



SPLATCH CBRS/5G CELLULAR MIDBAND CHIP ANTENNA 2496-5000MHz

Part Numbers:

L000810-01

L000810-80

FEATURES & BENEFITS

- Omnidirectional coverage
- High efficiency, low profile, on board SMD PCB antenna
- Wideband coverage for CBRS and 5G Midband without matching circuit
- Evaluation board available for testing (L000810-80)
- Bandwidth and performance dependent on ground plane size/ design
- Suggested minimum ground plane length from antenna feed is 150mm
- Available in tape & reel packaging for automatic mounting
- RoHS 2.0 compliant, Road vehicle compliant, REACH compliant

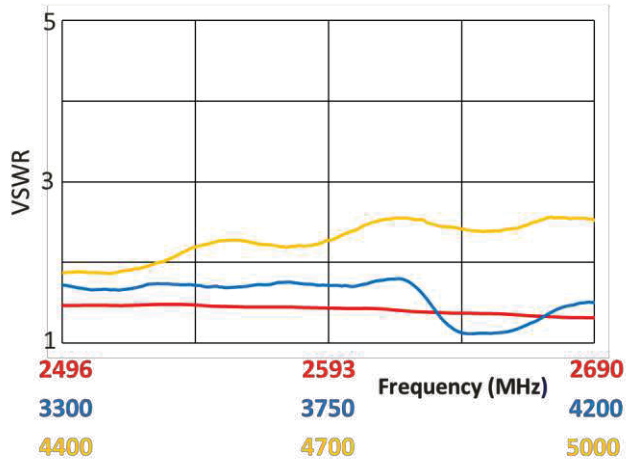
SPECIFICATIONS

Frequency Range (MHz)	2484-2690	3300-4200	4400-5000
VSWR	< 1.5:1	< 1.8:1	< 2.6:1
Average Efficiency	76.05%	69.36%	59.43%
Peak Gain	4.2dBi	3.3dBi	2.2dBi
Average Gain	-1.21dBi	-1.62dBi	-2.29dBi
Power Handling	5 Watt cw		
Feed Point Impedance	50 ohms unbalanced		
Polarization	Linear		
Size	20.0 mm x 10.0 mm x 1.61 mm ($\pm$ 0.13mm)		
Weight	< 1.5 g		
Mounting	Surface mount		
Operating Temperature	-40 to +85°C		
Storage Temperature	-40 to +85°C		
Packaging Specification	Bag & Box / Tape & Reel		
Hazardous Materials	A certificate of conformance is available from the product page on TE website.		

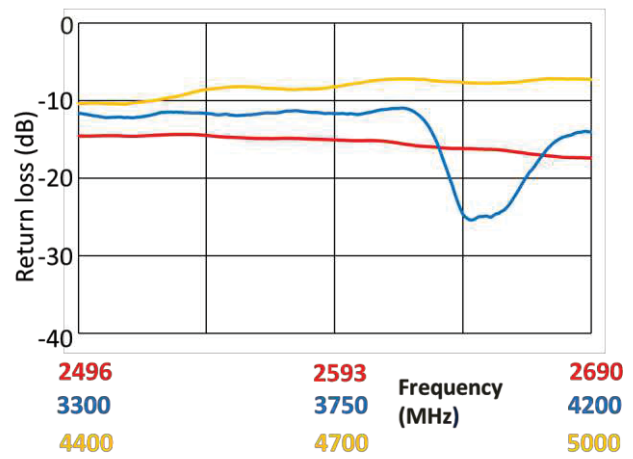
Data measured in free space and on reference ground plane of 150mm ground length and 55mm width, application data might vary.

RF DATA (SHOWN AS L000810: OTHERS CAN VARY WITH DIFFERENT GROUND LENGTHS.)

