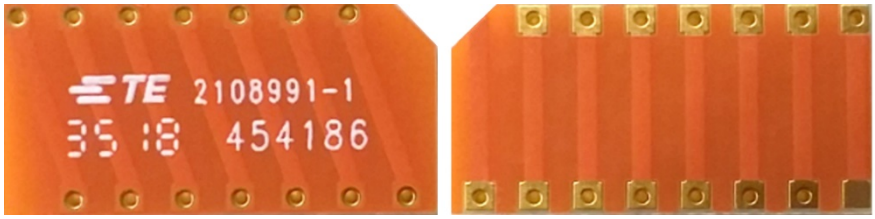
698– 960 MHz Helical Antenna for IoT/ LPWAN/ ISM

Part Number： 2108991-1



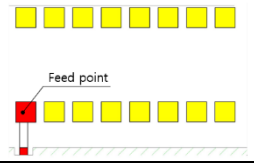
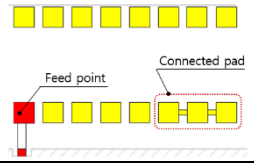
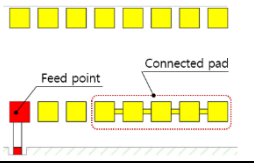
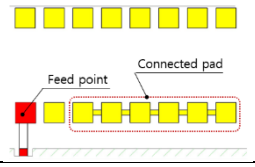
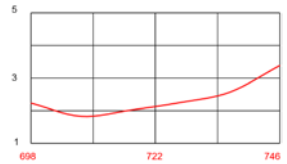
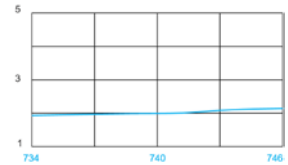
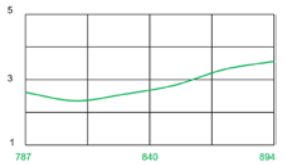
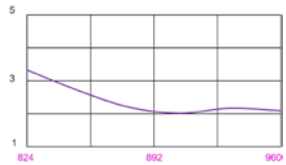
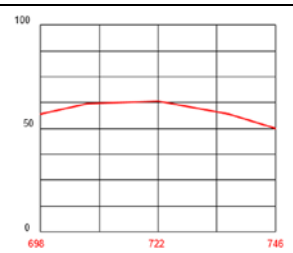
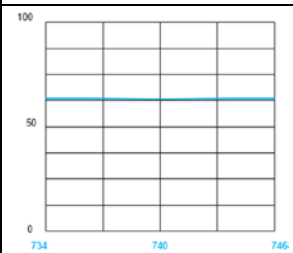
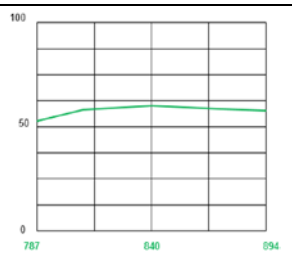
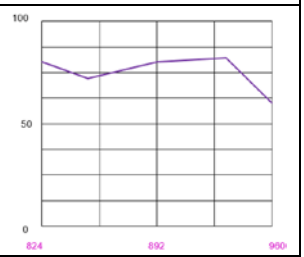
Product Facts

- Global LPWAN/ ISM band antenna
- Easy tuning capability
- 4 different frequency bands can be selected, determinded by PCB pad layout
- Available in Tape & Reel packaging
- Minimum matching circuits required
- Bandwidth and performance is dependent on ground plane size

Specifications

- Frequency Range(MHz) — 698-960
- Peak Gain — See the below chart
- VSWR — ＜3.5:1
- Azimuth Beam width — Omni directional
- Power Handing — 10 Watt cw
- Feed Point Impedance — 50 ohms
- Size — 18.00mm x 9.00mm x 1.57mm
- Weight — <0.5g
- Mounting — Surface-mount technology
- Keep Out Area — See diagram on page 7
- Operating Temperature — -40～+85℃

