

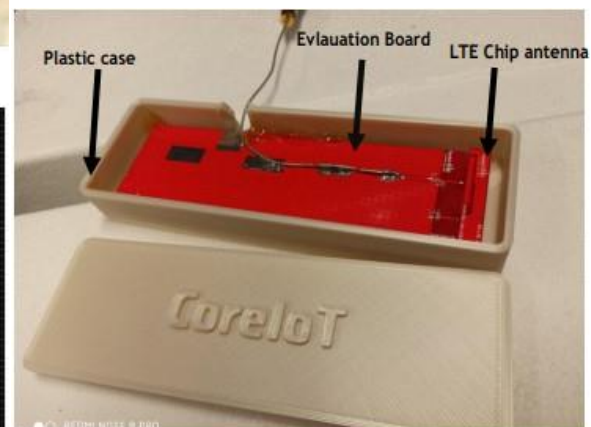


LTE Chip Antenna

LTE Chip Antenna

Introduction

CoreloT chip antenna is designed to cover the full cellular 2G / 3G/ GSM / 4G / LTE bands, covering frequencies 698 - 960 MHz & 1710 - 2690 MHz. Antenna delivers excellent performance and is fully compatible with SMT processes which decreases the assembly cost and improve device's quality and consistency.



LTE Chip Antenna with plastic case

Electrical Specification

1. Frequency: 698 – 2700 MHz
2. Impedance: 50 Ω

Equipment Used

1. ETS 8050 Antenna Anechoic Chamber
2. Keysite 5071C VNA (Radiation Pattern Measurement)
3. Agilent 5071C VNA (Return Loss measurement)



| BAND | 700/850/900 | 1700/1800/1900 | 2100 | 2400 | 2600 |
|------------------------------|------------------|----------------|-------------|-------------|-------------|
| STANDARD | CELLULAR | CELLULAR | CELLULAR | ISM | CELLULAR |
| Frequency(mhz) | 698 - 960 | 1710 - 1990 | 1755 - 2170 | 2400 – 2500 | 2500 - 2690 |
| Max. VSWR | ≤5.52:1 | ≤1.92:1 | ≤1.92:1 | ≤1.57:1 | ≤1.92:1 |
| Max. Return loss (dB) | ≥3.18 | ≥10 | ≥10 | ≥13 | ≥10 |
| Peak gain(dBi) | ≥-2.27 | ≥0.71 | ≥0.71 | ≥ 1.55 | ≥ 1.68 |
| Efficiency(%) | ≥32 | ≥43 | ≥43 | ≥58 | ≥61 |
| Radiation properties | Omni directional | | | | |
| Max. input power | 2W | | | | |
| Polarization | Linear | | | | |
| Impedance(ohms) | 50 ohm | | | | |