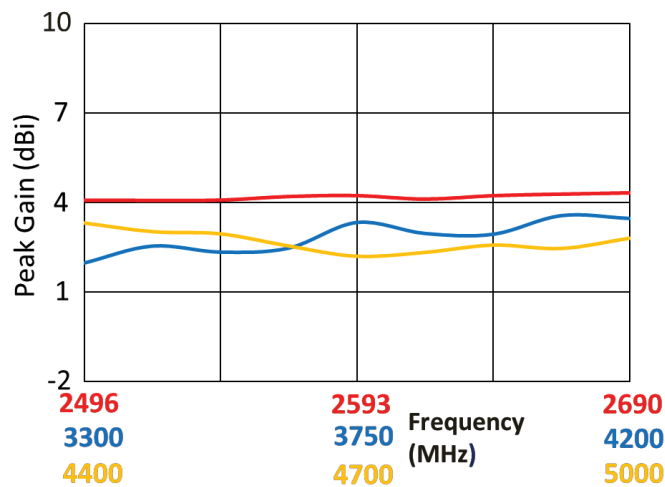
VSWR



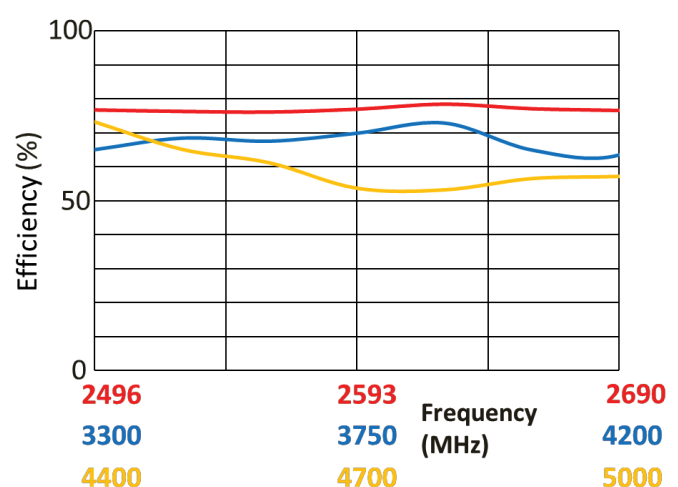
Return Loss



Peak Gain



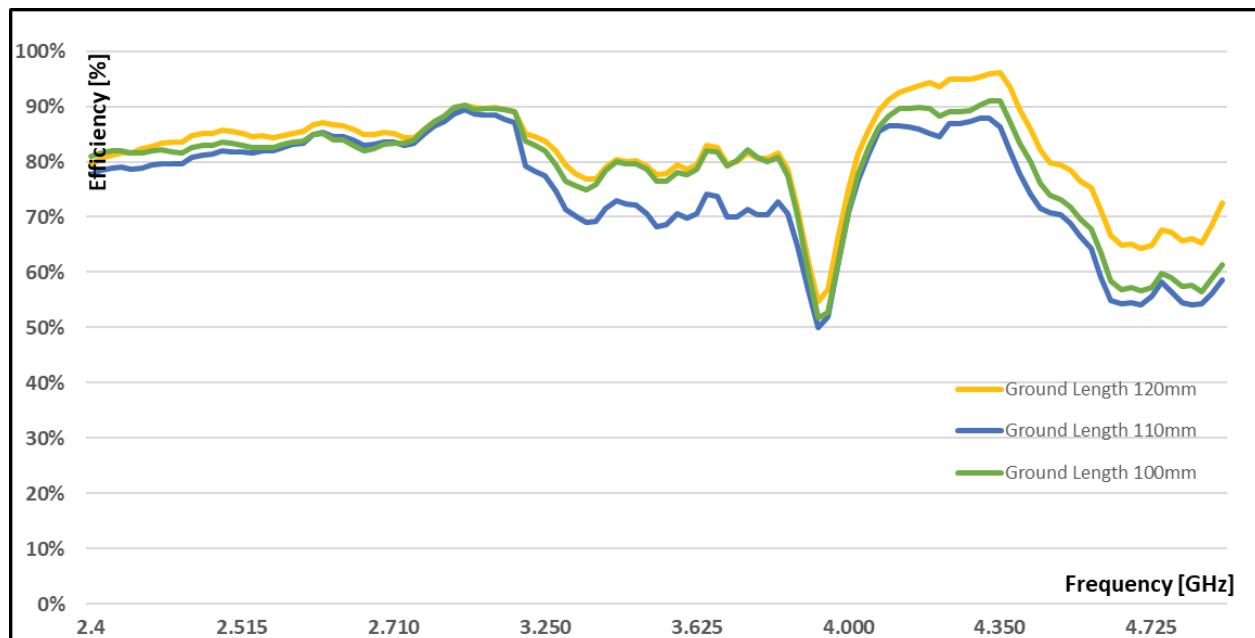