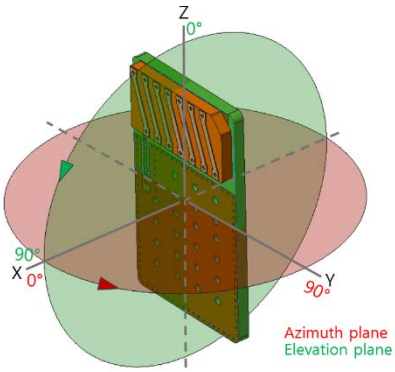
Summary data

	698 – 746 MHz	734 – 746 MHz	787 – 894 MHz	824 – 960 MHz
Figure				
VSWR				
Efficiency [%]				
Peak Gain [dBi]	+ 0.2	+ 0.1	+ 0.5	+ 1.2

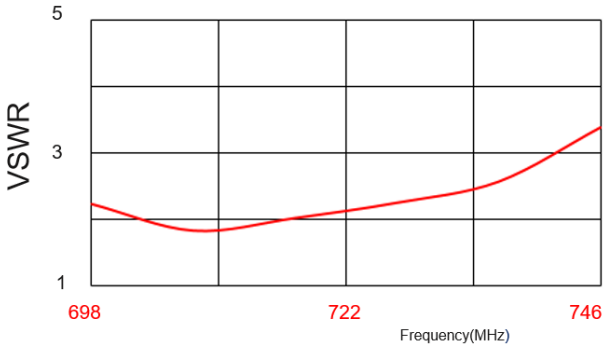
698– 960 MHz Helical Antenna for IoT/LPWAN/ ISM

