

5G/4G/3G/2G, NB-IoT, Cat-M, GNSS WORLD BAND COMBINATION ANTENNA

Part Numbers: 2108823-1

FEATURES & BENEFITS

- On board SMD Metal stamping antenna
- Wide Band coverage for 3G, 4G and 5G with GPS(Included Beidou and GNSS)
- Bandwidth and performance dependent on ground plane size/ design suggested Available in Tray packaging for automatic mounting
- Minimal keep out zone requirement
- Performance dependent on ground plane size and design.

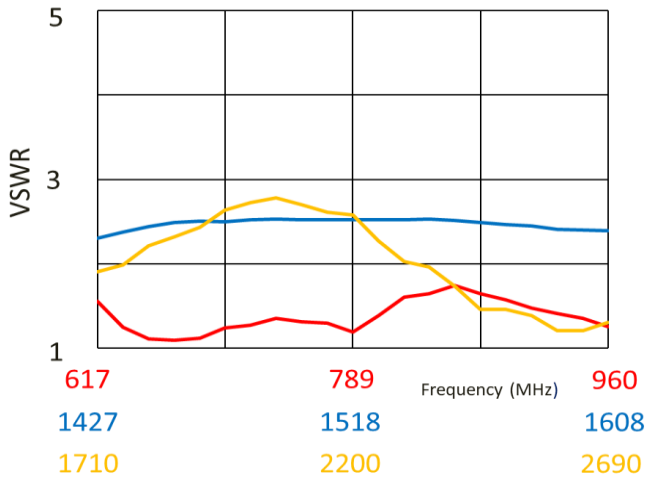
SPECIFICATIONS

Frequency Range (MHz)	617-960	1427-1608	1710-2690	3300-3800	4300-4700	5150-5875	5925-7125
VSWR	< 1.8:1	< 2.6:1	< 2.8:1	< 1.8:1	< 1.5:1	< 2.0:1	< 2.5:1
Average Efficiency	87%	54%	70%	70%	73%	58%	51%
Peak Gain	2.5dBi	2.9dBi	4.8dBi	4.6dBi	3.0dBi	2.2dBi	2.5dBi
Average Gain	-0.6dBi	-2.6dBi	-1.6dBi	-1.6dBi	-1.4dBi	-2.4dBi	-3.0dBi
Power Handling	5 Watt cw						
Feed Point Impedance	50 ohms unbalanced						
Polarization	Linear						
Size	52.0 mm x 21.3 mm x 15.0 mm						
Weight	< 6.5 g						
Mounting	Surface mount						
Operating Temperature	-40 to +85°C						
Storage Temperature	-40 to +85°C						
Packaging Specification	Tray						
Hazardous Materials	A certificate of conformance is available from the product page on TE website.						

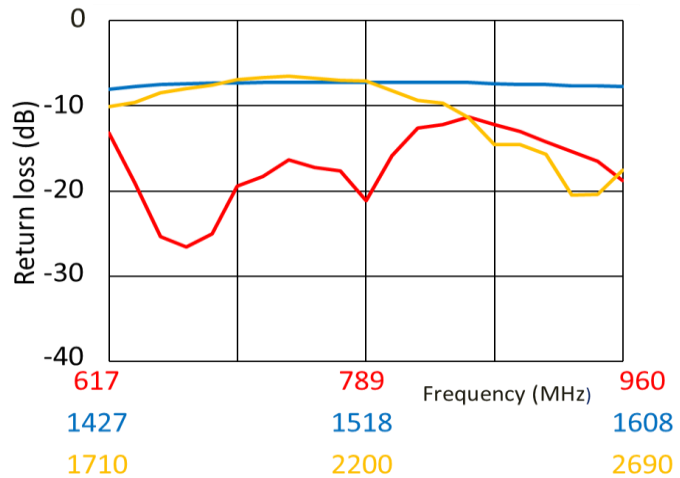
Data measured in free space and on reference ground plane of 135 mm length and 60.0 mm width, application data might vary

