

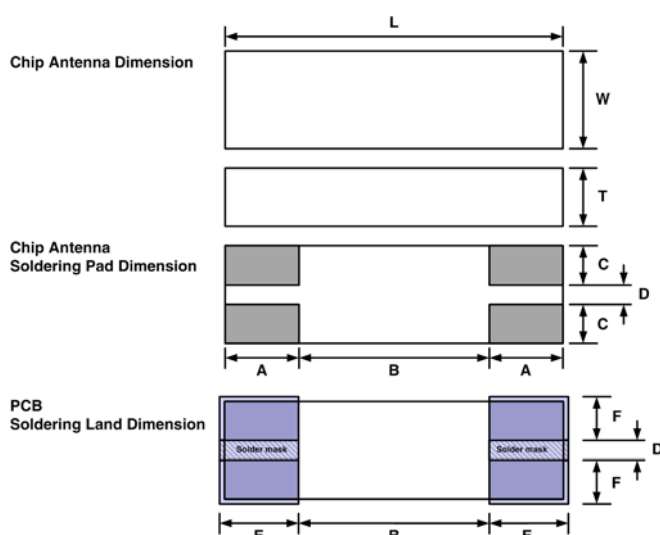
# Dielectric Chip Antenna



## P/N : ODBTPTR7020

This specification covers the dielectric chip antenna ODBTPTR7020 used in Bluetooth

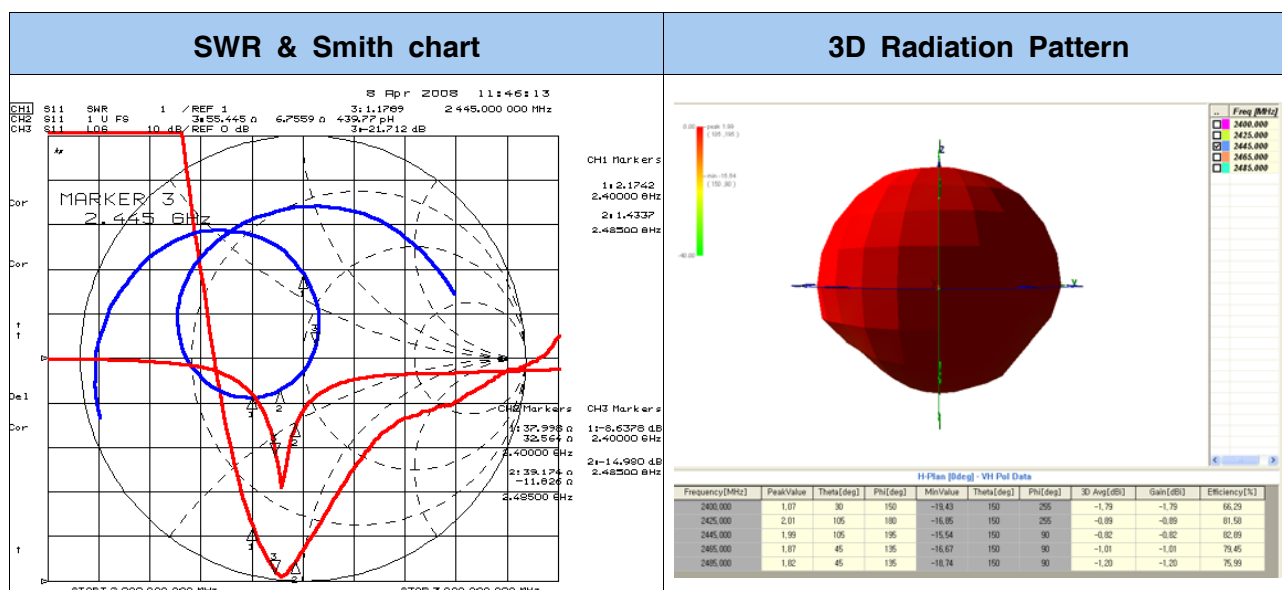
## MECHANICAL DIMENSION (unit : mm, tolerance : $\pm 0.1$ )



|   |     |
|---|-----|
| L | 7.0 |
| W | 2.0 |
| T | 1.2 |
| A | 1.5 |
| B | 4.0 |
| C | 0.8 |
| D | 0.4 |
| E | 1.6 |
| F | 0.9 |