698-746MHz

Test Orientation in Free Space

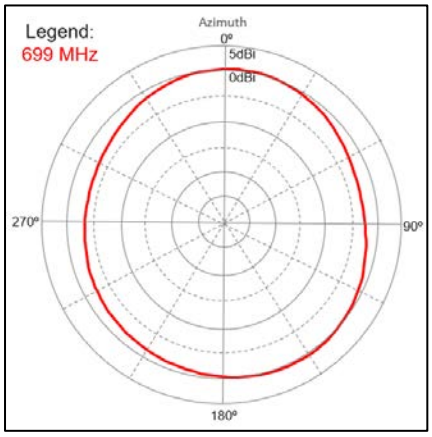


VSWR

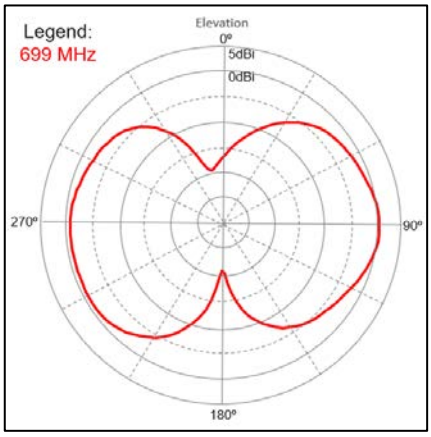


Azimuth

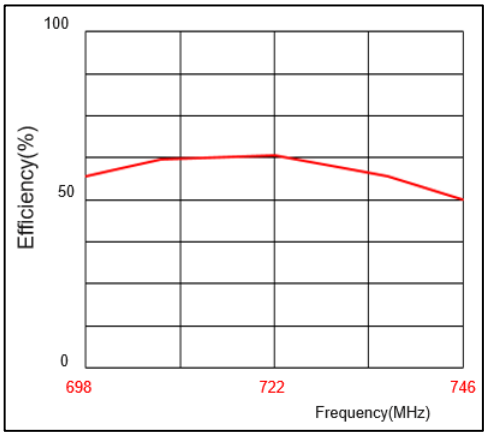
698-746MHz



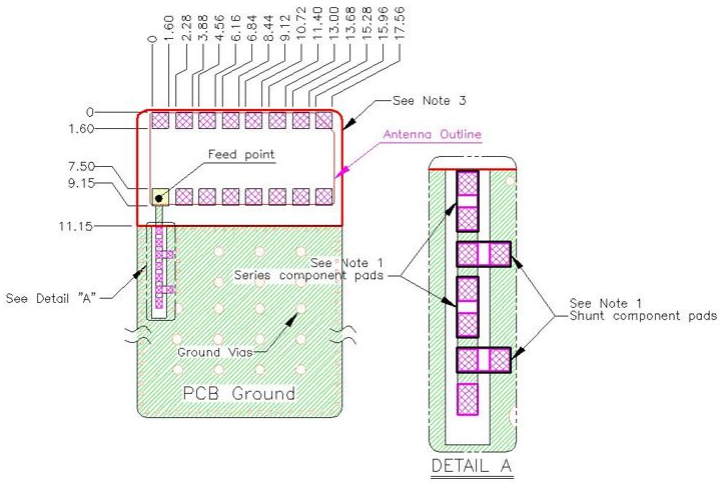
Elevation



Efficiency



Mounting Guide



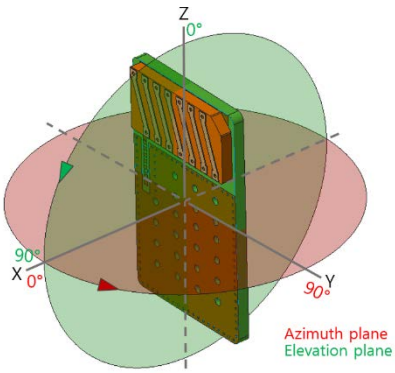
NOTES: 1. Suggested matching component pads.
2. Antenna must be mounted on the edge of PCB.
3. No copper allowed in designated area on all PCB layer –
4. For more information please call TE.

Dimensions: mm
Diagram is not to scale

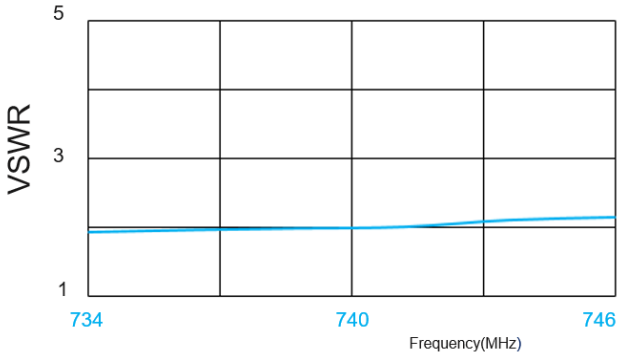
698– 960 MHz Helical Antenna for IoT/ LPWAN/ ISM

