



Part No. 1002295

Wi-Fi / BT Single Band Stamped Metal Embedded Antenna

2.4 GHz

Supports: Wi-Fi applications, Agriculture, Automotive, Bluetooth, Zigbee, WLAN, Smart Home, Healthcare, Digital Signage



Stamped Metal Wi-Fi/BT Embedded Antenna

2.400 – 2.485 GHz

KEY BENEFITS

Stay-in-Tune

Ethertronics antenna technology provides superior RF field containment, resulting in less interaction with surrounding components.

Quicker Time-to-Market

By optimizing antenna size, performance and emissions, customer and regulatory specifications are more easily met.

Reliability

Products are the latest RoHS version compliant.

APPLICATIONS

- Embedded design
- Cellular, Headsets, Tablets
- Gateway, Access Point
- Handheld
- Telematics
- Tracking
- Healthcare
- M2M, Industrial devices
- Smart Grid
- OBD-II

Ethertronics' Stamped Metal antennas deliver on the key needs of device designers for higher functionality and performance in smaller/thinner designs. These innovative antennas provide compelling advantages for WLAN enabled devices, media players, routers, and other wireless devices.

Greater Flexibility

Ethertronics' first-in-class technology enables you to develop concept designs that are more advanced and that deliver superior performance in reception critical applications.

Electrical Specifications

Typical performance on 75 x 75 mm PCB

Frequency	2.400 - 2.485 GHz
Peak Gain	4.4 dBi
Average Efficiency	79%
VSWR Match	2.0 :1 max
Feed Point Impedance	50 ohms unbalanced
Polarization	Linear
Power Handling	0.5 Watt CW

Mechanical Specifications & Ordering Part Number

Ordering Part #	1002295
Dimensions (mm)	16.1 x 15.7 x 10.55
Mounting Type	SMT (P&P)
Weight (grams)	0.70
Packaging	Tape & Reel, 150 pcs/Reel
Demo Board	1003666-01

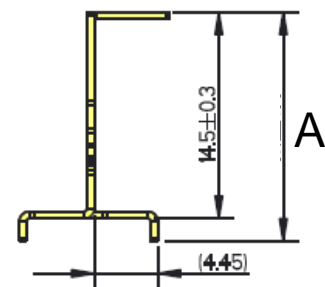
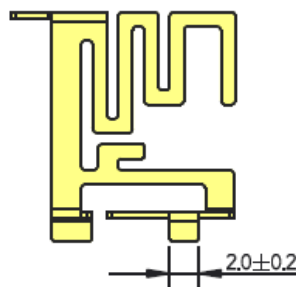
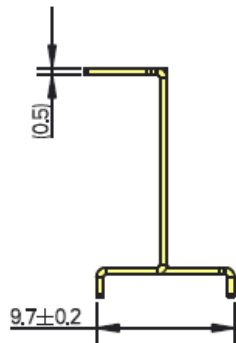
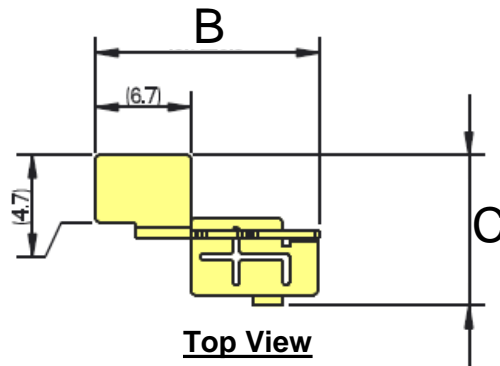
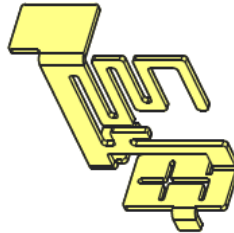


2.4 GHz Stamped Metal Ethertronics' Embedded Antenna Specifications
Ethertronics produces a wide variety of standard and custom antennas to meet user needs.