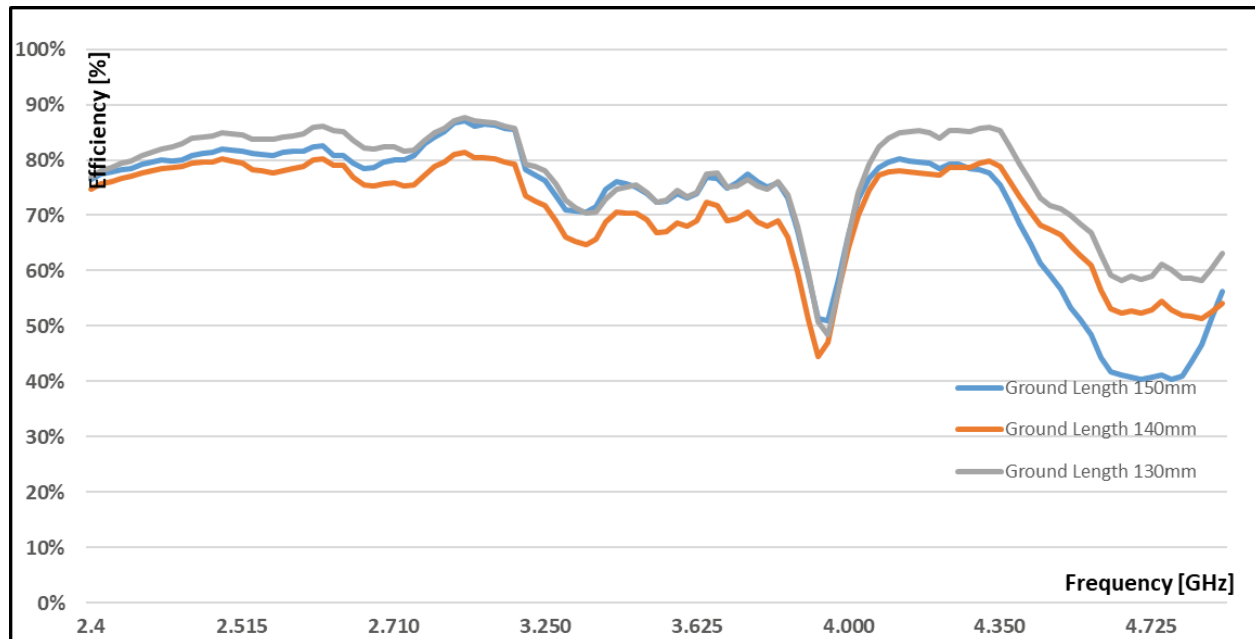
Efficiency



Data measured in free space and on reference ground plane of 150mm ground length and 55mm width, application data might vary.