734-746MHz

Test Orientation in Free Space

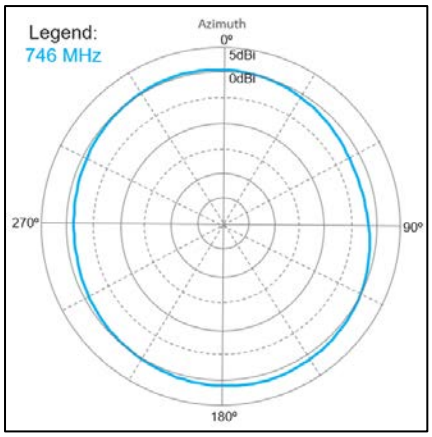


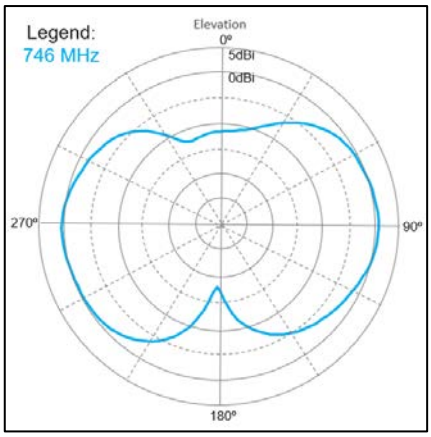
VSWR

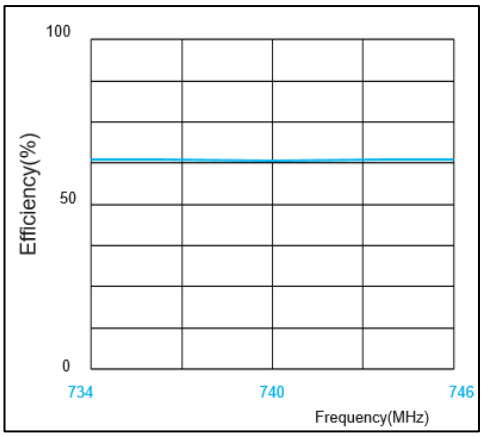


Azimuth **Elevation** **Efficiency**

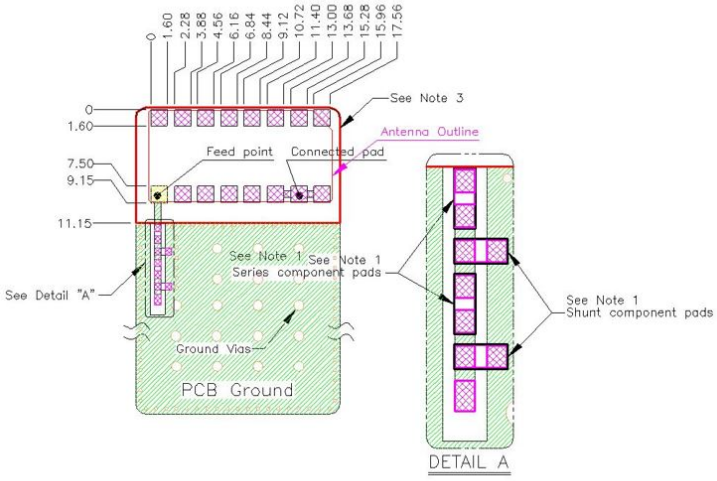
734-746MHz







Mounting Guide



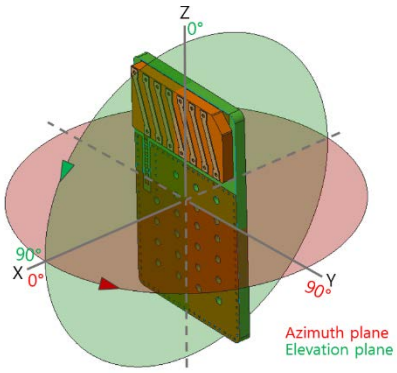
NOTES: 1. Suggested matching component pads.
2. Antenna must be mounted on the edge of PCB.
3. No copper allowed in designated area on all PCB layer –
4. For more information please call TE.

Dimensions: mm
Diagram is not to scale

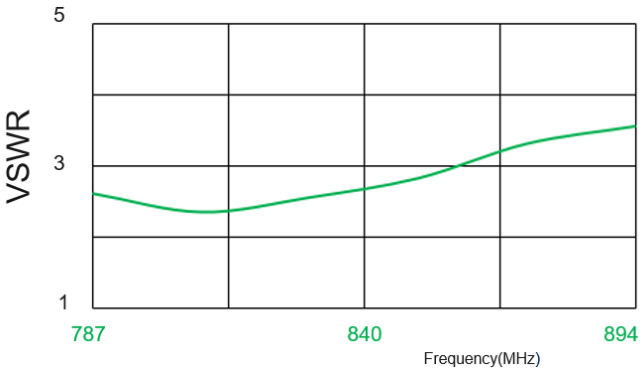
698– 960 MHz Helical Antenna for IoT/ LPWAN/ IS

