



4G/LTE Flexible PCB Internal Antennas

Product Number : ATIFLTE-5717-80

1. Picture





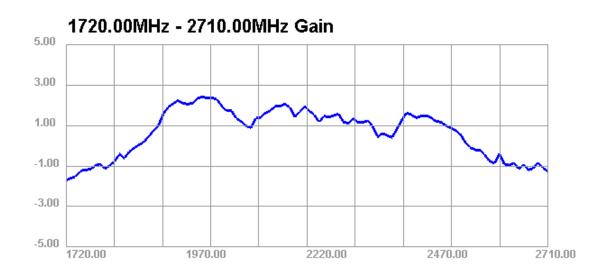
2. Electrical Characteristics

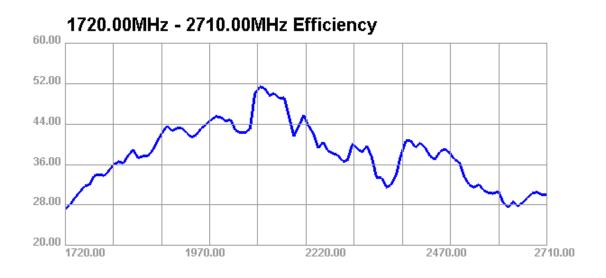
| Item | | Specifications | |
|---------------|--------------------------|--|--|
| Antenna | Frequency Range | 650 ~800 / 810 ~ 980 /1700 ~ 2690 MHz | |
| | Polarization | Linear | |
| | Gain | 2dB | |
| | V.S.W.R | <2.5 | |
| | Impendance | 50 Ω | |
| | Dimension | 56.59 * 16.53 mm | |
| Mechanical | Cable | RF1.13 or others | |
| | Connector | IPEX | |
| | Mounting Method | Embedded | |
| Environmental | Operating Temperature | -40°C~+85°C | |
| | Vibration | 10 to 55Hz with 1.5mm amplitude 2hours | |
| | Environmentally Friendly | ROHS Compliant | |



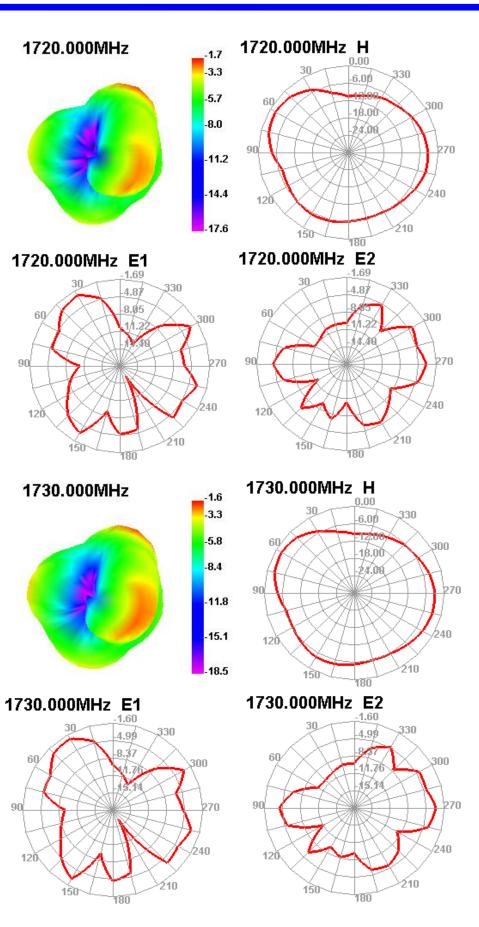
3. Testing of Gain, Efficiency & Radiation Pattern

