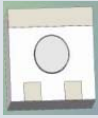




SMD Tunable RF Inductor Comparison 1

Yantel VS Traditional tunable Inductor

| Manufacturer/ Item | Yantel  Φ1 , Φ1.6, Φ2 series | Company C  | Company J  |
|-------------------------------------|---|---|---|
| Inductance values range | Series design, accurate tuning, up to 6GHz 3-30nH at 1GHz | 30-100nH at 150MHz | 30-100nH at 150MHz |
| Typical Q@ Freq (MHz) | Q value = 165 at 5.1GHz | Q value = 90 at 100MHz | Q value = 90 at 100MHz |
| SRF Value (Self-resonant frequency) | Up to 7300MHz | ≤ 6000MHz | ≤ 6000MHz |
| Soldering | Capable of reflow soldering, suitable for mass production | Wave soldering only | Wave soldering only |
| Size | 3×3×3 (mm) | 5.21×5.21×7.87 (mm) | 5.21×5.21×7.87 (mm) |
| Operating temperature | -40 °C~ +125 °C | -40 °C~ +85 °C | -40 °C~ +85 °C |

SMD Tunable RF Inductor Comparison 2

| Yantel Tunable Inductor VS Fixed Capacitor/inductor | | |
|--|--|---|
| Items | Tunable Inductor | Fixed Capacitor/inductor |
| Patent | Patent granted in USA, China | No patent |
| Tuning Method | Tuning inductance directly on the PCB | Capacitance or inductance not tunable. In impedance matching, the devices have to be desoldered first to replace them with new capacitors or inductors in other values. |
| Reliability | Surface mountable by reflow solder, high reliability and safe operation | The process of repeated desolder and resolder causes “pad off” risk or poor soldering, decreasing reliability of the system and device. |
| Overall Cost | Minimize labor cost by tuning directly on the PCB | Low production capability (50 pcs antennas per operator/day)raises overall cost |
| Efficiency in product line | Tuning the antenna can be done in 3 seconds, highly enhancing the efficiency | Limited efficiency in tuning the antenna(50 pcs per operator/day) |