787-894MHz

Test Orientation in Free Space



VSWR

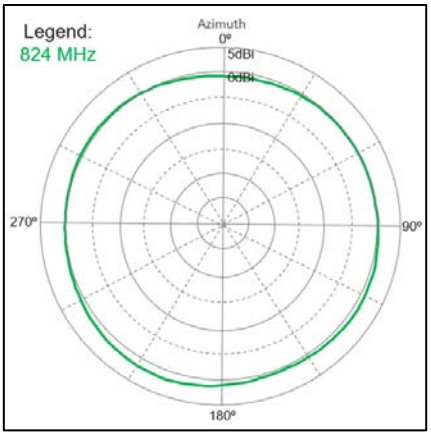


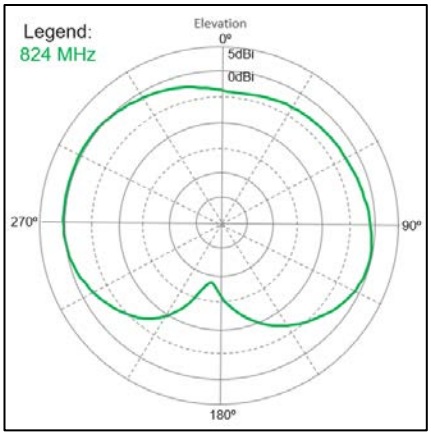
Azimuth

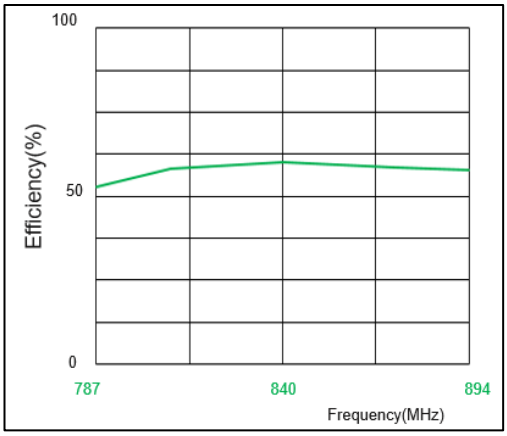
Elevation

Efficiency

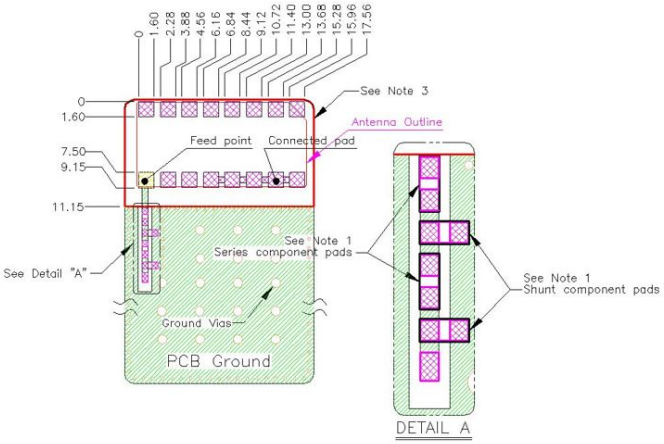
787-894MHz







Mounting Guide



NOTES: 1. Suggested matching component pads.
2. Antenna must be mounted on the edge of PCB.
3. No copper allowed in designated area on all PCB layer –
4. For more information please call TE.

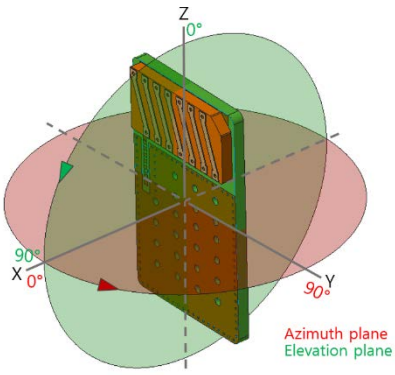
Dimensions: mm
Diagram is not to scale

698– 960 MHz Helical Antenna for IoT

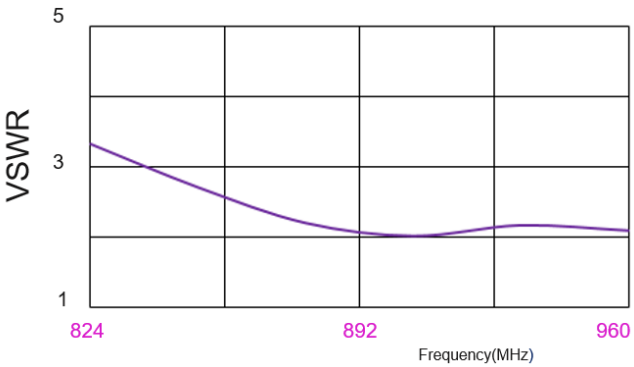
(includes frequencies of IoT solutions) (Continued)