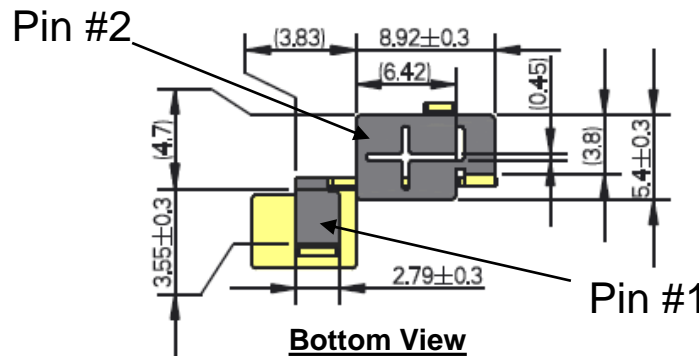
Antenna Dimensions

Typical antenna dimensions (mm)

Part Number	A (mm)	B (mm)	C (mm)
1002295	16.1 ± 0.4	15.7 ± 0.3	10.55 ± 0.4



Pin#	Description
1	Feed
2	Ground

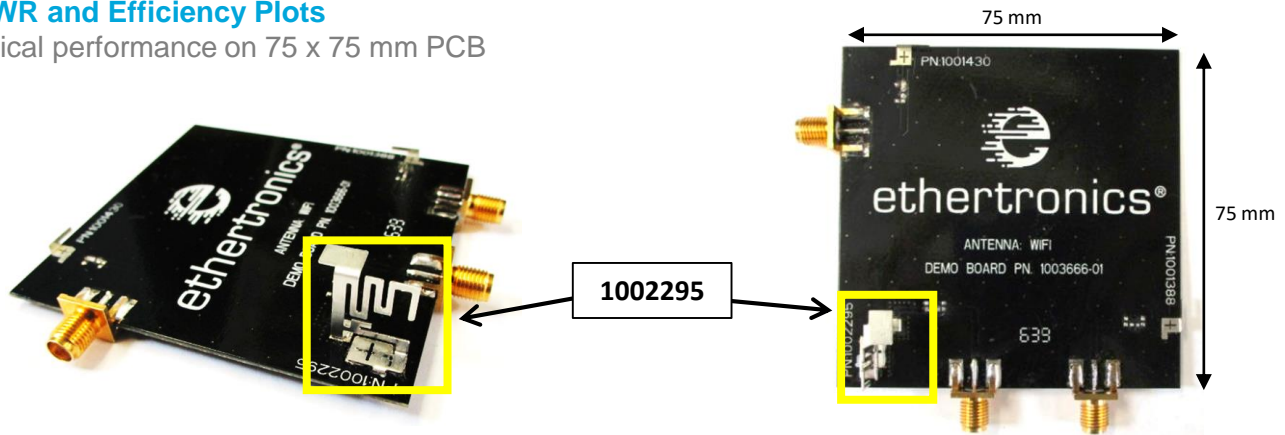




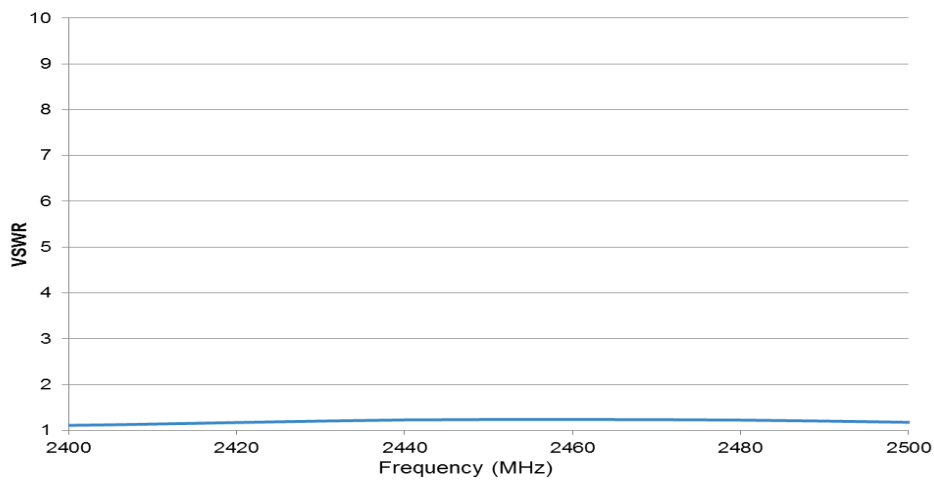
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VSWR and Efficiency Plots

