

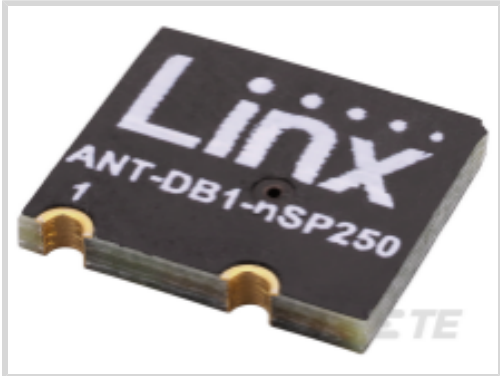
ANT-DB1-NSP250-T

✓ ACTIVE

TE Internal #: ANT-DB1-NSP250-T  
PCB Antenna, Dual Band, Wi-Fi, Internal/Embedded Mount,  
Surface Mount, Solder, Omnidirectional, Single Port, 3 < 6 dBi Peak  
Gain  
[View on TE.com >](#)



Antennas



Communication Protocol: **Wi-Fi**  
Mounting Location: **Internal/Embedded**  
Mounting Type: **Surface Mount**  
Frequency Category: **2400 – 2500**  
Antenna Type: **PCB**

Features

Product Type Features

|                      |         |
|----------------------|---------|
| Antenna Termination  | Solder  |
| Antenna Product Type | Antenna |

Configuration Features

|                    |                   |
|--------------------|-------------------|
| Antenna Style      | PCB               |
| Mounting Location  | Internal/Embedded |
| Antenna Type       | PCB               |
| Band Type          | Dual Band         |
| Port Configuration | Single Port       |

Electrical Characteristics

|            |        |
|------------|--------|
| Impedance  | 50 Ω   |
| VSWR (Max) | <2.1:1 |

Signal Characteristics

|                    |                 |
|--------------------|-----------------|
| Frequency Band     | 2400 – 2485 MHz |
| Gain (Max)         | 2.7 dB          |
| Frequency Category | 2400 – 2500     |
| Peak Gain          | 3 < 6 dBi       |

Mechanical Attachment

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



|               |               |
|---------------|---------------|
| Mounting Type | Surface Mount |
|---------------|---------------|

Dimensions

|                |                |
|----------------|----------------|
| Product Width  | 8.4 mm[.33 in] |
| Product Length | 9.6 mm[.38 in] |
| Product Height | 1.1 mm[.04 in] |

Operation/Application

|                |                 |
|----------------|-----------------|
| Directionality | Omnidirectional |
|----------------|-----------------|

Industry Standards

|                        |       |
|------------------------|-------|
| Communication Protocol | Wi-Fi |
| Primary Application    | Wi-Fi |

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 Halogen - Br, Cl, F < 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

|  |  |  |  |
|--|--|--|--|
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Customers Also Bought

|  |  |  |  |
|--|--|--|--|
|  |  |  |  |
|--|--|--|--|

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PCB Antenna, Dual Band, Wi-Fi, Internal/Embedded Mount, Surface Mount, Solder, Omnidirectional, Single Port, 3 < 6 dBi Peak Gain

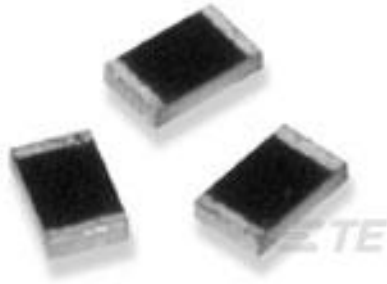




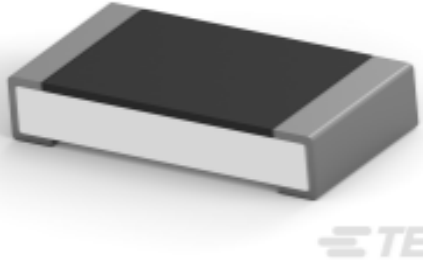
TE Part #7-1879223-7  
CPF 0603 1K65 0.1% 25PPM 1K RL



TE Part #5-1879337-5  
CPF 0603 9K09 1% 50PPM 1K RL



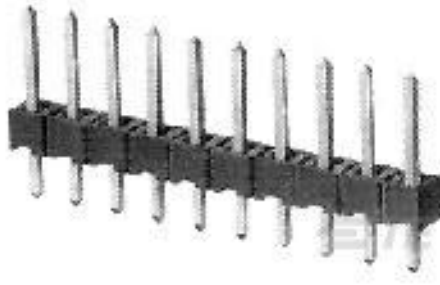
TE Part #7-1879745-1  
RP 1J 2K94 0.1% 15PPM CUT LENGTH



TE Part #9-2176388-7  
RQ 1206 100R 0.1% 10PPM 5K RL



TE Part #L9000060-01  
Antenna 2.4 FPC SF 25x20 100 UFL



TE Part #826629-4  
4P AMPMODU II PIN HSG

Documents

Product Drawings

Antenna nSP PCB RPC 2.4/5.8GHz SMT T&R

English

CAD Files

3D PDF

3D

Customer View Model

ENG\_CVM\_CVM\_ANT-DB1-NSP250-T\_A.2d\_dxf.zip

English

Customer View Model

ENG\_CVM\_CVM\_ANT-DB1-NSP250-T\_A.3d\_igs.zip

English

Customer View Model

ENG\_CVM\_CVM\_ANT-DB1-NSP250-T\_A.3d\_stp.zip

English

By downloading the CAD file I accept and agree to the [Terms and Conditions](#) of use.

Datasheets & Catalog Pages

Embedded WiFi/ WLAN Antenna

English