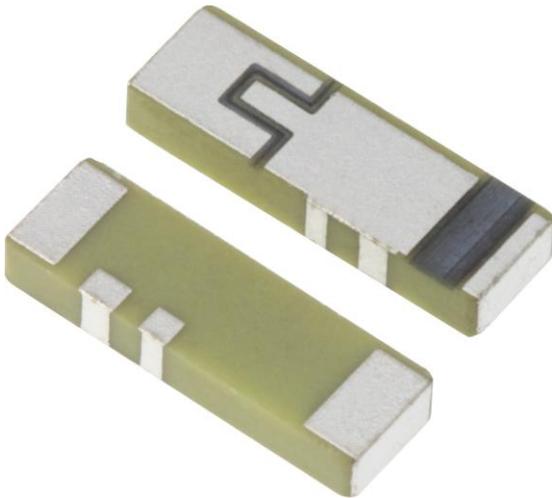


Features:

- Frequency: 1558-1616/2400-2500MHz
- Omni directional radiation
- Low profile
- Size W x L x H (10 x 3.2 x 1.5mm)
- Lead free materials
- Fully SMD compatible
- MSL Level 3
- RoHS Compliant



Applications:

- Combo 2-in-1 Antenna
- Single feed point
- GNSS L1 band
- Bluetooth, WLAN, WiFi (2.4 – 2.5GHz)

All dimensions are in mm / inches

Issue: 1837

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Pulse (Suzhou) Wireless Products Co, Inc.
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Suzhou New District
Jiangsu Province, Suzhou 215009 PR China
Tel: 86 512 6807 9998



ELECTRICAL SPECIFICATIONS

Antenna Type	Ceramic Chip
Frequency	1558-1616MHz/2.4-2.5GHz
Nominal Impedance	50 Ω
Return Loss / Max (BD / GPS / GLONASS / BT)	-4 / -5 / -3 / -7 (dB)
Radiation Pattern – XY Plane & ZY Plane	Omni
Radiation Pattern – ZX Plane	Directional
Gain / Min (BD / GPS / GLONASS / BT)	-0.5 / 0.5 / 0 / 2 (dBi)
Efficiency / Min (BD / GPS / GLONASS / BT)	35% / 45% / 45% / 65%
Polarization	Linear-Vertical
Power Withstanding	1W

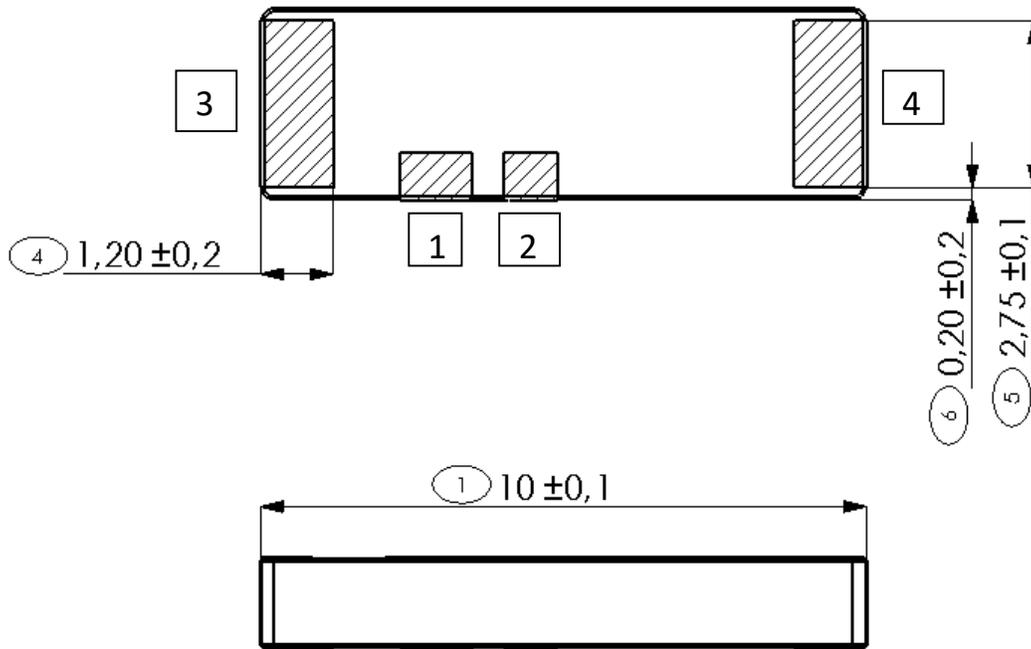
MECHANICAL SPECIFICATIONS

Overall Length	10mm
Weight	0.24g
Antenna Color	White

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-40 ~ +85° C
Storage Temperature	-40 ~ +85° C
RoHS Compliant	Yes