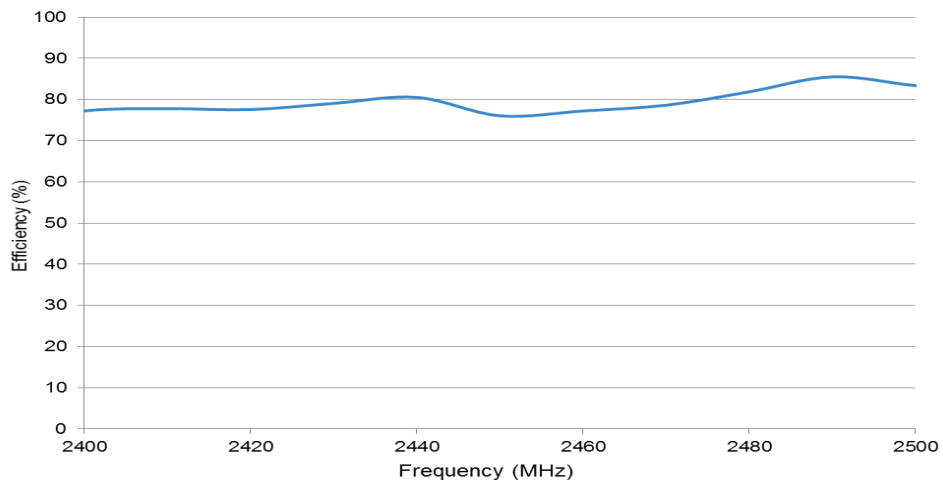
Typical performance on 75 x 75 mm PCB



VSWR



Efficiency

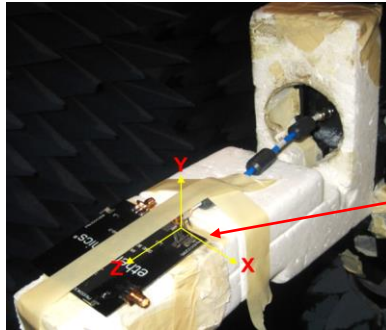




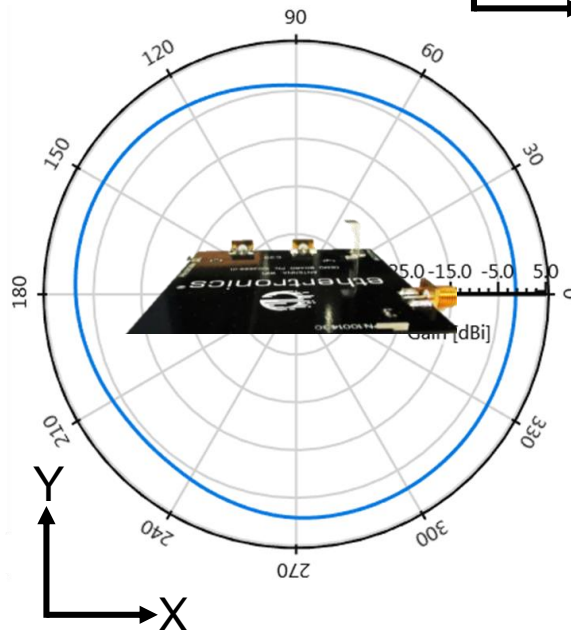
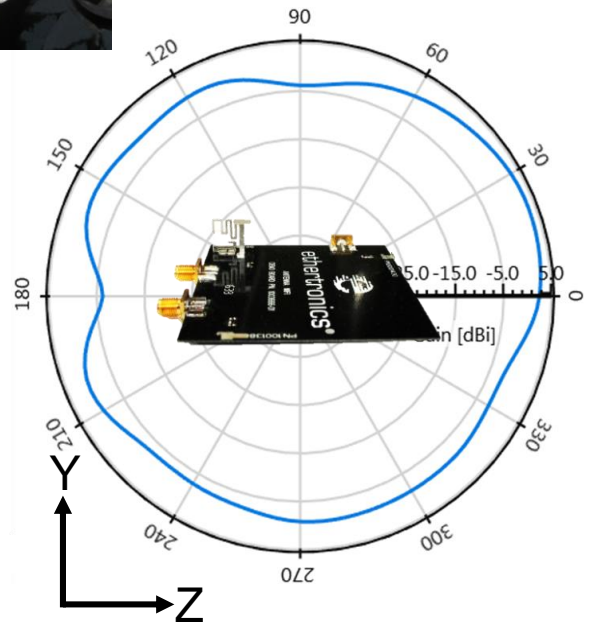
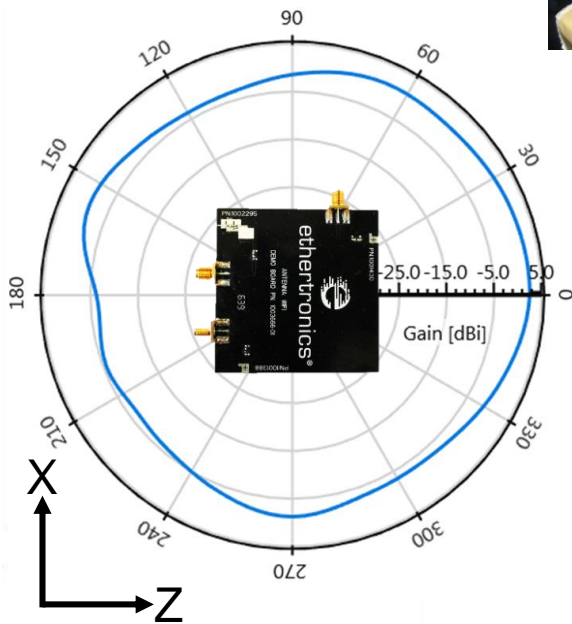
