

Approval Paper

Internal Antenna

Manufacturer: SUPREMA

MODEL: FSF2 AB

PART No: FSF2 AB BLE Antenna

page2 ----- Spec

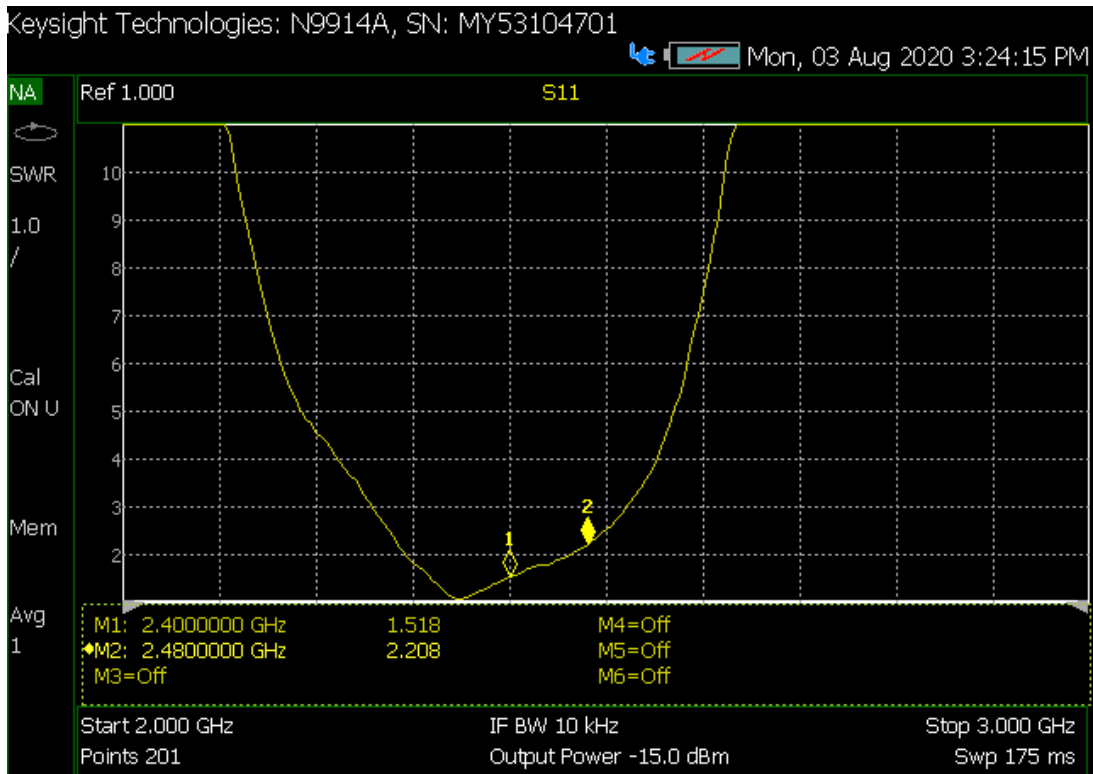
page3----- Electrical Performance Data

page4 ----- Drawing & picture

Spec

Band	2.4GHz ISM
Frequency	2.4~2.483GHz
VSWR	≤ 2.5
Peak Gain	1.30 ~ 3.03 dBi
Avg Gain	-4.14 ~ -2.72 dBi
Directivity	Directional
Polarization	Linear
Impedance	50 Ohms
TYPE	PCB(FR4) type PIFA

