# L000646-01 ✔ ACTIVE

TE Internal #: L000646-01

PCB Antenna, Multi Band, 5G, Internal/Embedded Mount, Omnidirectional, 0 < 3 dBi Peak Gain

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Antennas



Communication Protocol: **5G**

Mounting Location: **Internal/Embedded**

Frequency Category: **698 – 7125**

Antenna Type: **PCB**

Directionality: **Omnidirectional**

## Features

### Product Type Features

| | |
|---|---|
| Antenna Product Type | Antenna |

### Configuration Features

| | |
|---|---|
| Antenna Style | PCB |
| Mounting Location | Internal/Embedded |
| Antenna Type | PCB |
| Band Type | Multi Band |

### Electrical Characteristics

| | |
|---|---|
| Impedance | 50 Ω |
| Antenna Operation | Passive |
| VSWR (Max) | <2.5:1 |

### Signal Characteristics

| | |
|---|---|
| Frequency Band | 698 – 7125 MHz |
| Gain (Max) | 2.9 dB |
| Frequency Category | 698 – 7125 |
| Peak Gain | 0 < 3 dBi |

## Body Features

| | |
|---|---|
| | .08 oz |

## Mechanical Attachment

| | |
|---|---|
| Polarization | Linear |

## Dimensions

| | |
|---|---|
| Product Width | 1.6 mm[.063 in] |
| Product Length | 51 mm[2 in] |
| Product Height | 14.2 mm[.55 in] |

## Operation/Application

| | |
|---|---|
| Option | Connector Ordered Separately |
| Antenna Environment | Indoor |
| Wireless Standard | 5G 3300-5000 |
| Directionality | Omnidirectional |

## Industry Standards

| | |
|---|---|
| Communication Protocol | 5G |
| Primary Application | 5G |

## Product Availability

| | |
|---|---|
| Applicable Region | Global |

## Packaging Features

| | |
|---|---|
| Packaging Method | Bag & Box |

## Product Compliance

For compliance documentation, visit the product page on TE.com>

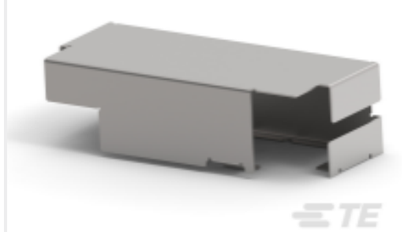
| | |
|---|---|
| EU RoHS Directive 2011/65/EU | Compliant |
| EU ELV Directive 2000/53/EC | Not Yet Reviewed |
| China RoHS 2 Directive MIIT Order No 32, 2016 | 有害物质含量符合标准要求 No Restricted Substance(s) Above Threshold |
| EU REACH Regulation (EC) No. 1907/2006 | Current ECHA Candidate List: JUNE 2025 (250)<br>Candidate List Declared Against: JUNE 2025 (250)<br>Does not contain REACH SVHC |
| Halogen Content | Low Bromine/Chlorine - Br and Cl < 900 ppm per homogenous material. Also BFR |

| | |
|---|---|
| | /CFR/PVC Free |
| Solder Process Capability | Not reviewed for solder process capability |

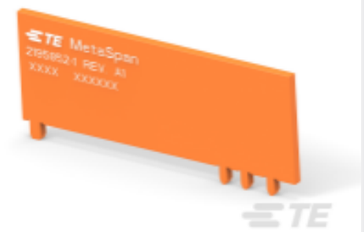
Product Compliance Disclaimer

This information is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information they provided. This information is subject to change. The part numbers that TE has identified as EU RoHS compliant have a maximum concentration of 0.1% by weight in homogenous materials for lead, hexavalent chromium, mercury, PBB, PBDE, DBP, BBP, DEHP, DIBP, and 0.01% for cadmium, or qualify for an exemption to these limits as defined in the Annexes of Directive 2011/65/EU (RoHS2). Finished electrical and electronic equipment products will be CE marked as required by Directive 2011/65/EU. Components may not be CE marked.Additionally, the part numbers that TE has identified as EU ELV compliant have a maximum concentration of 0.1% by weight in homogenous materials for lead, hexavalent chromium, and mercury, and 0.01% for cadmium, or qualify for an exemption to these limits as defined in the Annexes of Directive 2000/53/EC (ELV). Regarding the REACH Regulations, TE's information on SVHC in articles for this part number is still based on the European Chemical Agency (ECHA) 'Guidance on requirements for substances in articles'(Version: 2, April 2011), applying the 0.1% weight on weight concentration threshold at the finished product level. TE is aware of the European Court of Justice ruling of September 10th, 2015 also known as O5A (Once An Article Always An Article) stating that, in case of 'complex object', the threshold for a SVHC must be applied to both the product as a whole and simultaneously to each of the articles forming part of its composition. TE has evaluated this ruling based on the new ECHA "Guidance on requirements for substances in articles" (June 2017, version 4.0) and will be updating its statements accordingly.

## Compatible Parts



TE Part # 2108823-1
Stamped antenna, SMD, 617-7125 MHz




TE Part # 2195852-1
PCB ANT, TAB MOUNT, 698-5875MHz, 55X20mm



TE Part # 2108784-1
PCB ANTENNA, SMD, 698-6000MHz




TE Part # L000682-01
SPLATCH 5G/LTE EUROPE WIDEBAND CHIP ANT

## Customers Also Bought




TE Part #L000517-01
Antenna GNSS FPC SH L1/L5 25x25 50 UFL



TE Part #L000836-01
FPC ANT, VDP, 50mm, MHF1, 617-5000MHz



TE Part #L000848-07
FPC ANT, HDP, 50mm, MHF4L, 617-5000MHz



TE Part #L000941-07
FPC ANT, VDP, 50mm, MHF4L, 617-5000MHz



TE Part #1053354-1
2062 0000 00,SMA PCB VERT JACK



TE Part #1-1879073-8
THS10 4R7 5%



TE Part #1-1879351-4
RR01 5% 10K AMMO



TE Part #2-1879351-6
RR01 5% 33K AMMO



TE Part #2108784-1
PCB ANTENNA, SMD, 698-6000MHz



TE Part #2108792-7
FPC Ant, MHF 4L, 100mm, Wi-Fi 7

## Documents

### Product Drawings

PCB ANT, TAB MOUNT, MIMO, 1557-7125MHz

English

### CAD Files

3D PDF

3D

Customer View Model

ENG_CVM_CVM_L000646-01_1.3d_stp.zip

English

Customer View Model

ENG_CVM_CVM_L000646-01_1.2d_dxf.zip

English

Customer View Model

ENG_CVM_CVM_L000646-01_1.3d_igs.zip

English

By downloading the CAD file I accept and agree to the Terms and Conditions of use.

### Datasheets & Catalog Pages

L000646_DS

English

### Product Specifications

Product Specification

English