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Antenna Radiation Patterns

Typical performance on 75 x 75 mm PCB
Measured at 2450 MHz



1002295

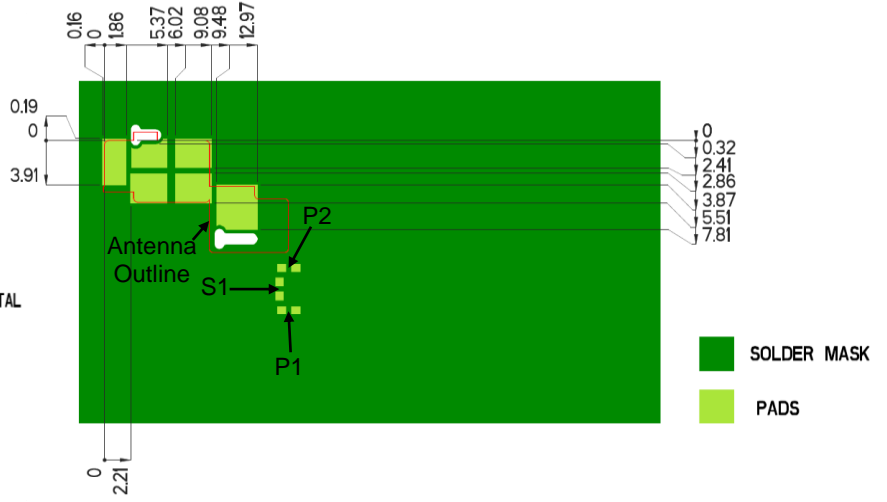
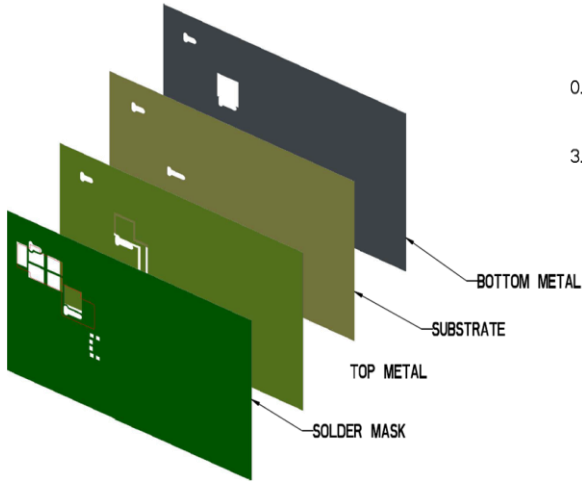