RF DATA

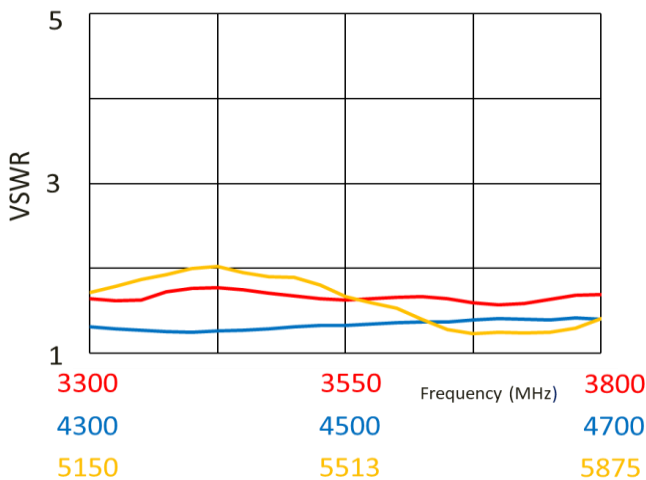
VSWR



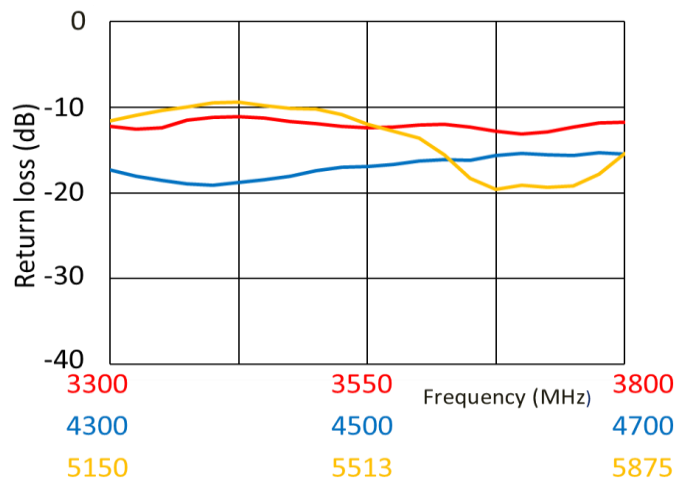
Return Loss



VSWR



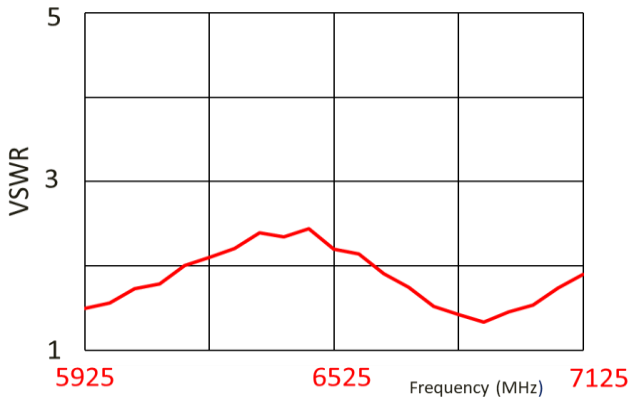
Return Loss



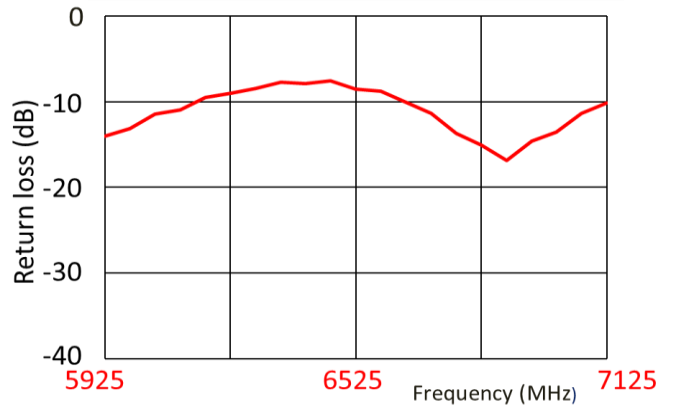
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RF DATA