LTE Chip Antenna

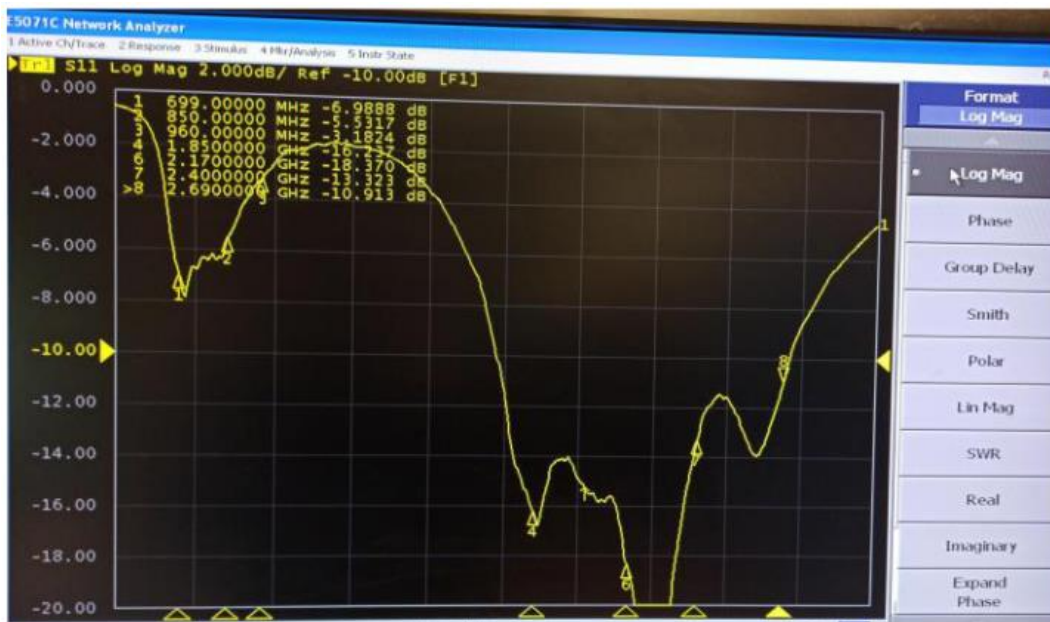
Features

1. Size of chip antenna
40.5*7.5*1.6mm
2. Evaluation board size
135*40mm
3. Ground plane dependent
4. >32% Efficiency on all bands
5. -2.27 dBi peak Gain
6. Adhesive tape/ Glass Mount Design
7. IPEX MHFI, UFL Compatible

Applications

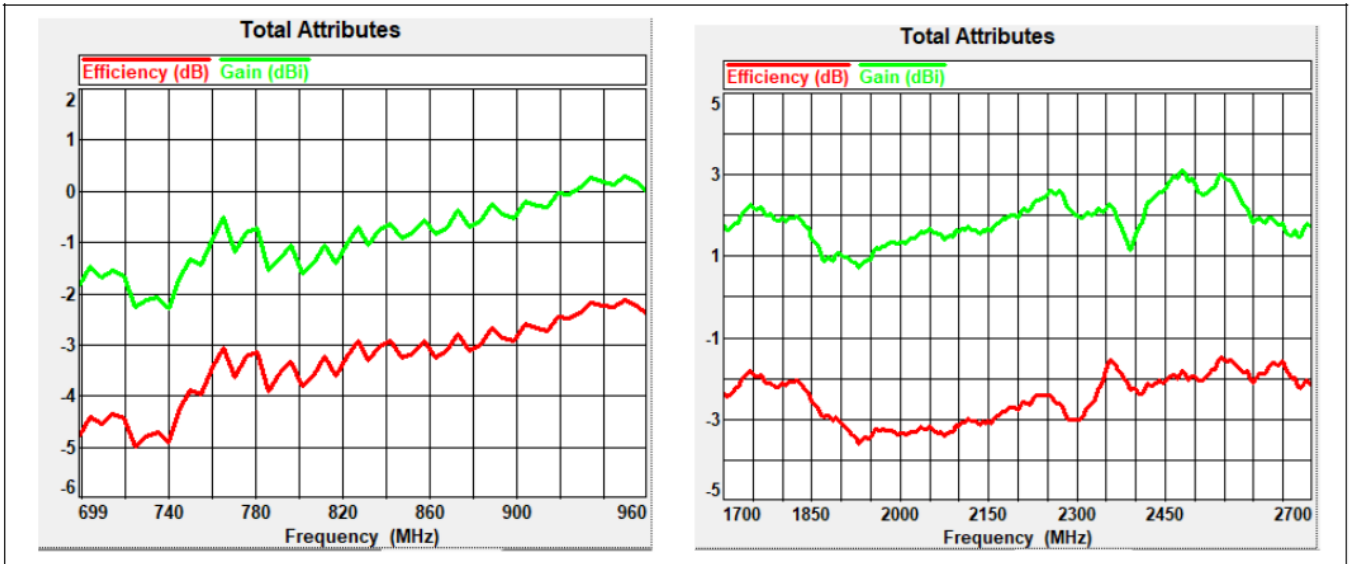
1. Cellular IoT: LTE-M (Cat-M1) and NB-IoT
2. Worldwide LTE, UMTS and GSM
3. Low-power, wide-area (LPWA)
4. Smart Home Networking
5. Sensing and Remote monitoring
6. Internet of Things (IoT) devices

Return Loss



LTE Chip Antenna

Efficiency



Radiation Pattern