3.1 1720.00Mhz - 2710.00MHz

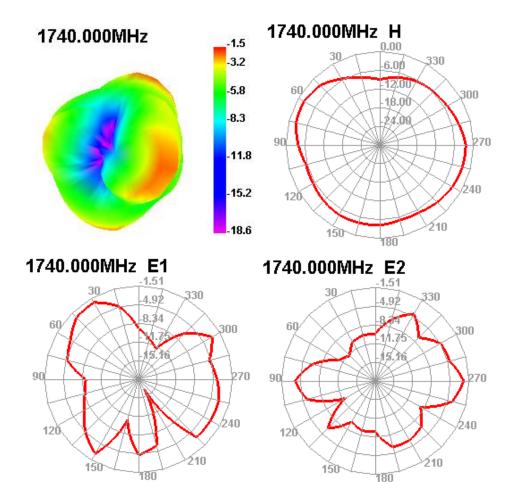






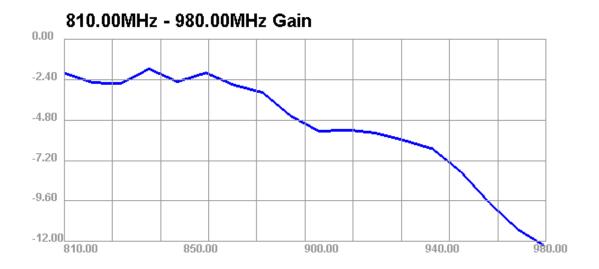


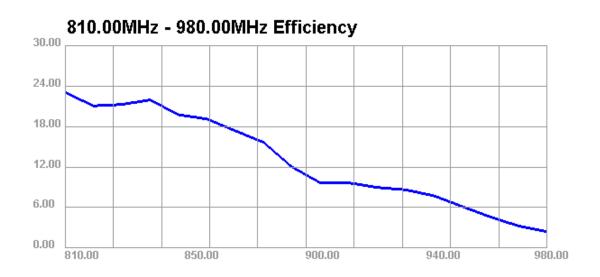




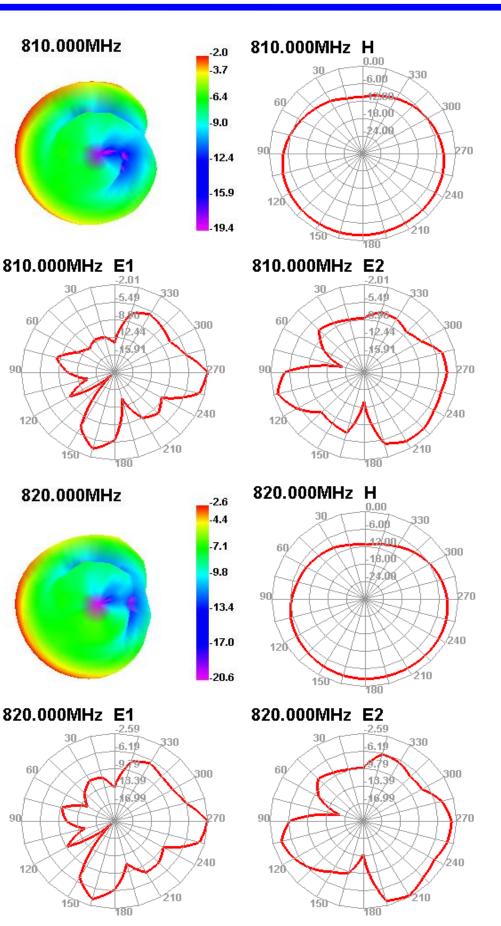


3.2 810.00Mhz - 980.00MHz

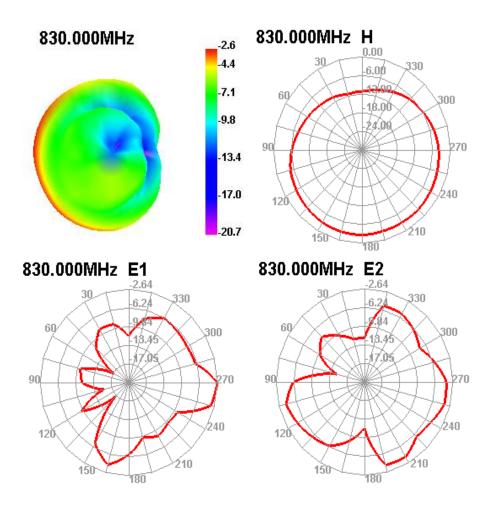






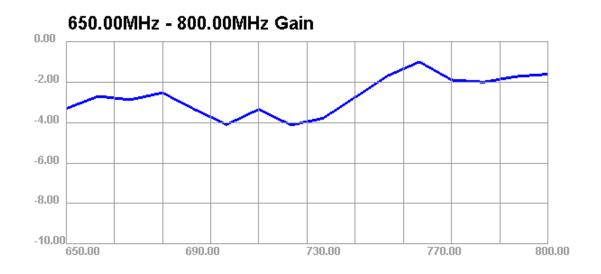


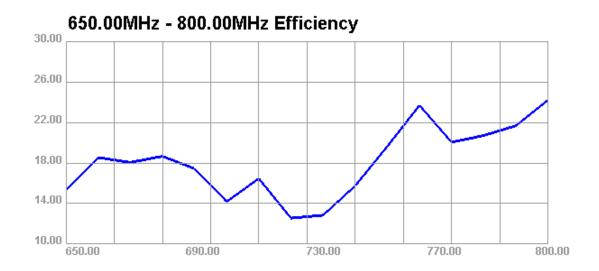




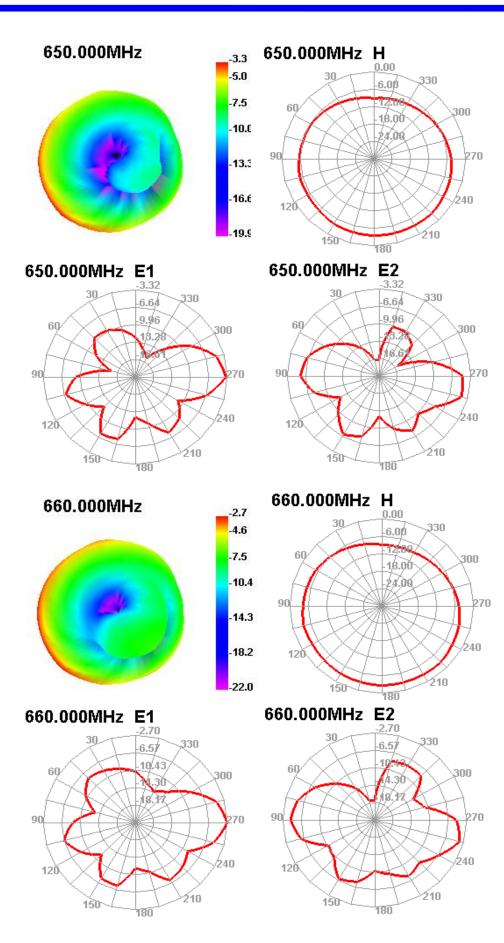


3.3 650.00Mhz - 800.00MHz

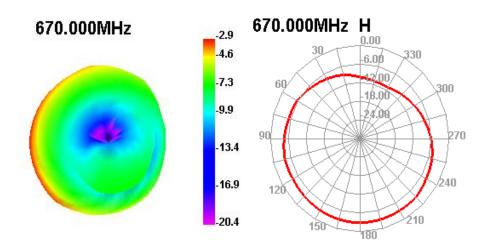


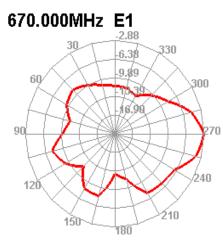


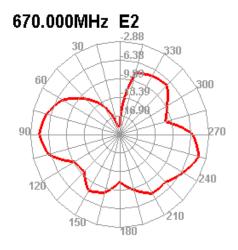




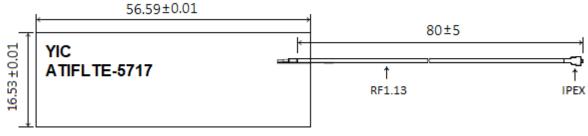








4. Drawing



Unit : mm



5. Characteristics and Reliability Test

| Test Items | | Test Condition and Procedure | Requirements |
|------------|-----------------|--|--------------------------------|
| C1 | S.W.R. | Set DUT on Network Analyzer; make individual calibration to test | Directive DUT specification |
| C2 | Antenna Gain | Set DUT on Antenna Chamber; make individual calibration to test | Directive DUT specification |
| M1 | Vibration | MIL-STD-202G, 201A | 1. No Visual Damage |
| | | Amplitude: 0.03 inch (0.76mm); Freq: 10 to 55 Hz 3 directions; 2 hours for each direction | 2. Frequency Tol.<= 5% |