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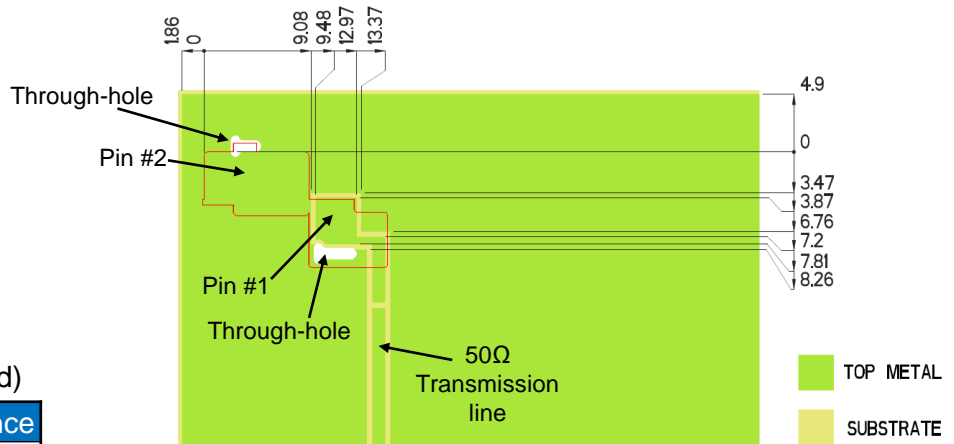
Antenna Layout

Typical layout dimensions (mm)



Pin Descriptions

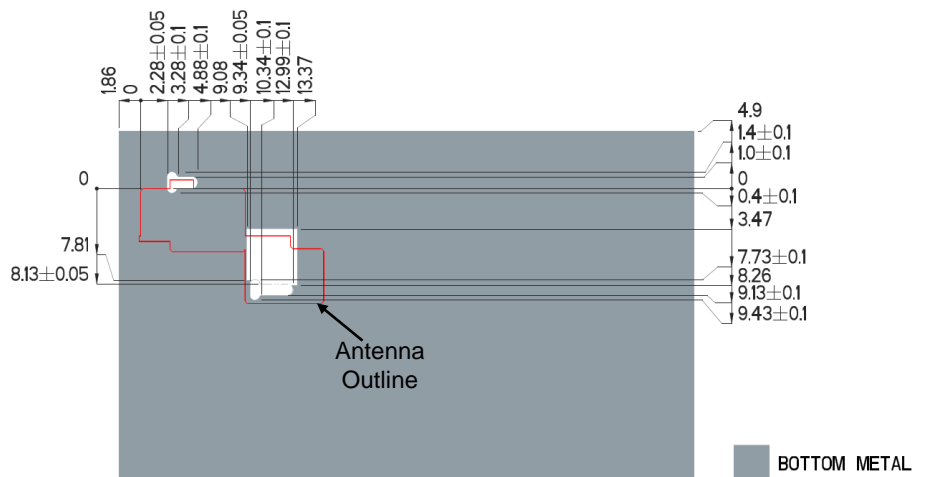
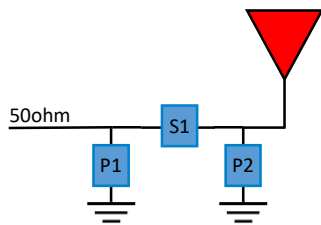
Pin#	Description
1	Feed
2	Ground