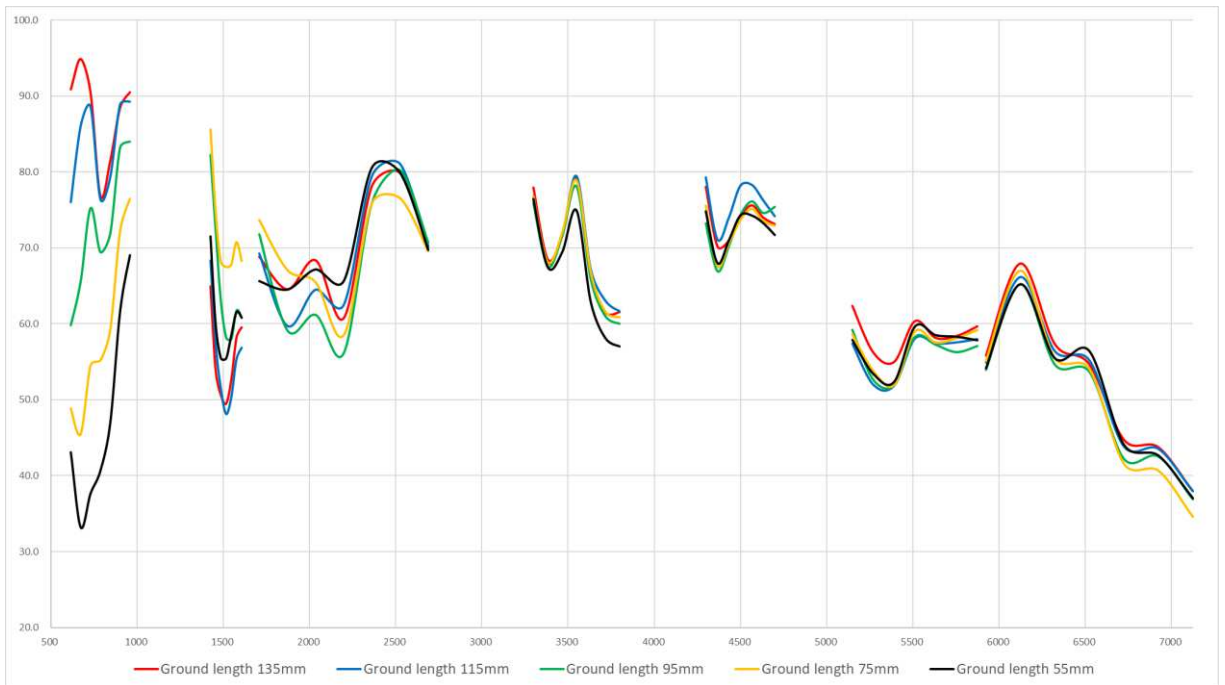
VSWR



Return Loss



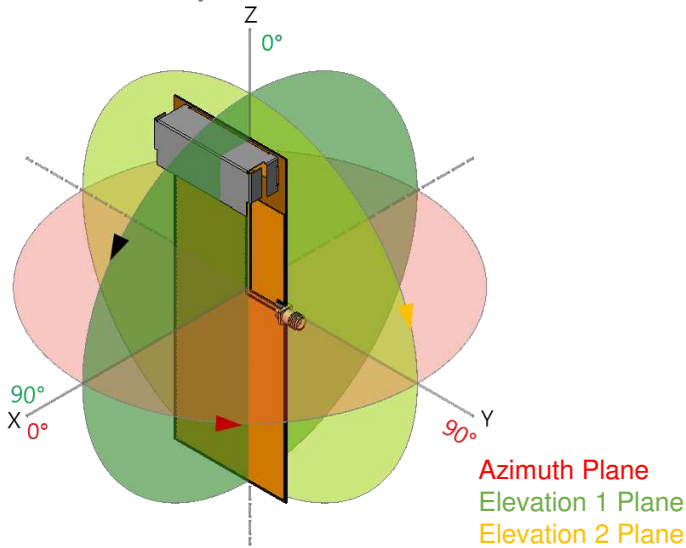
Efficiency vs. Ground plane length



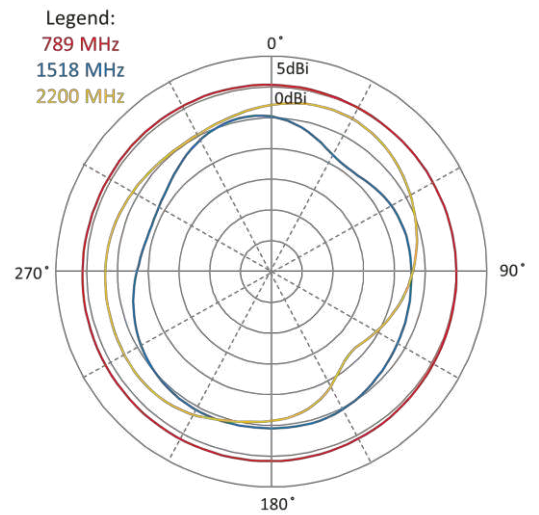
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RADIATION PATTERN