824-960MHz

Test Orientation in Free Space

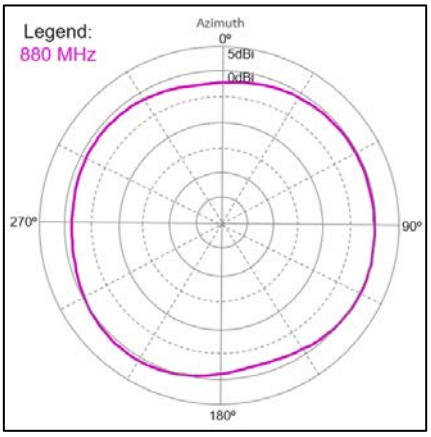


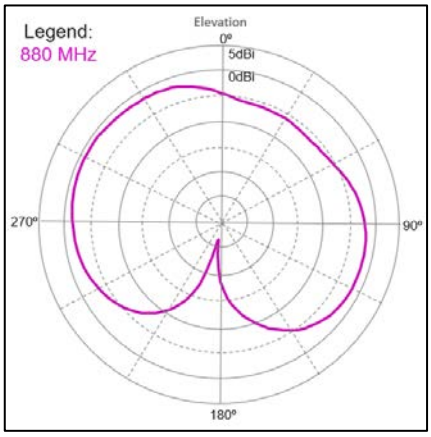
VSWR

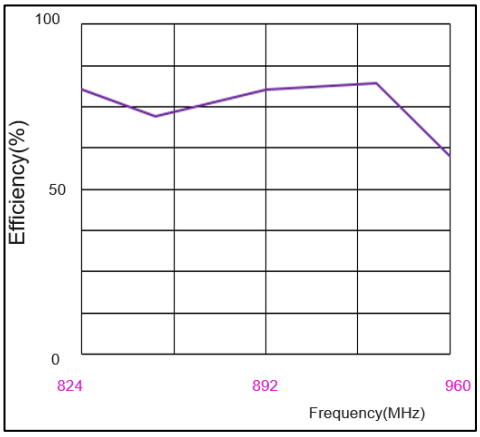


Azimuth **Elevation** **Efficiency**

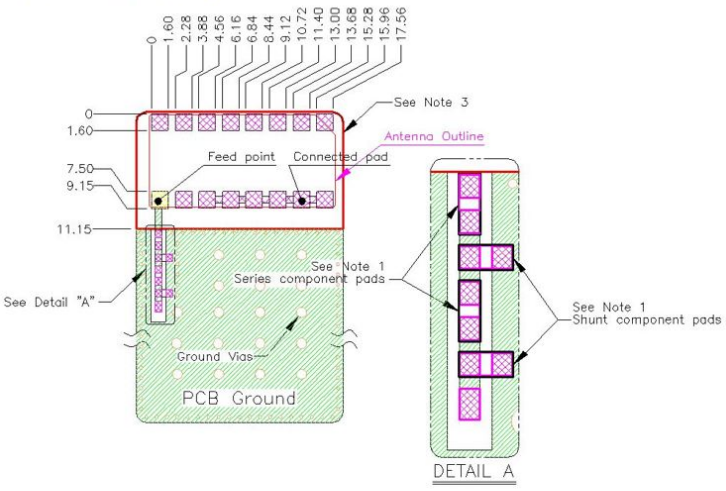