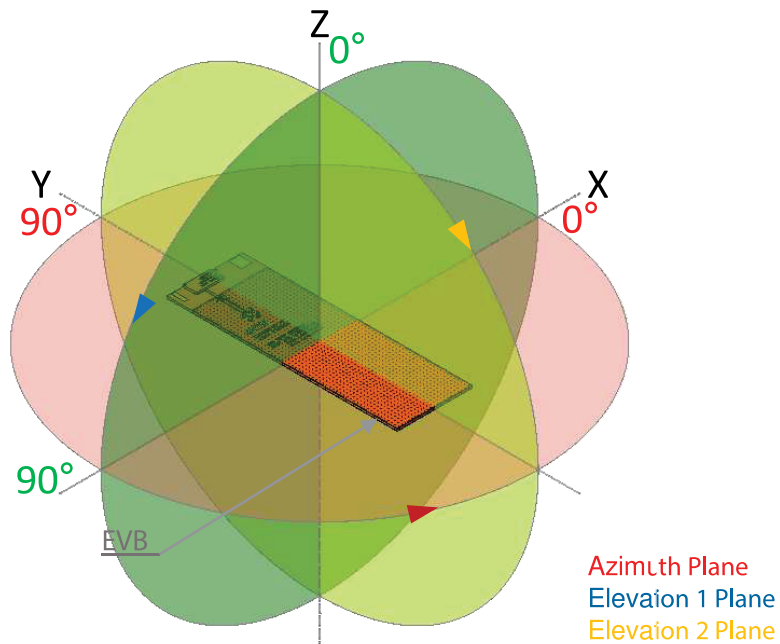
RF DATA (SHOWN AS L000810: OTHERS CAN VARY WITH DIFFERENT GROUND LENGTHS.)

Efficiency vs. Ground Length size

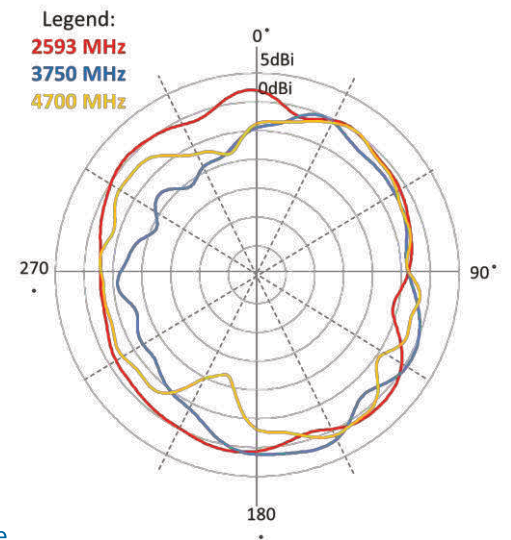


RADIATION PATTERN

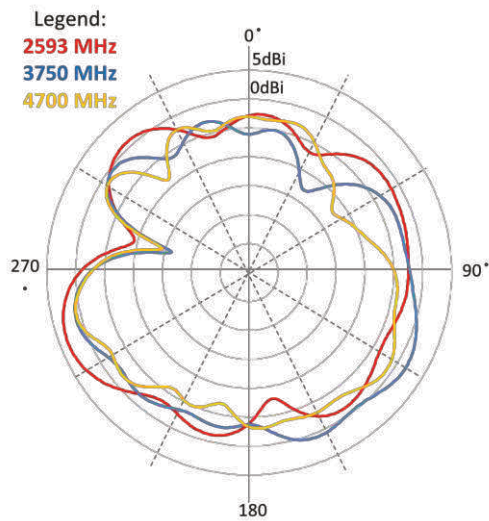
Test setup



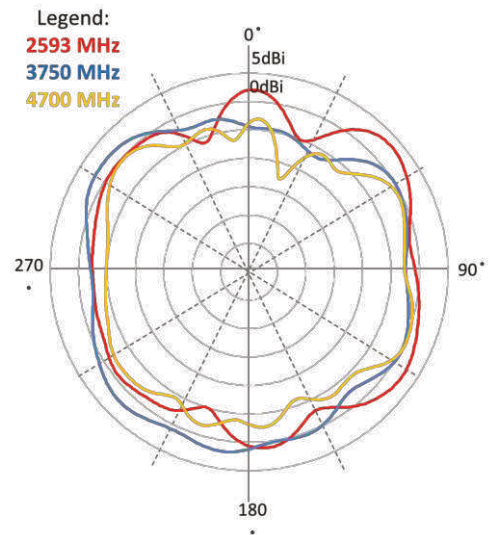
Azimuth(XY)