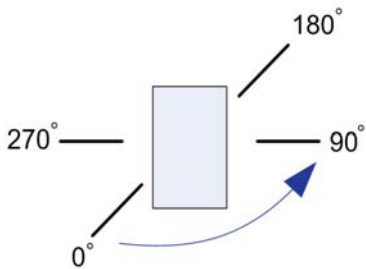
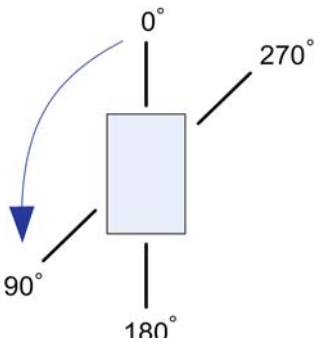
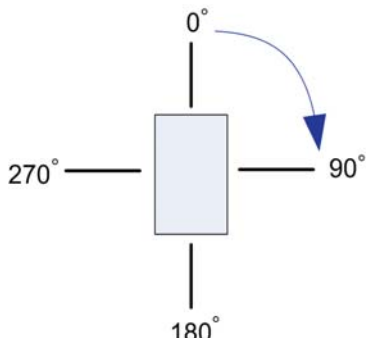
## ELECTRICAL CHARACTERISTICS

| ITEM            |         | SPECIFICATION   |       |       |       |       |
|-----------------|---------|-----------------|-------|-------|-------|-------|
| Frequency Range |         | 2400 ~ 2485 MHz |       |       |       |       |
| VSWR            |         | 3:1 Max         |       |       |       |       |
| Polarization    |         | Linear          |       |       |       |       |
| Frequency [MHz] |         | 2400            | 2425  | 2445  | 2465  | 2485  |
| Gain [dBi]      | Peak    | 1.07            | 2.01  | 1.99  | 1.87  | 1.82  |
|                 | Average | -1.79           | -0.89 | -0.82 | -1.01 | -1.20 |
| Efficiency [%]  |         | 66.29           | 81.58 | 82.89 | 79.45 | 75.99 |