| M2 | Random | Height: 1.5 Meter; | 1. No parts separated |
| | Drop | 3 directions; 1 time for each direction | 2. Frequency Tol.<= 5% |
| М3 | Solderability | MIL-STD-202G, 210F, cond. A | 1. Mounted on PCB |
| | | Solder iron: 350±10°C; Duration: 5 seconds | 2. No Visual Damage |
| M4 | Terminal- | MIL-STD-202G, 211A, cond. A | 1. Directive DUT specification |
| | Pull Test | Holding with individual specification; force applied | 2. Frequency Tol.<= 5% |
| | | to axis of terminal | |
| M5 | Terminal- | MIL-STD-202G, 211A, cond. E | 1. Directive DUT specification |
| | Torque Test | Holding with individual specification; applied | 2. Frequency Tol.<= 5% |
| | | clockwise and counterclockwise to the axis of | |
| | | terminal | |
| M6 | Dimension | Inspection of dimension, color, material, package, | Directive DUT specification |
| | | surface process | |
| E1 | Salt Spray | MIL-STD-202G, 101E, cond. B | After 2 Hours Recovery |
| | | Temp: 35°C; RH: >= 95%; NaCl solution: >= 5%; | 1. No Visual Damage |
| | | Time: 48 hours | 2. Frequency Tol.<= 5% |
| E2 | Humidity | MIL-STD-202G, 103B, cond. B | After 2 Hours Recovery |