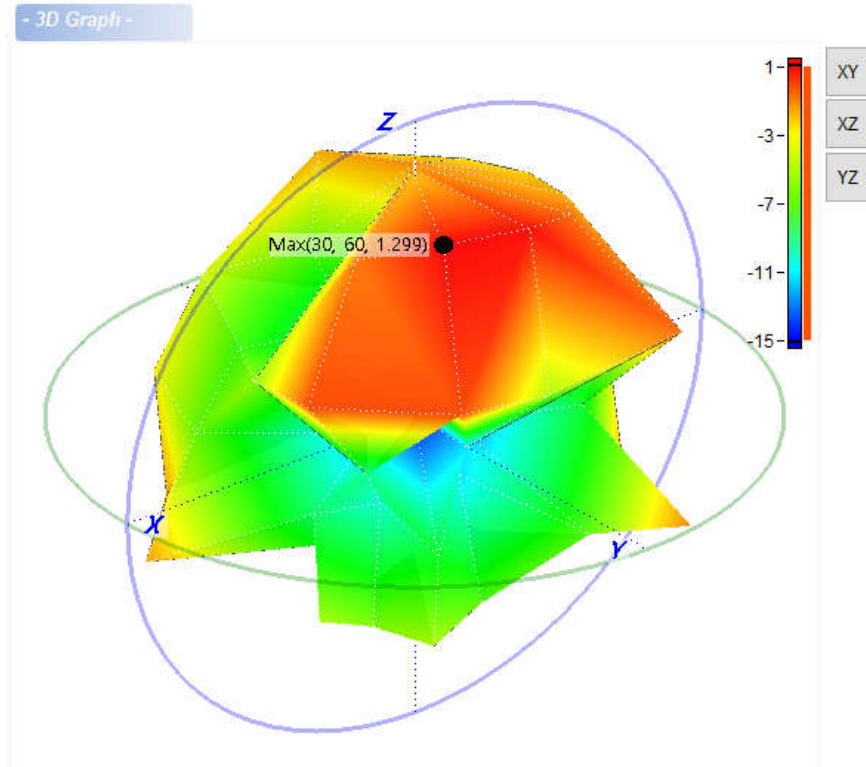
VSWR



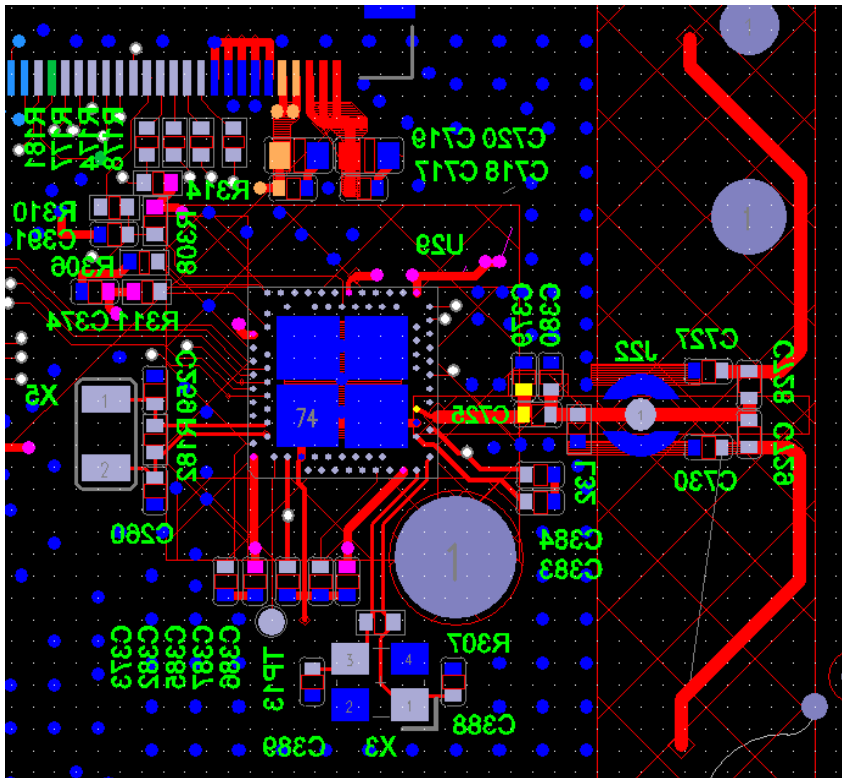
Radiation

No	Frequency	Peak Value		Minimum Value		Avg. Gain	Efficiency
	[MHz]	Value[dBi]	Degree	Value[dBi]	Degree	[dBi]	[%]
1	2400.00	1.30	30 / 60	-15.23	90 / 60	-4.14	38.518095
2	2430.00	2.30	30 / 60	-15.59	180 / 300	-3.42	45.547384
3	2460.00	2.91	30 / 60	-18.97	180 / 240	-2.90	51.291938
4	2480.00	3.03	30 / 60	-18.51	90 / 120	-2.72	53.516958