Elevation 1(XZ)

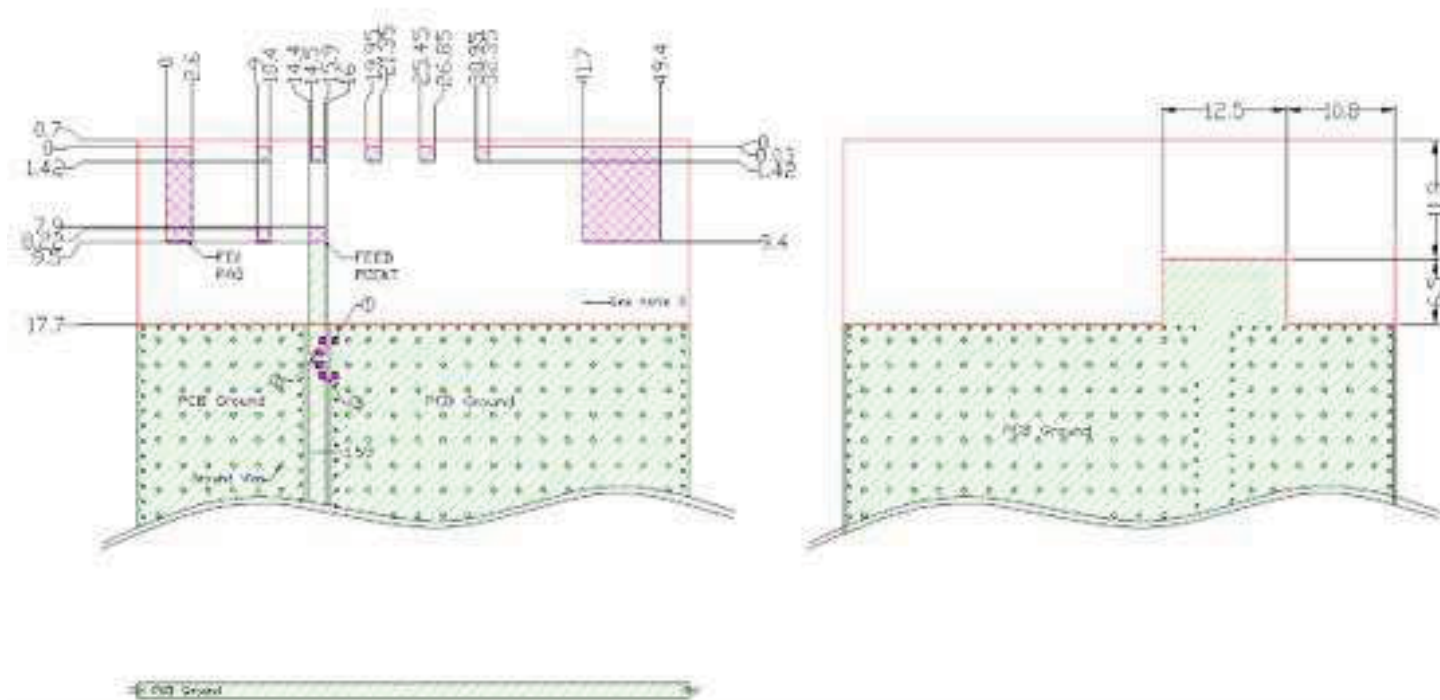


Elevation 2(YZ)



Data measured in free space and on reference ground plane of 150mm ground length and 55mm width, application data might vary.