824-960MHz







Mounting Guide



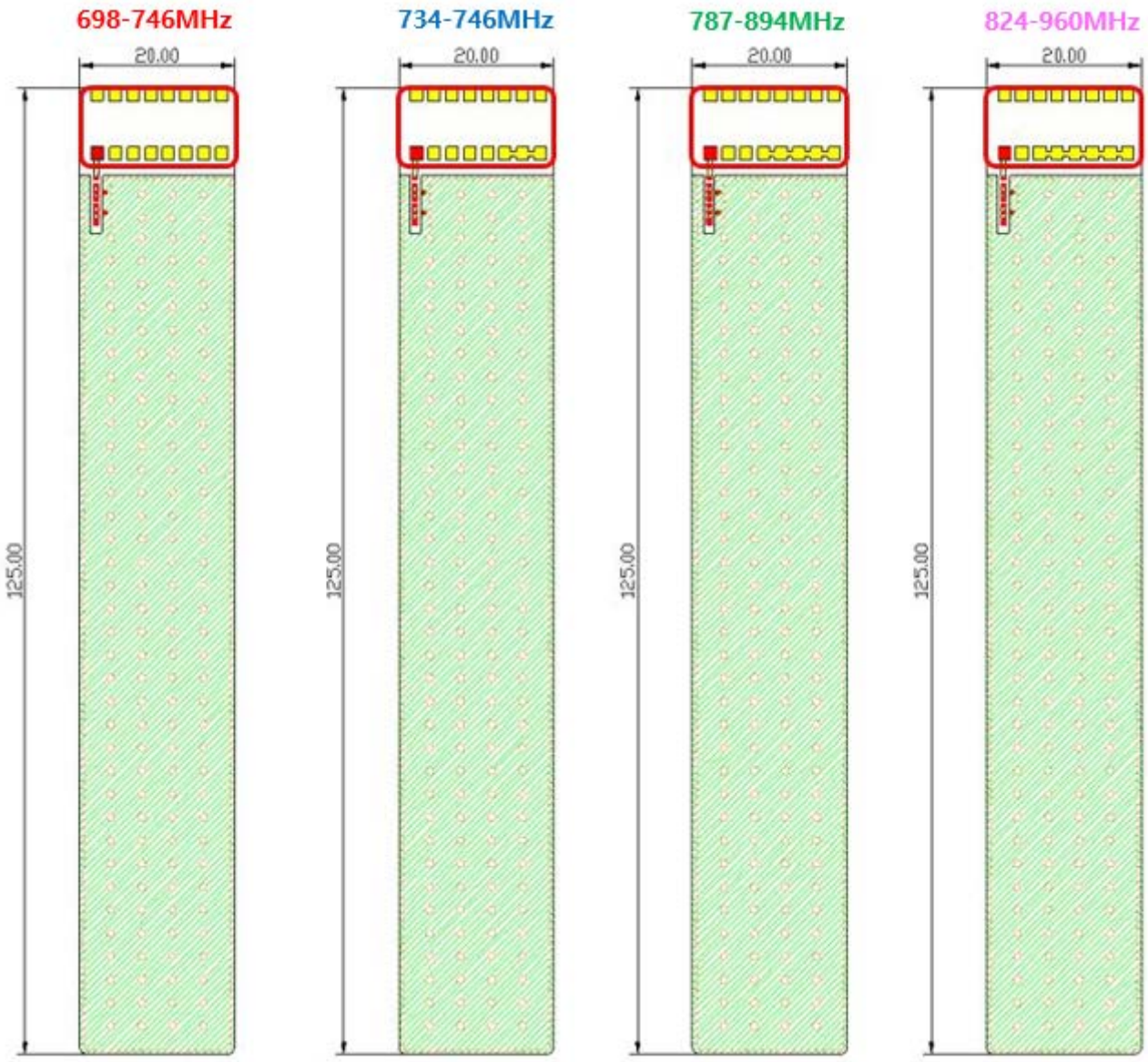
NOTES: 1. Suggested matching component pads.
2. Antenna must be mounted on the edge of PCB.
3. No copper allowed in designated area on all PCB layer –
4. For more information please call TE.