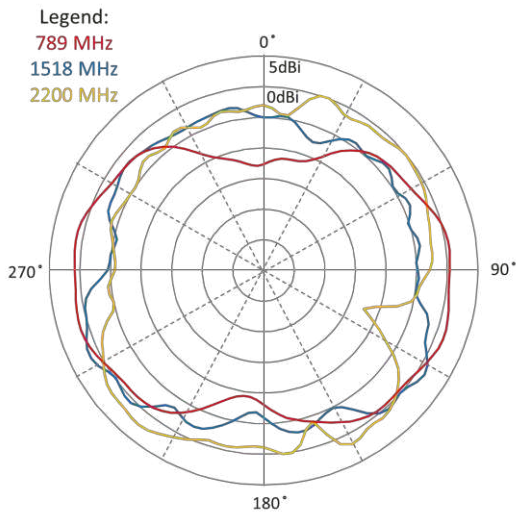
Test setup



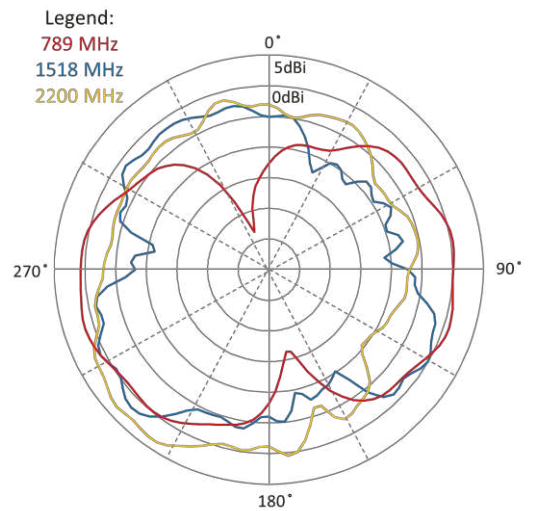
Azimuth



Elevation 1



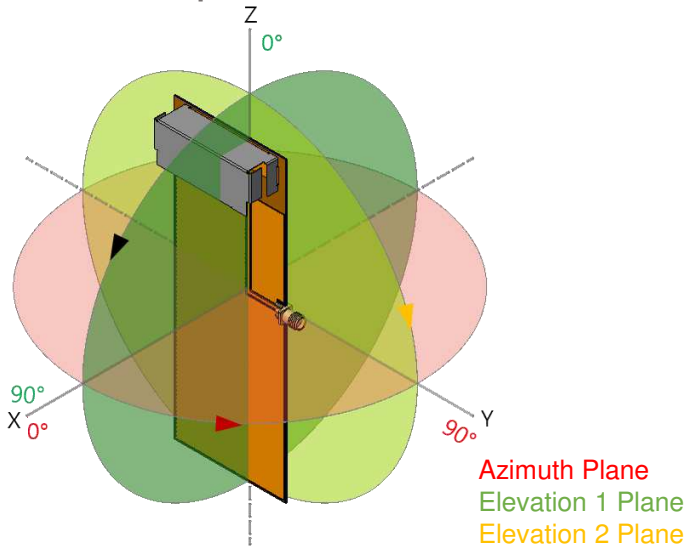
Elevation 2



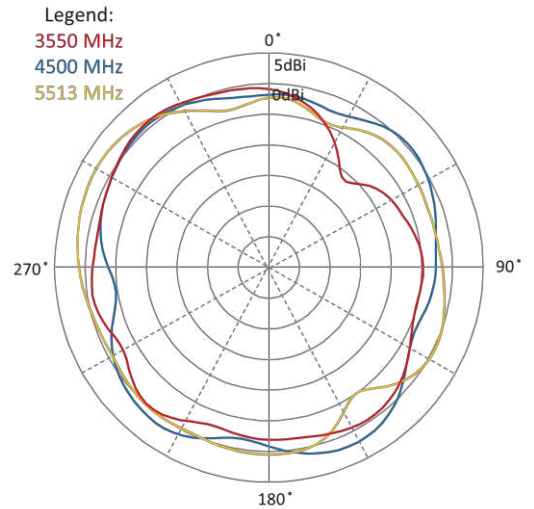
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RADIATION PATTERN

