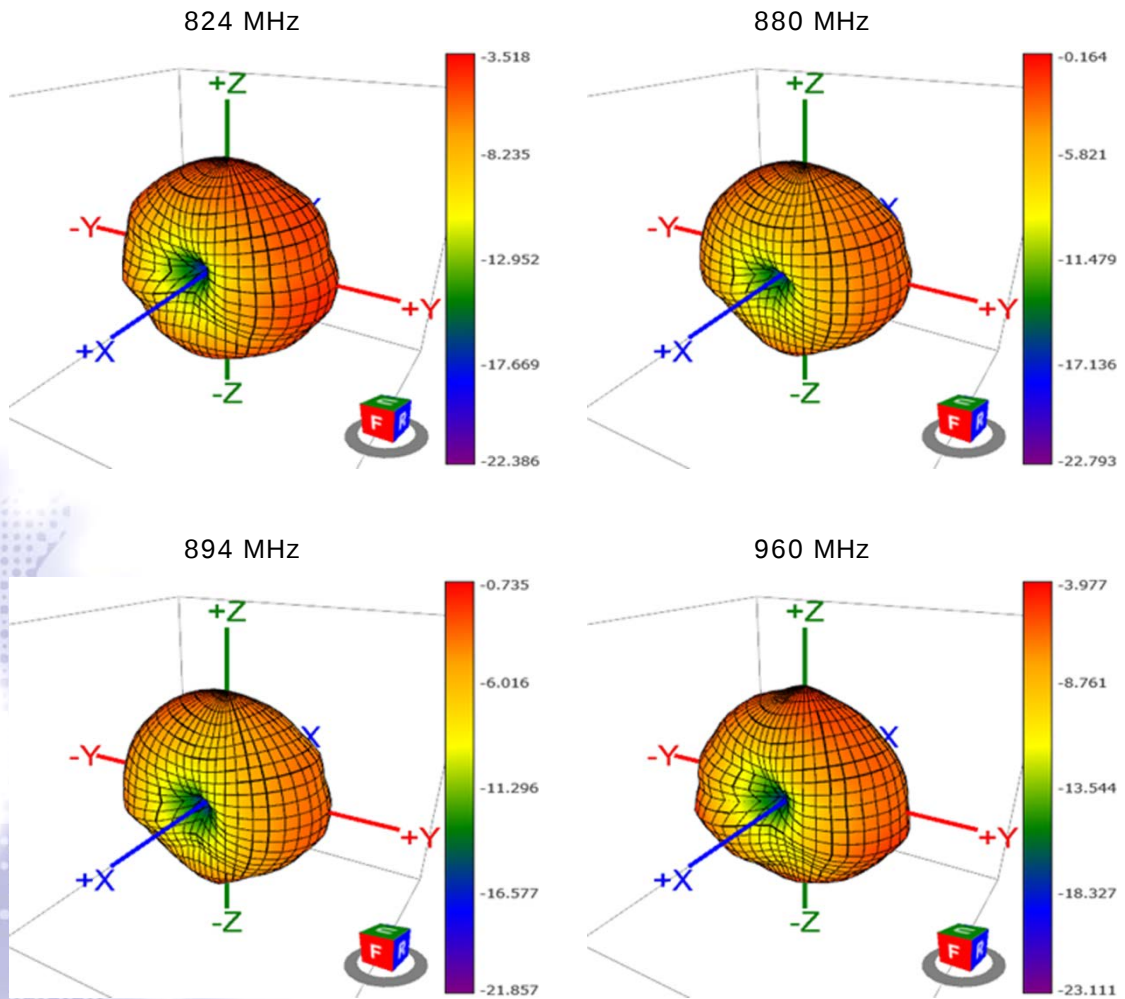
2D Radiation Pattern





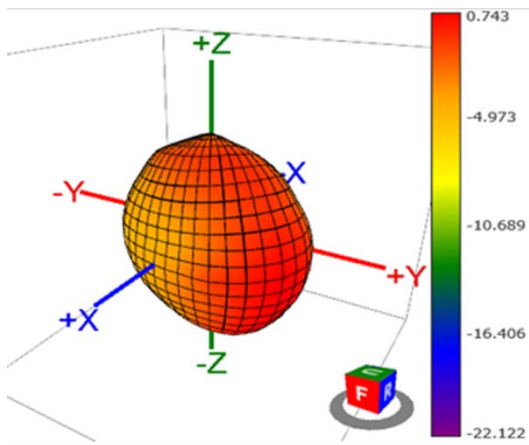
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3D Radiation Pattern