## ELECTRICAL CHARACTERISTICS (2D)

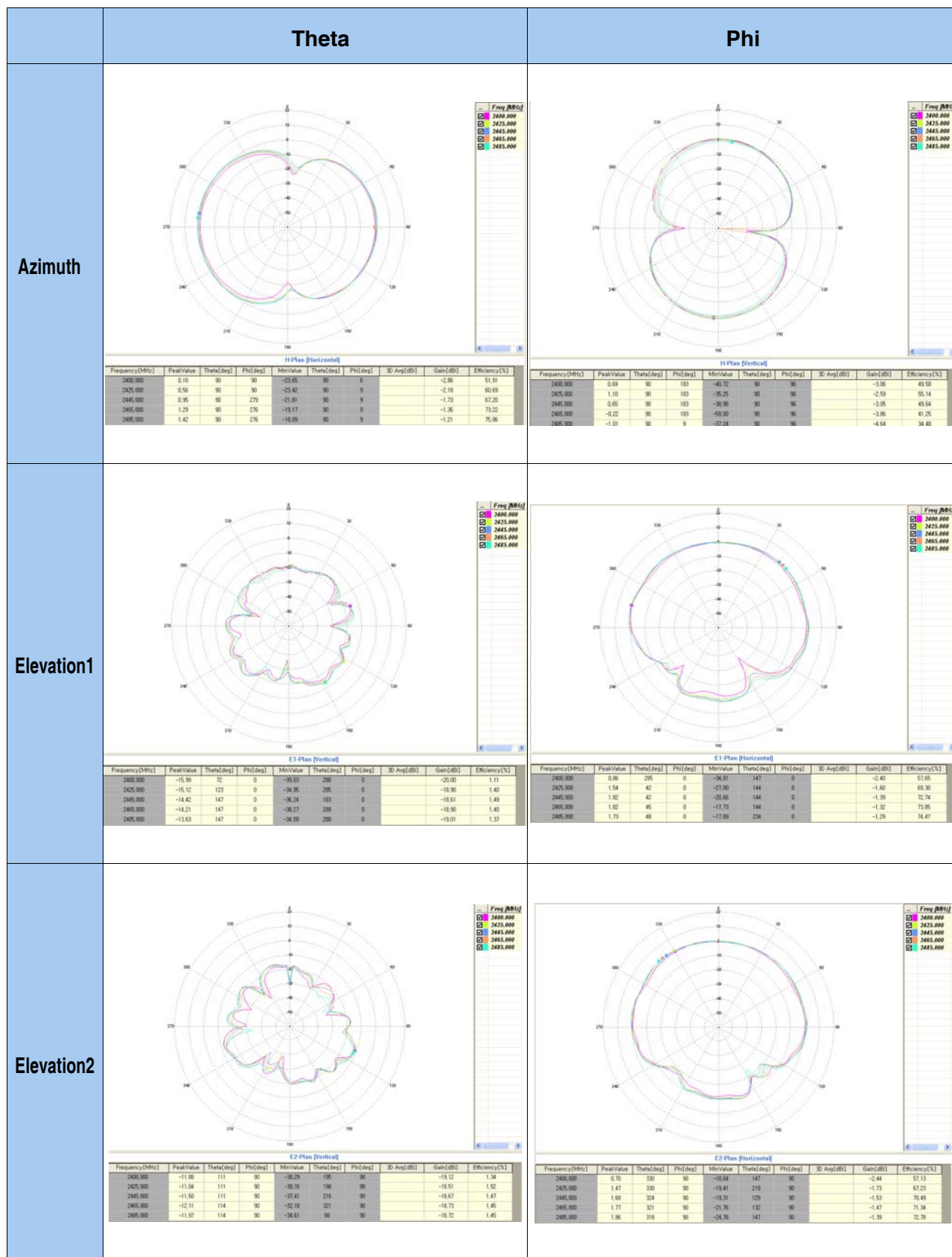
| 2D Measurement |             |       |         |        |
|----------------|-------------|-------|---------|--------|
| Gain           | Azimuth     | Theta | Peak    | 1.29   |
|                |             |       | Average | -1.21  |
|                |             | Phi   | Peak    | 1.10   |
|                |             |       | Average | -2.59  |
|                | Elevation 1 | Theta | Peak    | -14.42 |
|                |             |       | Average | -18.61 |
|                |             | Phi   | Peak    | 1.73   |
|                |             |       | Average | -1.29  |
|                | Elevation 2 | Theta | Peak    | -11.04 |
|                |             |       | Average | -18.51 |
|                |             | Phi   | Peak    | 1.86   |
|                |             |       | Average | -1.39  |

| Azimuth Plane                                                                       | Elevation1 Plane                                                                    | Elevation2 Plane                                                                      |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |
| Theta                                                                               | Vertical field of measured plane                                                    |                                                                                       |
| Phi                                                                                 | Horizontal field of measured plane                                                  |                                                                                       |

# Dielectric Chip Antenna



## 2D RADIATION PATTERN

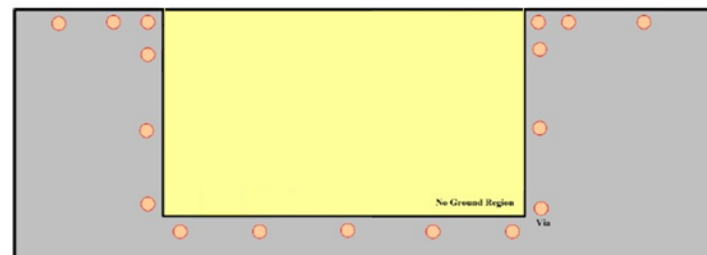


# Dielectric Chip Antenna

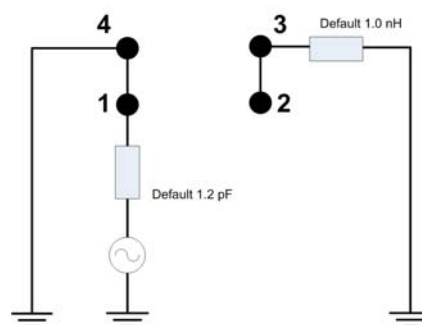
## ■ FEEDING METHOD (unit : mm, tolerance : $\pm 0.05$ )



< Top View >



< Bottom View >



< Default Condition Equivalent Circuit >

## ■ AutoCAD Drawing of Reference PCB Design