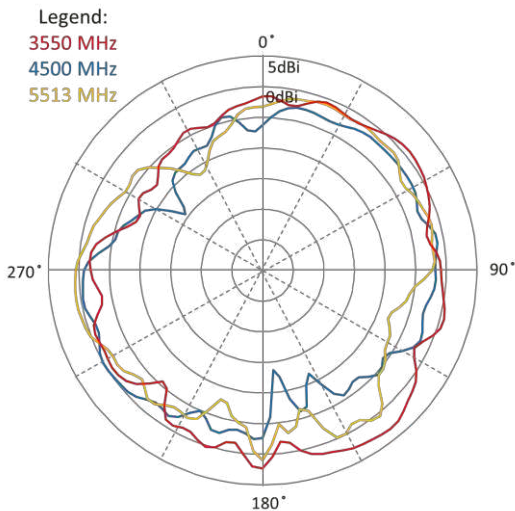
Test setup



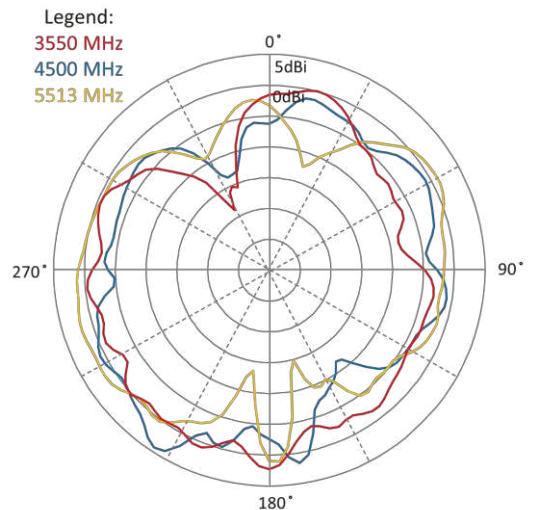
Azimuth



Elevation 1



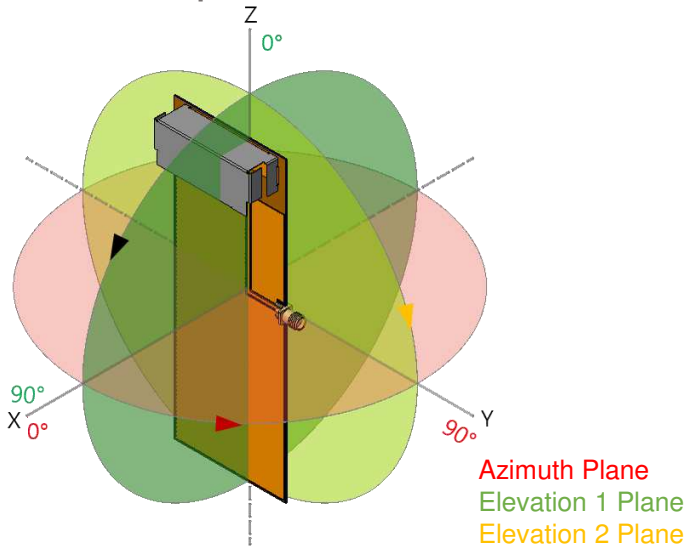
Elevation 2



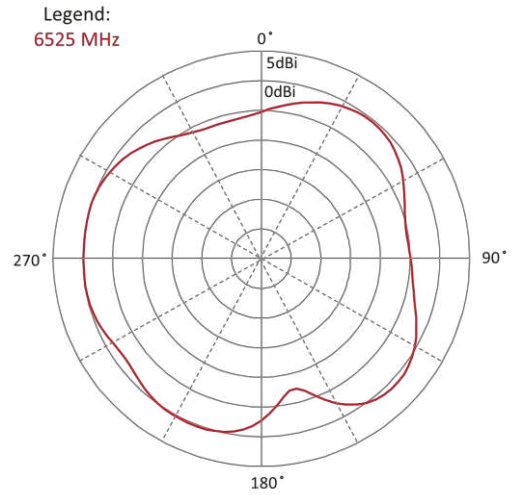
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RADIATION PATTERN