Matching Pi Network (Demo Board)

Component	Value	Tolerance
P1	0.5pF	±0.05pF
S1	1nH	±0.1nH
P2	DNI	DNI

*Actual matching values depend on customer design



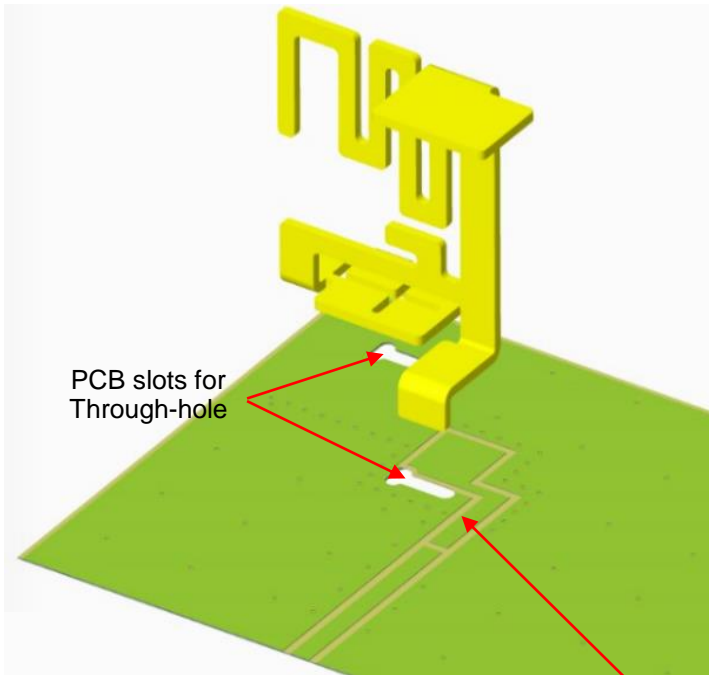


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Antenna Layout cont. (SMT Mounting, Through-hole for Stabilization)

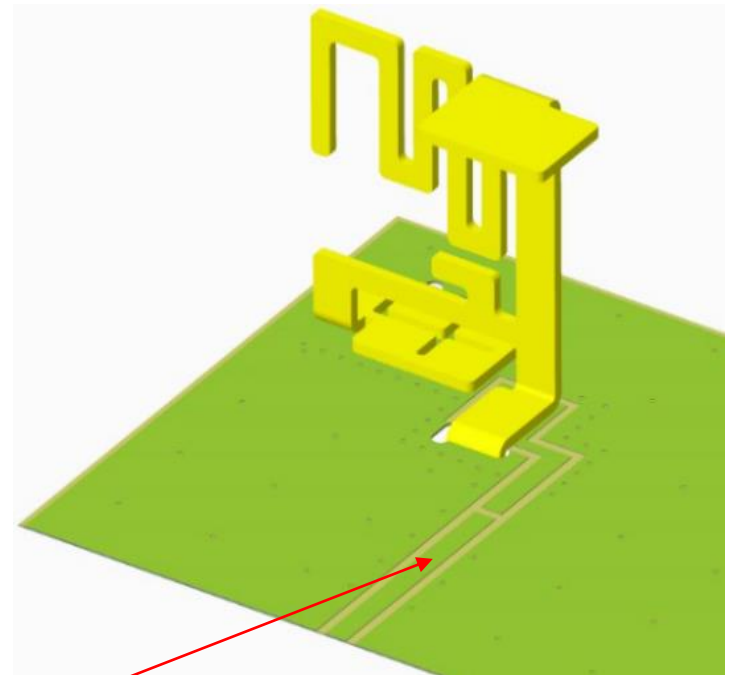
Typical layout dimensions (mm)