MOUNTING GUIDE



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 0 ohm, ③ NC

6. Reference PCB Dimension(mm) - 55.2 x 168.6 x 1.61

Dimensions: mm

Diagram is not to scale

3. For more information please call TE.

Diagram is not to scale

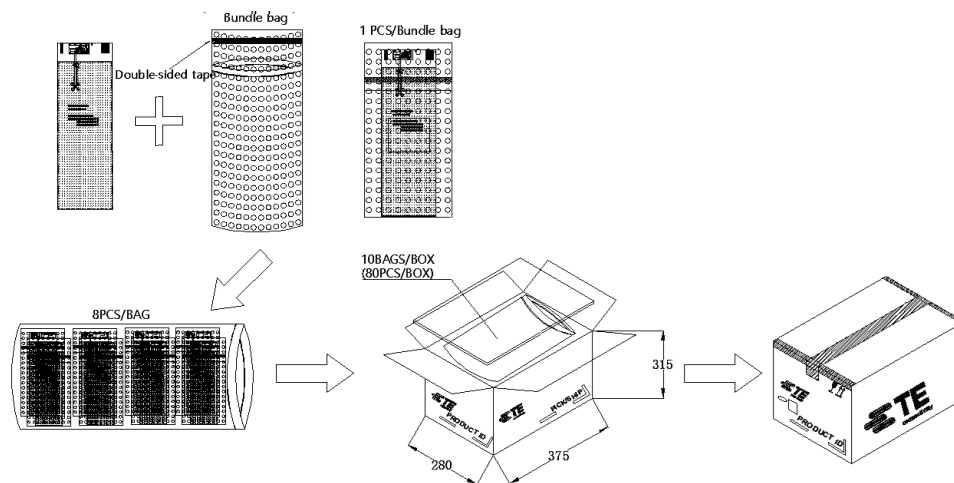
The drawing consists of three views of the L000810-01 P1 component:

- Top View:** A rectangular component with a width of 20 and a height of 10. It features the STE logo, the part number L000810-01 P1, and the text XXXX XXXXXX. There are two small circles in the top-left corner and two in the bottom-center.
- Side View:** A narrow vertical profile with a thickness of 1.61.
- Bottom View:** A rectangular area showing a grid of mounting points. A label (6x)ENIG points to a specific feature. There are two small circles in the bottom-left corner and two in the bottom-right corner.

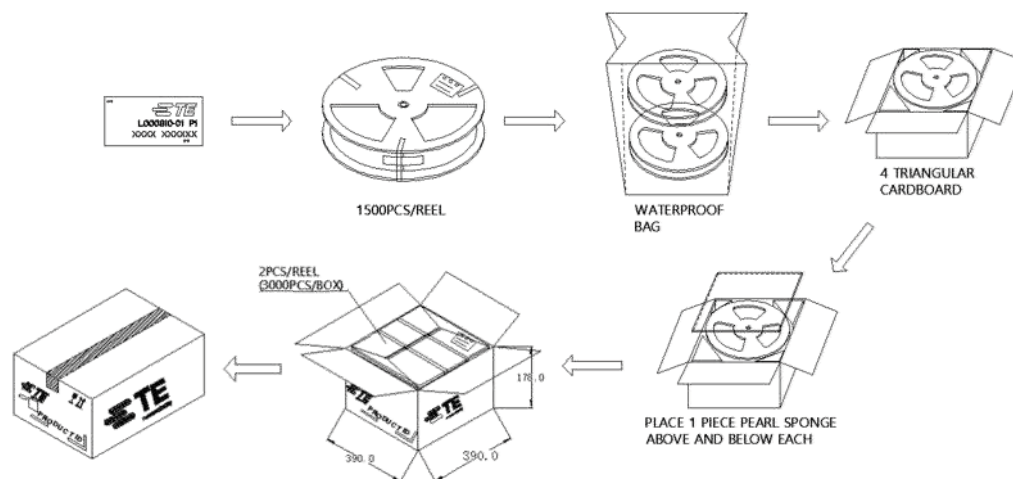
Diagram is not to scale

PACKAGING

L000810-80 (BULK)



L000810-01 (TAPE & REEL)



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Standard Antenna Solutions

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UK: +44 (0) 800-267666

France: +33 (0) 1-3420-8686

Netherlands: +31 (0) 73-6246-999

China: +86 (0) 400-820-6015

For phone numbers in other countries, go to te.com/support-center

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Revised 05-24