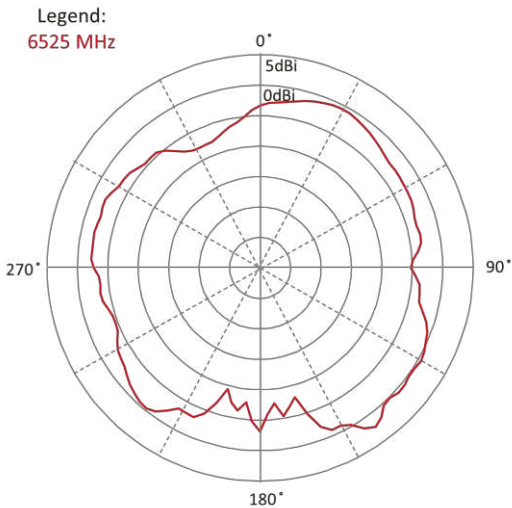
Test setup



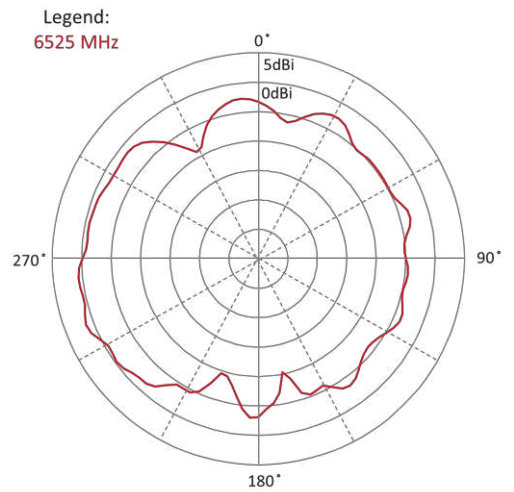
Azimuth



Elevation 1

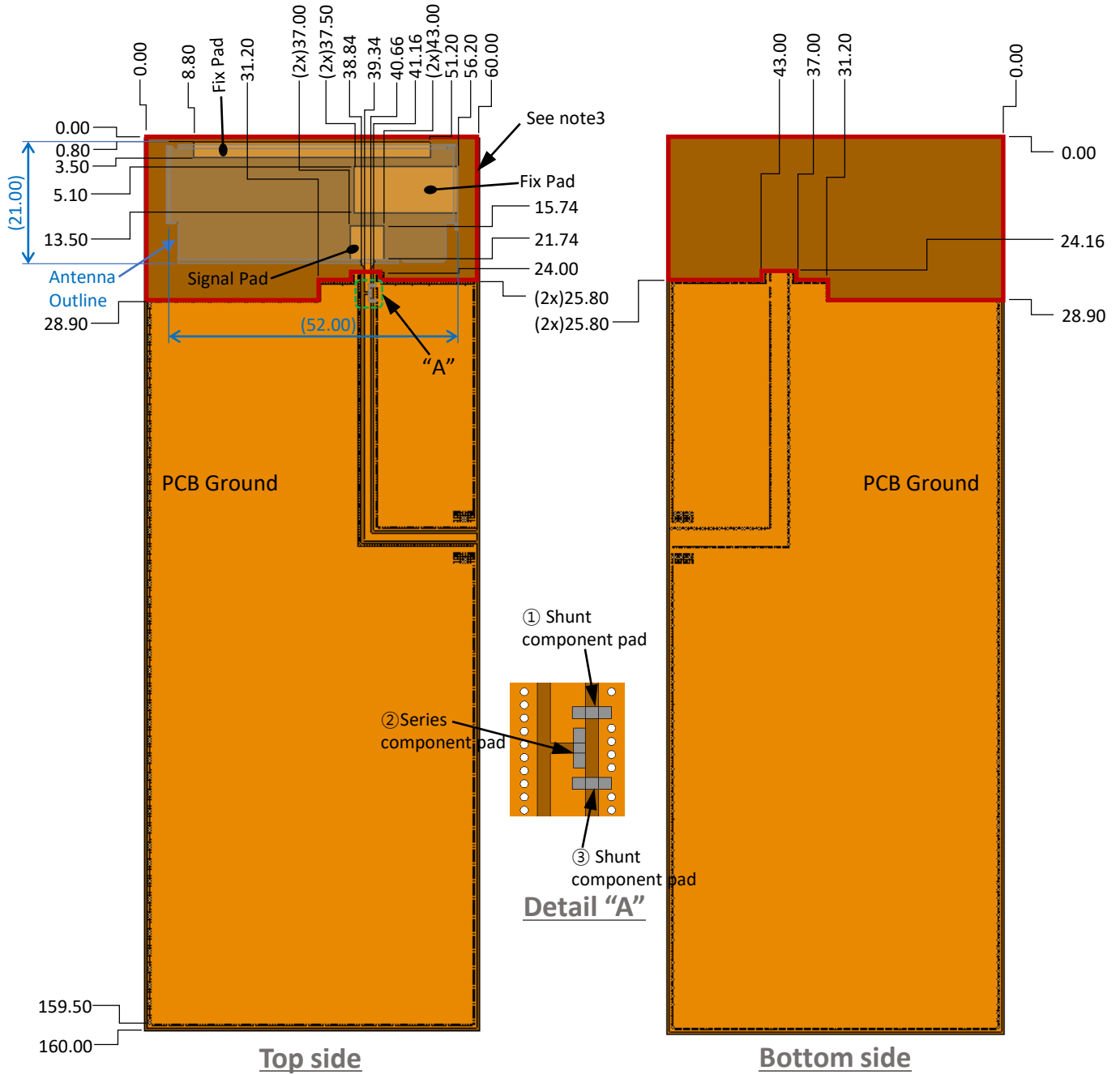


Elevation 2