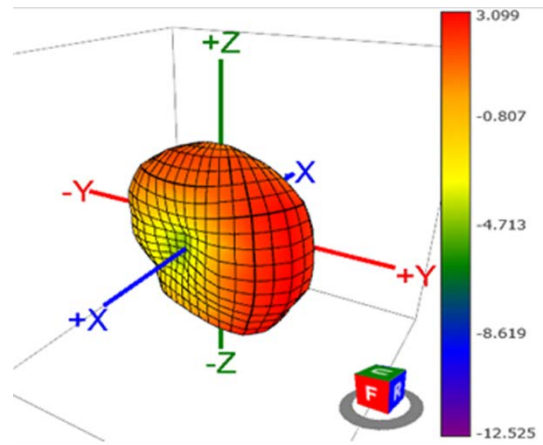


SANAV
2019.10.22
DCC

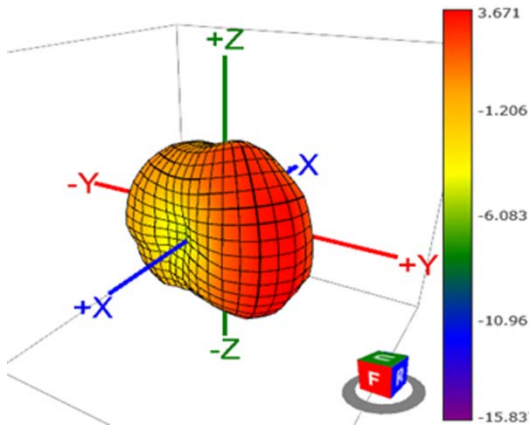
1710 MHz



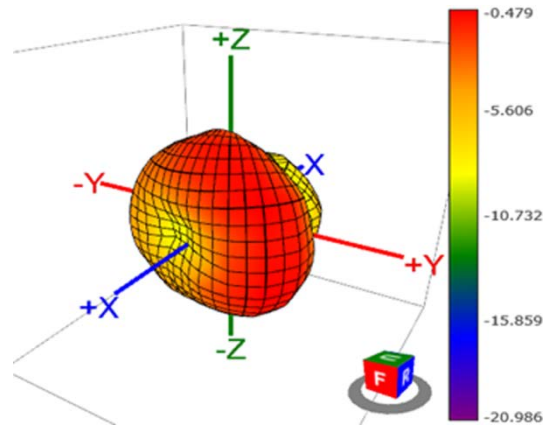
1880 MHz



1990 MHz

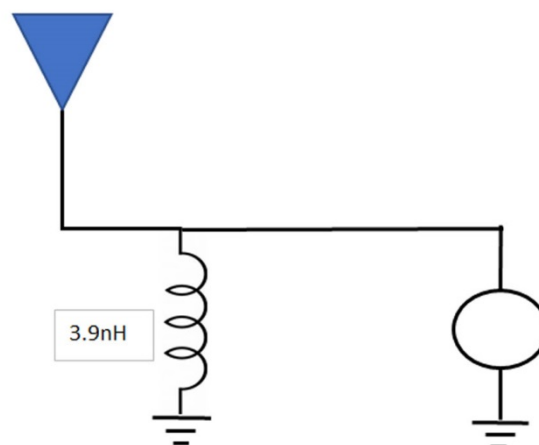


2170 MHz



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IV. Matching Circuits :