Dimensions: mm
Diagram is not to scale

698– 960 MHz Helical Antenna for IoT

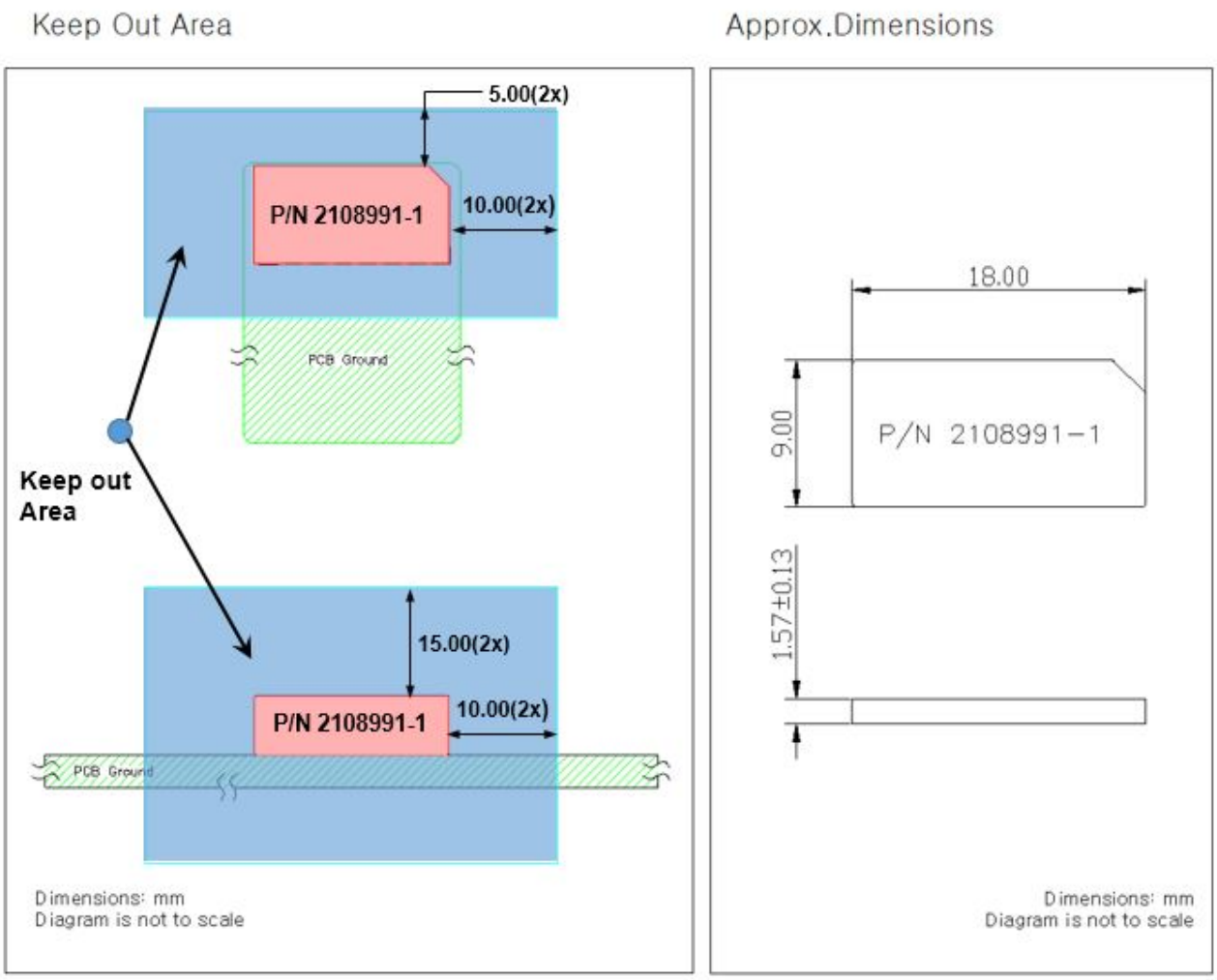
(includes frequencies of IoT solutions) (Continued)

PCB TEST Options



698– 960 MHz Helical Antenna for IoT

(includes frequencies of IoT solutions) (Continued)



- Note: In case keep out zone as recommended can't be guaranteed, contact TE for implementation service.