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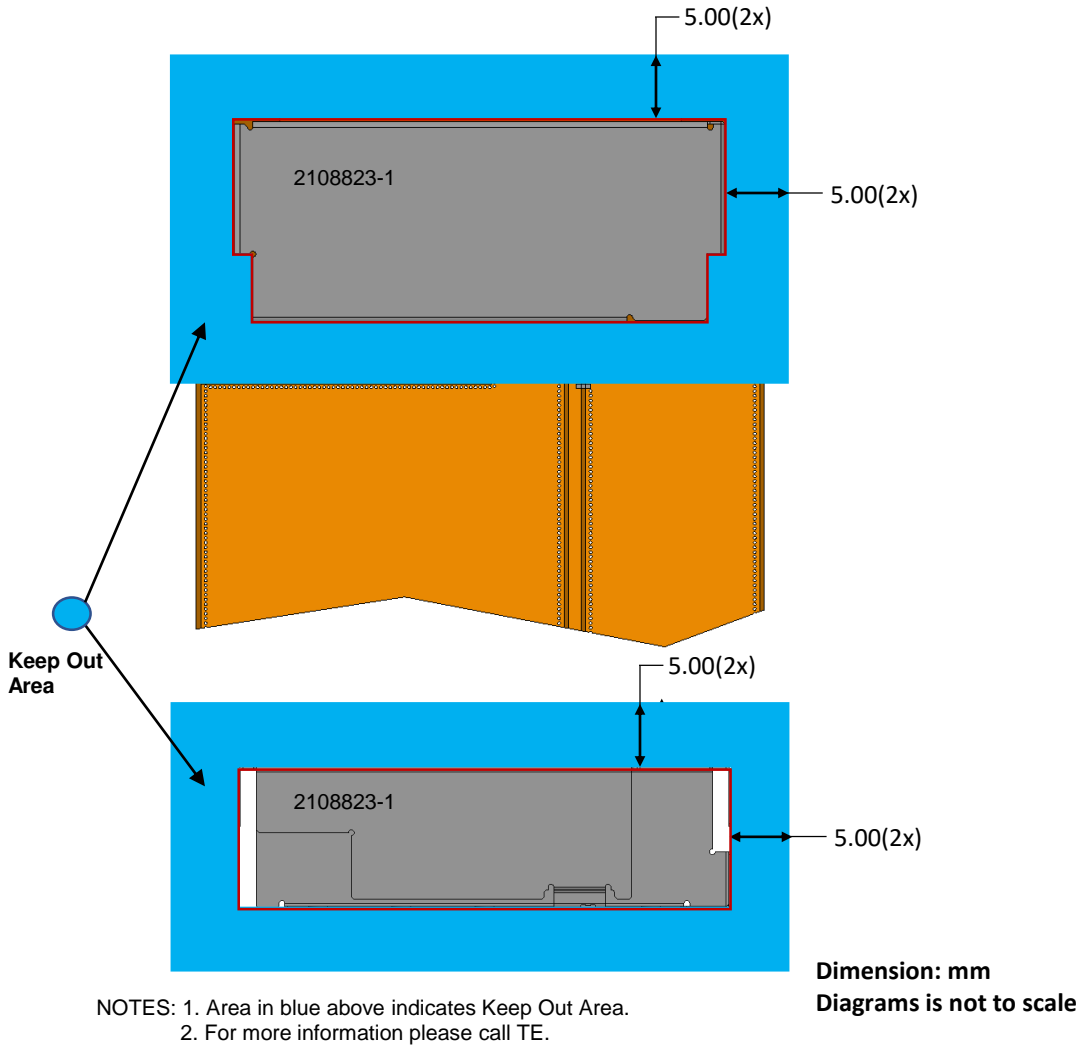
MOUNTING GUIDE



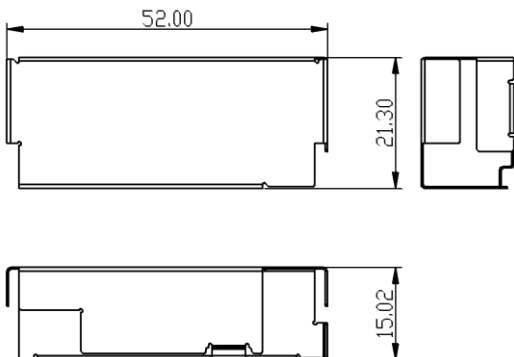
Bottom side
Dimension: mm
Diagrams is not to scale