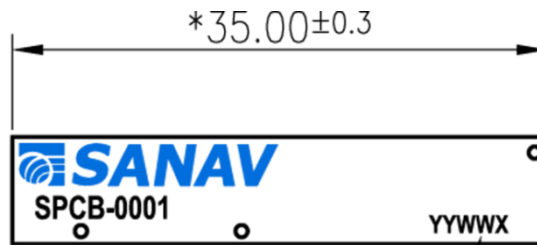


SANAV
2019.10.22
DCC

V. Mechanical Drawing (Unit:mm):

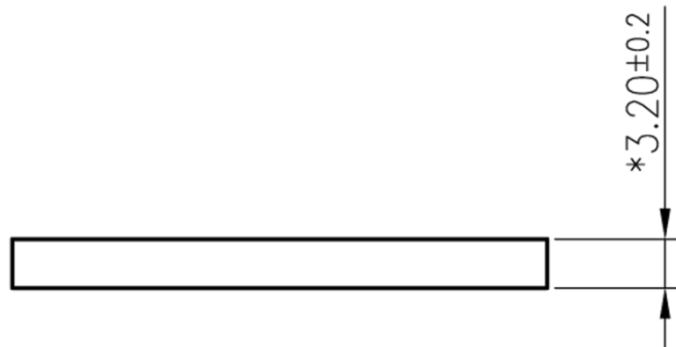
Antenna

Top View

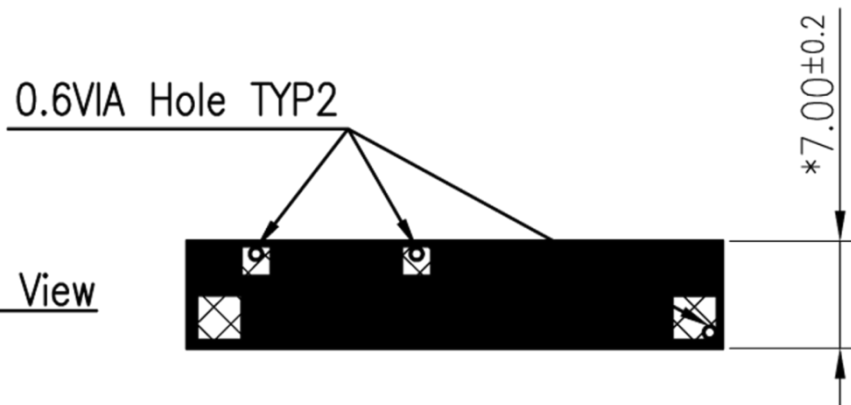


YYWWX—Date Code
Production Year. Week and Vendor Code

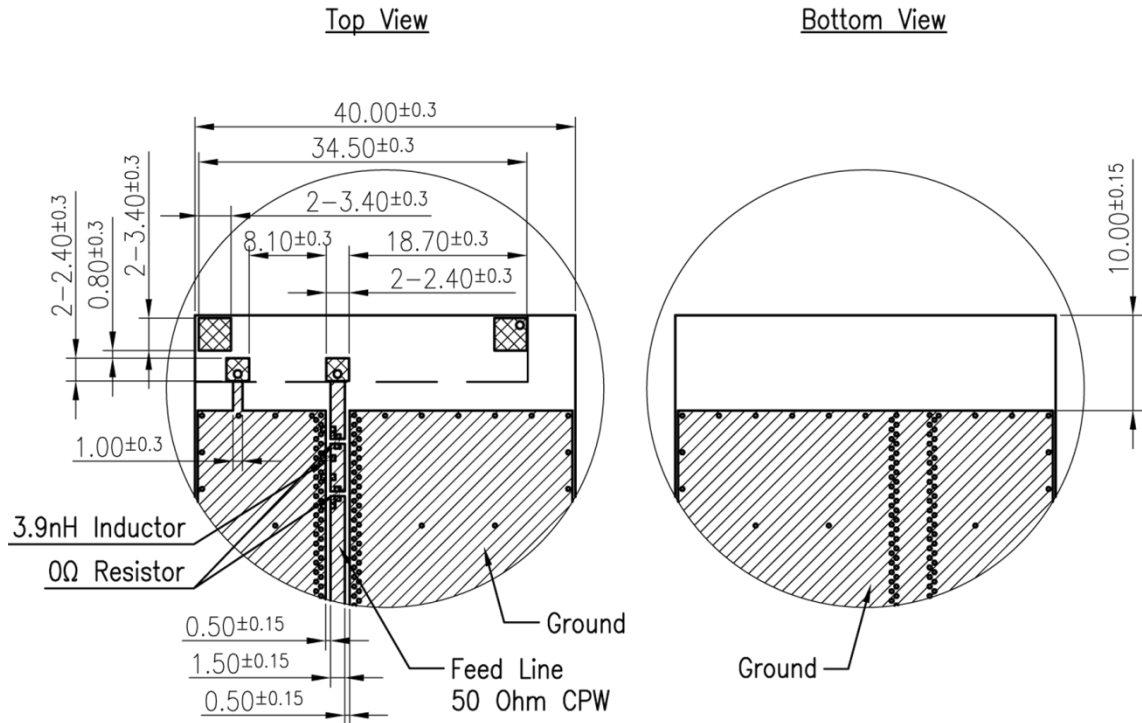
Side View



Bottom View



PCB Footprint

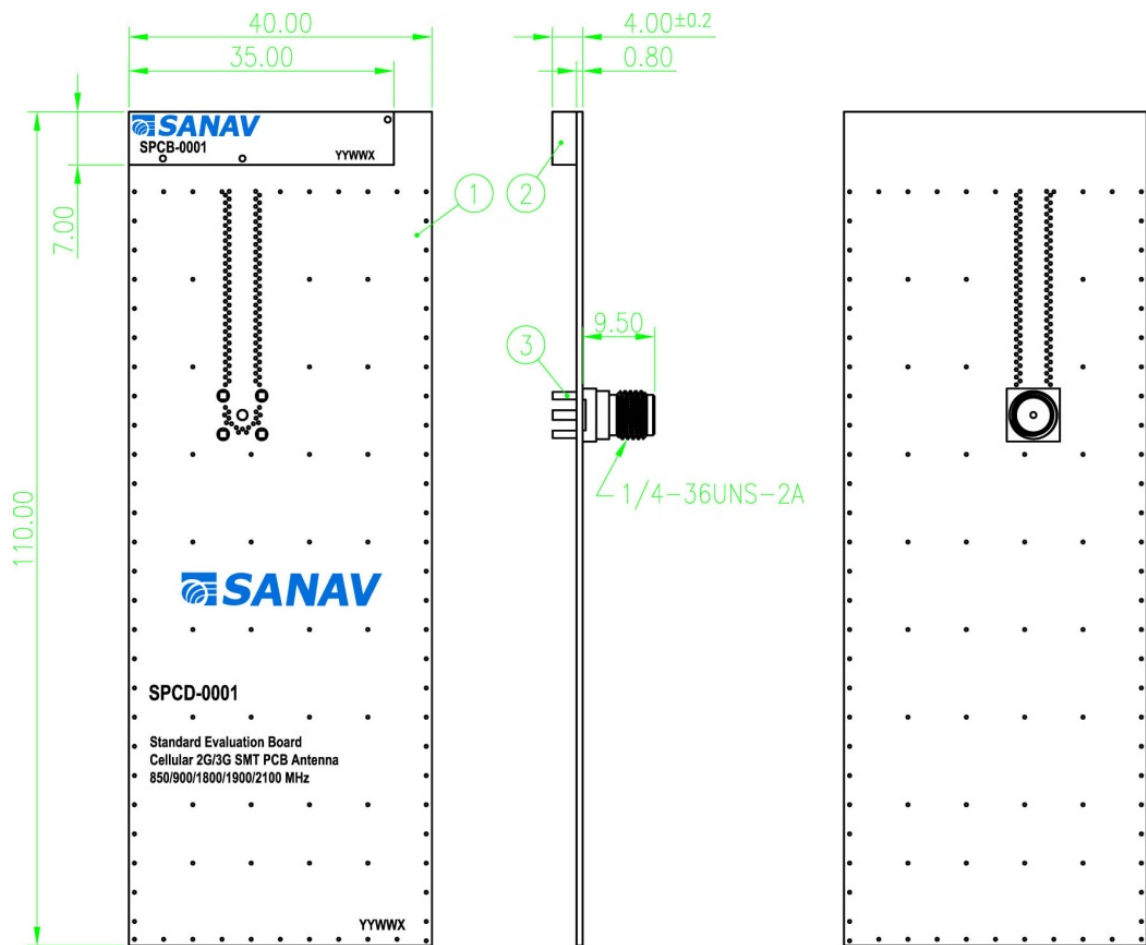


Notes:

1. Copper Area
2. Au Plated
3. Soldermask
4. Ground Clearance Area
5. SPCB-0001 Board
6. Logo & Text Ink Printing: Black.
7. Matching - Value Changes According To Ground and Layout.
8. "*"Critical Dimensions.

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Evaluation Board



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3	SMA(Jack) Connector	Brass	Au Plated	1
2	SPCB-0001 Board	FR-4 3.2t	White	1
1	SPCB-0001 Demo EVB Board	FR-4 0.8t	White	1
No	NAME	MATERIAL	FINISH	Q'TY