| | | Temp: 40°C; RH: >= 95%; Time: 48 hours | 1. No Visual Damage |
| | | | 2. Frequency Tol.<= 5% |
| E3 | Thermal | 1 Cycle: - 40°C (30 minutes) to + 80°C (30 minutes) | After 2 Hours Recovery |
| | Shock | Cycles: 24 | 1. No Visual Damage |
| | | | 2. Frequency Tol.<= 5% |
| E4 | Life (High | MIL-STD-202G, 108A, cond. A | After 2 Hours Recovery |
| | Temp.) | Temp: 85°C; Time: 96 hours | 1. No Visual Damage |
| | | | 2. Frequency Tol.<= 5% |
| R1 | RoHS | With Reference to IEC 62321:2008 with flow chart | Directive RoHS 2002/95/EC |
| R2 | PFOS | With Reference to USA EPA 3540C:1996 by LC/MS | Directive RoHS 2006/122/EC |
| R3 | PFOA | With Reference to USA EPA 3540C:1996 by LC/MS | Directive RoHS 2006/122/EC |





6. Note

6.1 This product specification guarantees the quality of our product as a single unit. Please make sure that your product is evaluated and confirmed against your specifications when our product is mounted to your product.

6.2 The product will get free warranty for one year since the date of purchase users operate in the correct way; users will have to pay cost of the materials and maintaining fee out of the condition.

6.3 Electrostatic sensitive device. Observe precautions for handling.