- NOTES:** 1. Antenna must be mounted on the edge of PCB.
 2. NC = Non connection (mechanical mounting pads).
 3. No copper allowed in designated area on all PCB layers –
 4. For more information please call TE.
 5. Measured with below matching circuit condition.
 ① NC ② 1nH ③ 18nH
 6. Reference PCB Dimension(mm) - 60.0 x 160.0 x 0.8t

KEEP OUT AREA

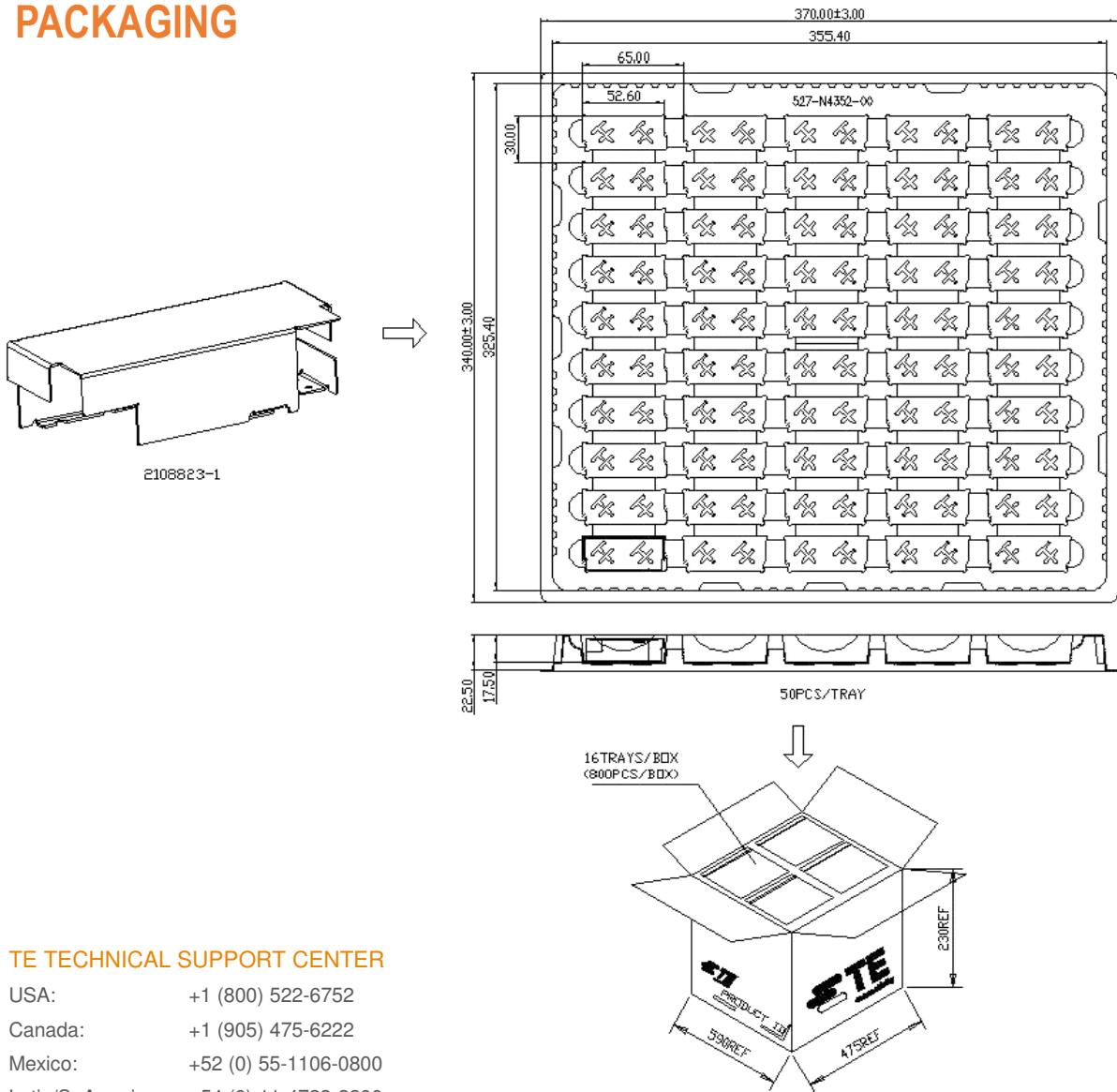


DIMENSIONS



Dimension: mm
 Diagrams is not to scale

PACKAGING



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