

Preliminary

Notice, this is not a final specification.

Some parametric factors are subject to change.

HBM770

Bluetooth Antenna

Data sheet

ANTENNA (82-31-210-6454)
Mobile RF R&D(Chip Antenna)
SAMSUNG ELECTRO-MECHANICS Co., LTD

Feature and Specification
Preliminary Documentation
Revision Ver. 1.0

Features

- Super slim, High Gain and Wide Band
- Multi-Layer Ceramic Type (LTCC)
- Available size : $8 \times 2 \times 1.5 \text{ mm}^3$
- Embodied properties in real device

Applications

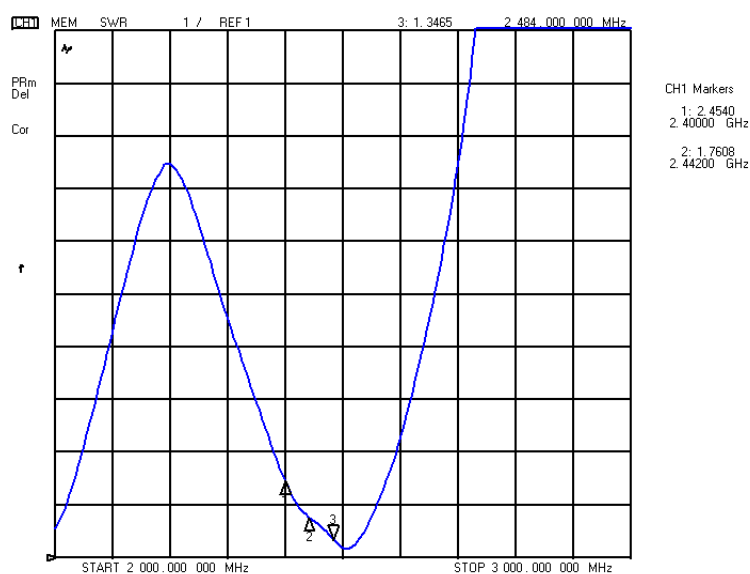
- Bluetooth
- W-Lan
- Satellite DMB



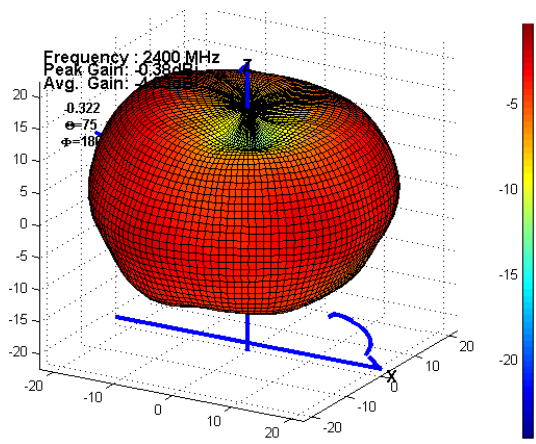
Chip antenna properties (HBM770 Application)

Description	Value
Frequency	2400 ~ 2484 MHz
VSWR	< 4 : 1
Peak Gain [dBi] @2442 MHz	0.1
Ave. Gain [dBi] @2442 MHz	-4.03
Polarization	Linear
Operating Temperature (°C)	-40~+ 85
Impedance (Ω)	50

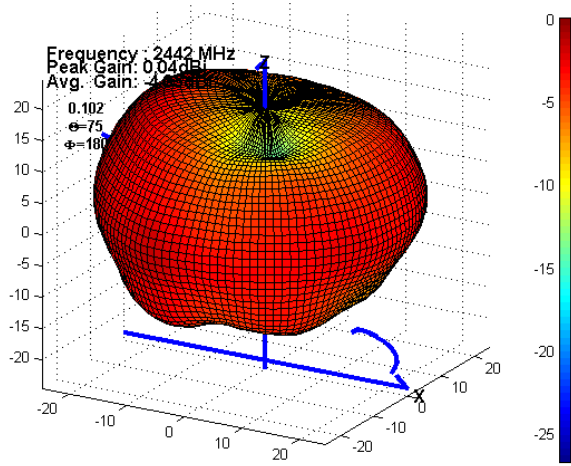
VSWR characteristics (HBM770 Application)



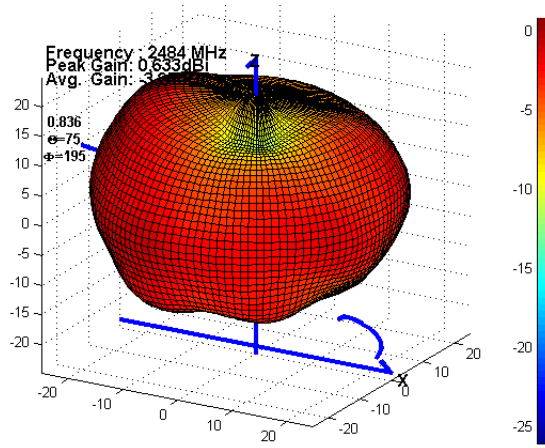
Radiation Pattern (HBM770 Application)



2400 MHz



2442 MHz



2484 MHz

Radiation Efficiency (HBM770 Application)

Frequency	Eff. (%)	Ave. Gain (dBi)	Peak Gain (dBi)	Directivity (dBi)
2400 MHz	40	-4.03	-0.32	3.71
2421 MHz	35	-4.56	-0.55	4.00
2442 MHz	40	-4.03	0.10	4.13
2463 MHz	43	-3.64	0.46	4.11
2484 MHz	47	-3.25	0.84	4.09