Pattern



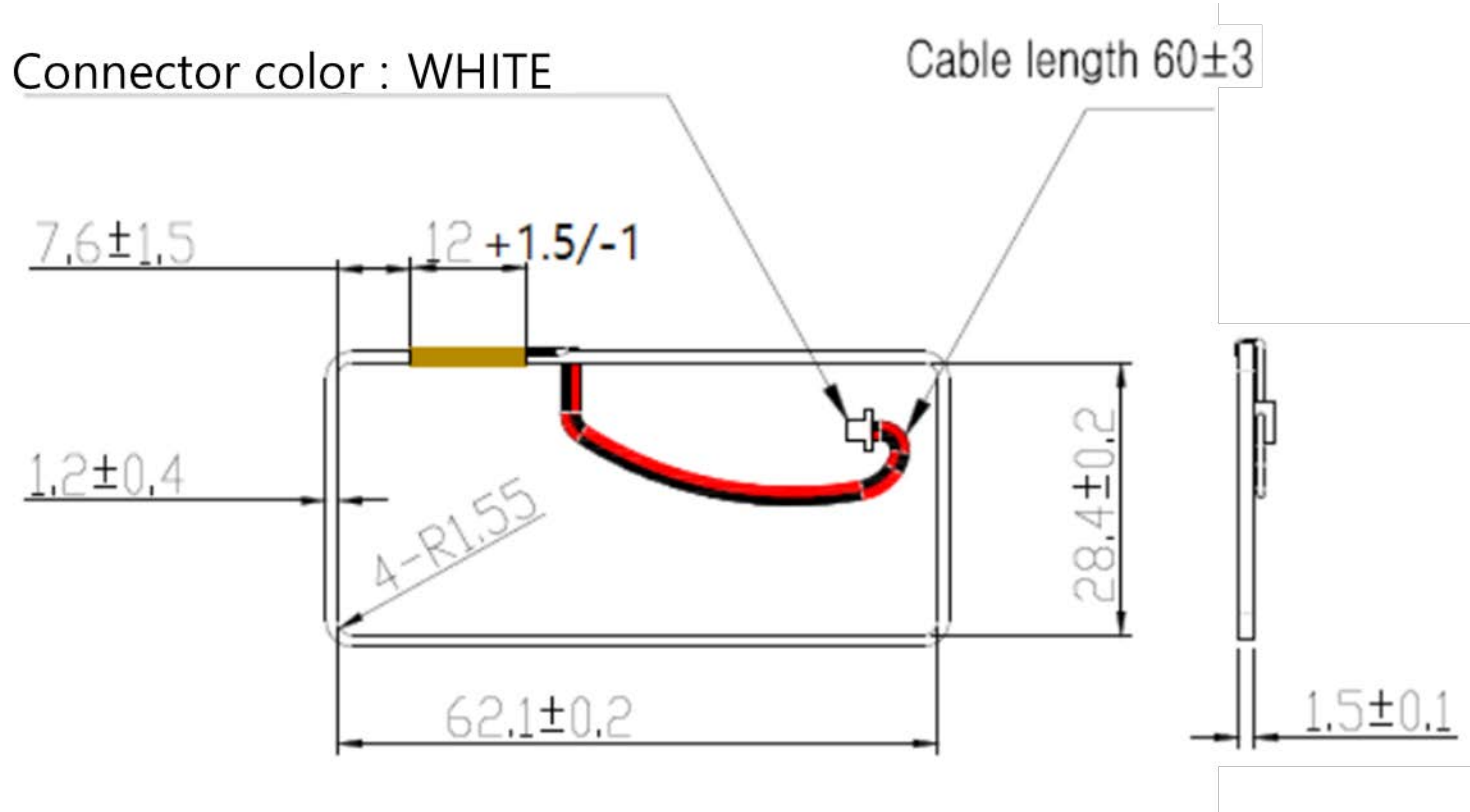
Drawing



Pictures



FSF2-AB LF RFID Antenna Specification



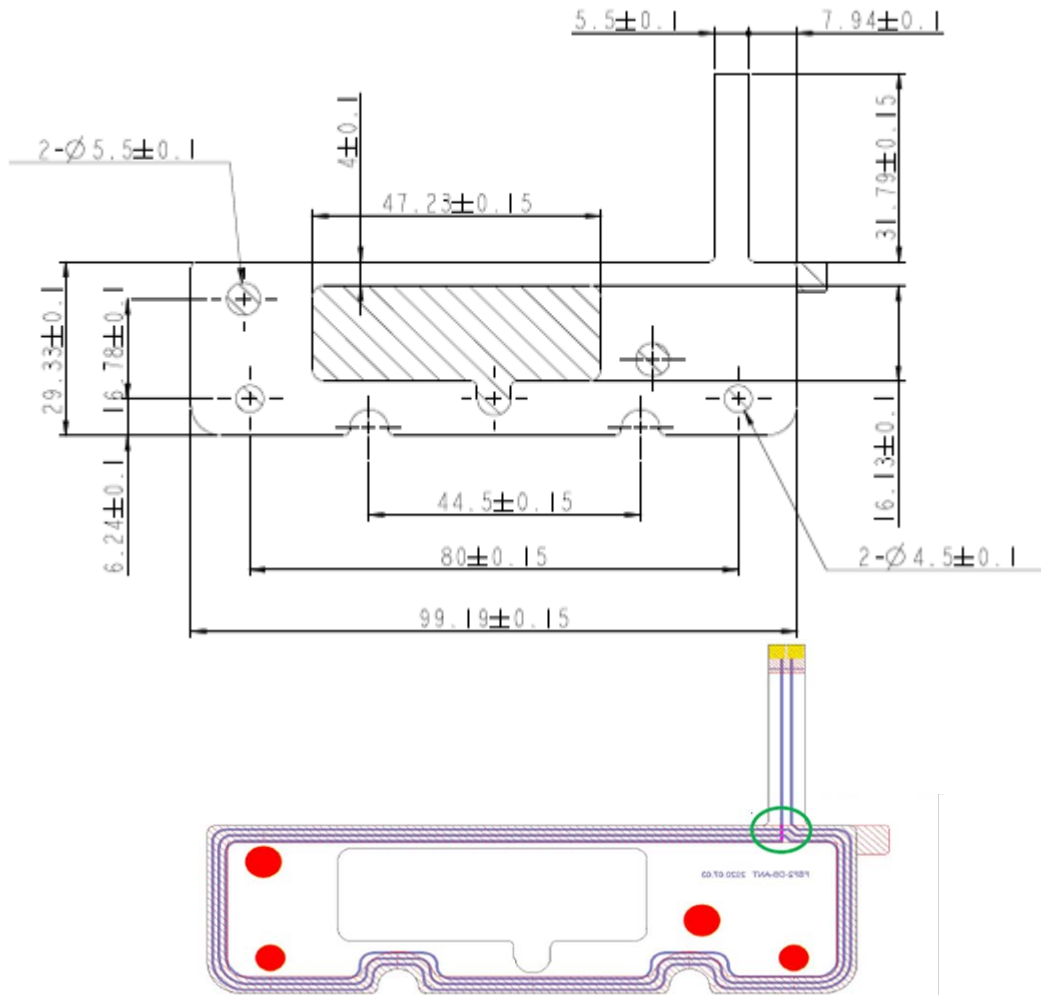
Note

Cable Length and Tolerance : $60\text{mm} \pm 3\text{mm}$
Connector of cable Ass'y need to use 12505HS-2
Thickness of cable & tape color : 28 AWG, gold
RFID coil raw materials need to use SB-UEW 0.14Ø

Specification

Inductance : $600\mu\text{H} \pm 5\%$ (100KHz, 1V, LCR METER)
 $0.14\text{Ø} / 68\text{turn} \pm 1\text{turn}$

FSF2-AB HF RFID Antenna Specification



Specification

13.56MHz Antenna / 3turn

Dimension : mm