Exploded View



PCB slots for
Through-hole

Assembled View



A 50 ohm transmission line needs to be designed and connected at this location

Bottom View



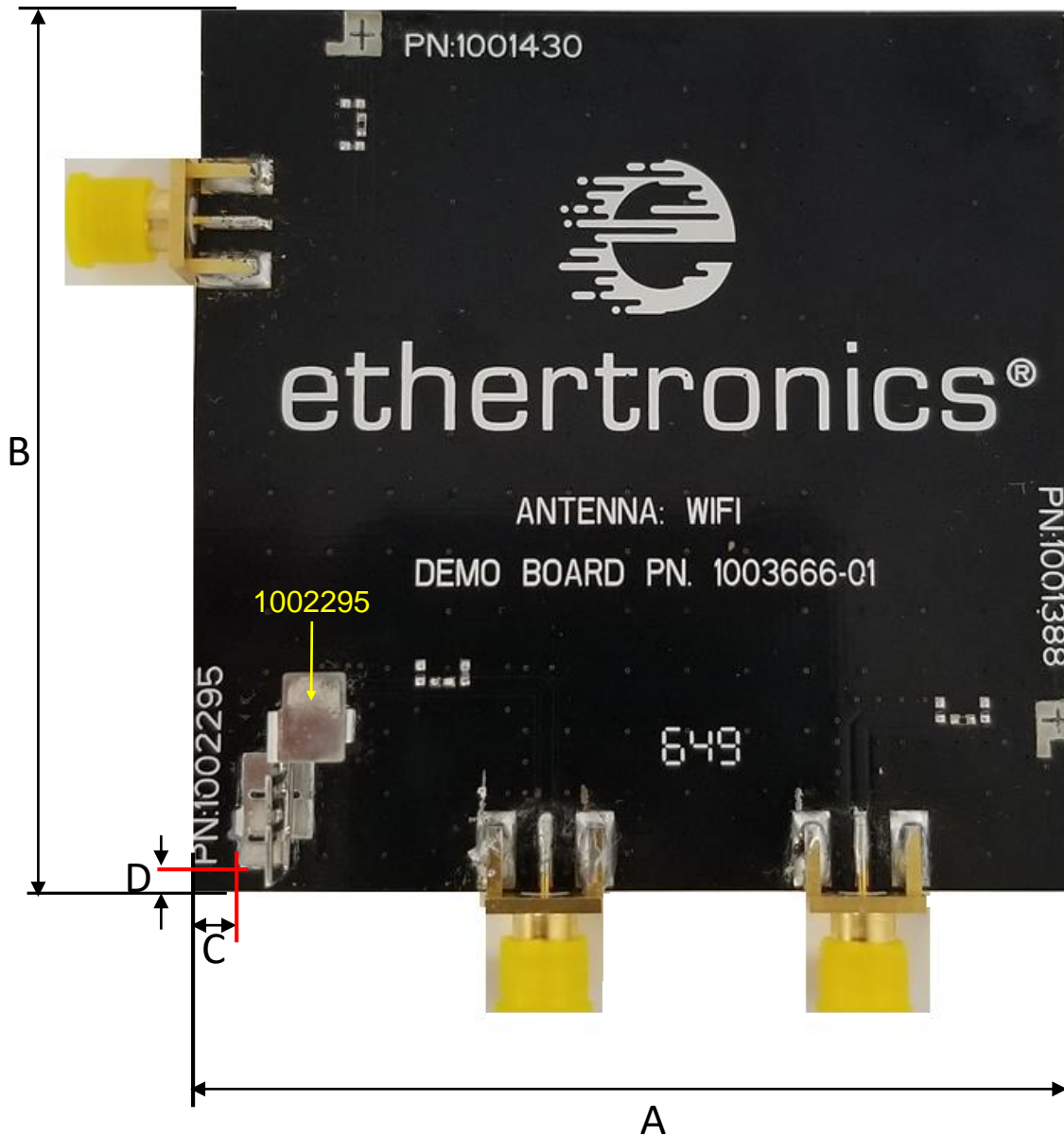


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Antenna Demo Board

Typical layout dimensions (mm)

Part Number	A (mm)	B (mm)	C (mm)	D (mm)
1000366-01	75.0	75.0	4.9	1.86





Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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