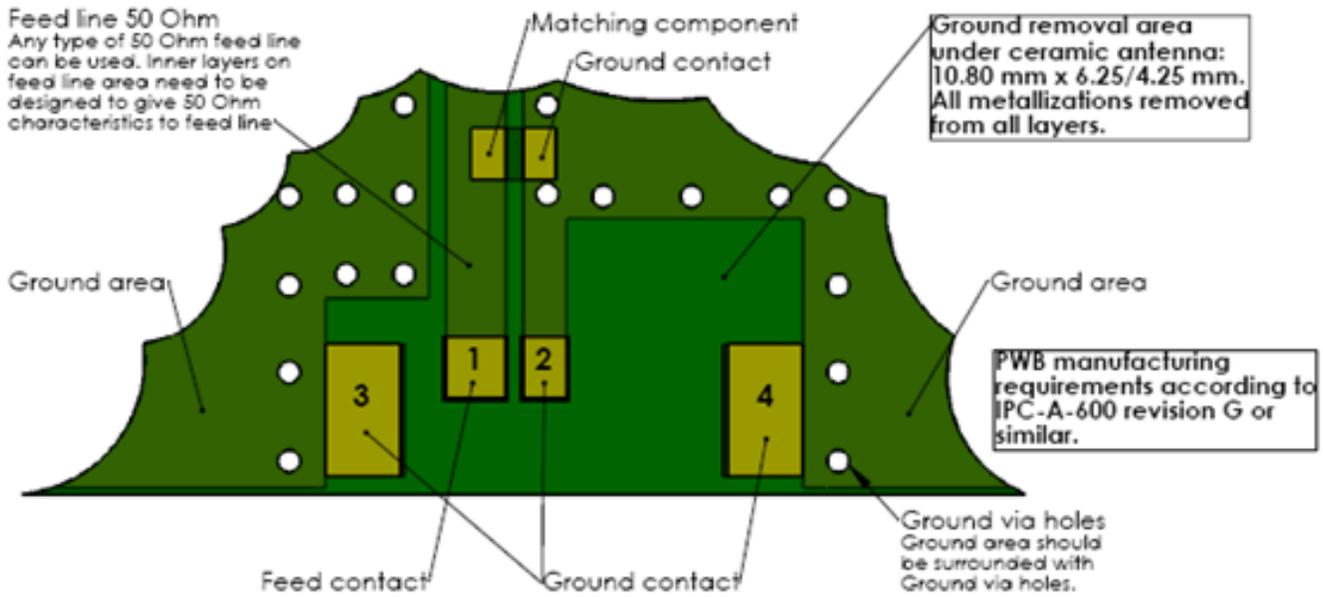
MECHANICAL DRAWING



No.	Terminal Name	Terminal Dimensions
1	Feed	1.34 x 0.80 mm
2	GND	1.00 x 0.80 mm
3	GND	2.75 x 1.20 mm
4	GND	2.75 x 1.20 mm

TEST SETUP

Test board information



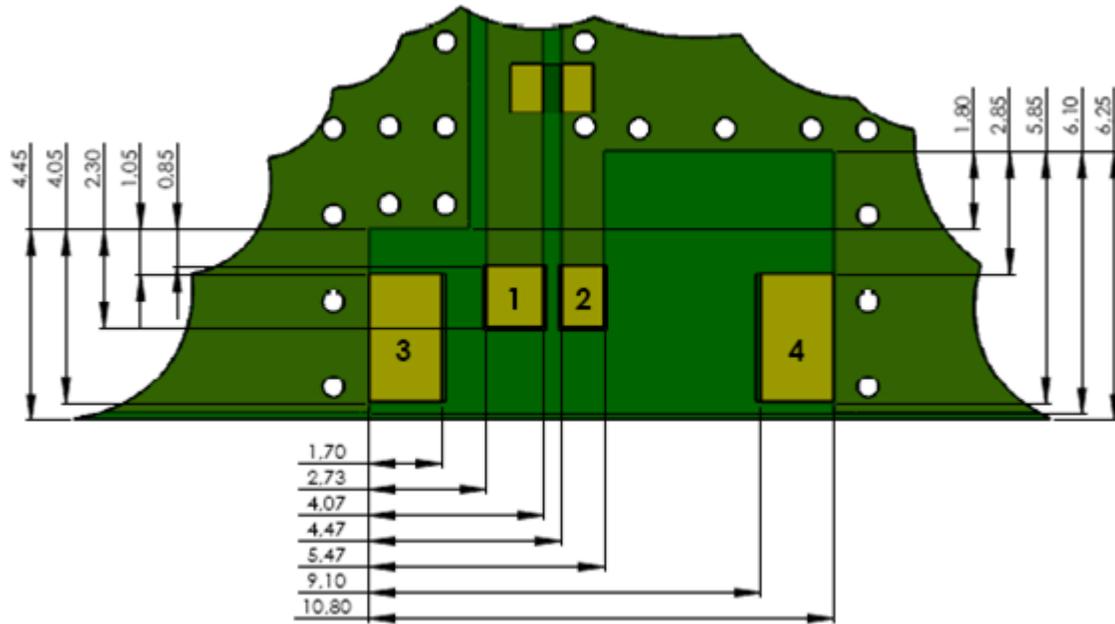
Note: Electrical characteristics are measured on test pwb with matching circuit (2.2 nH shunt matching inductor on feed).

Recommended Antenna Pad Dimensions on PWB Layout (top surface)

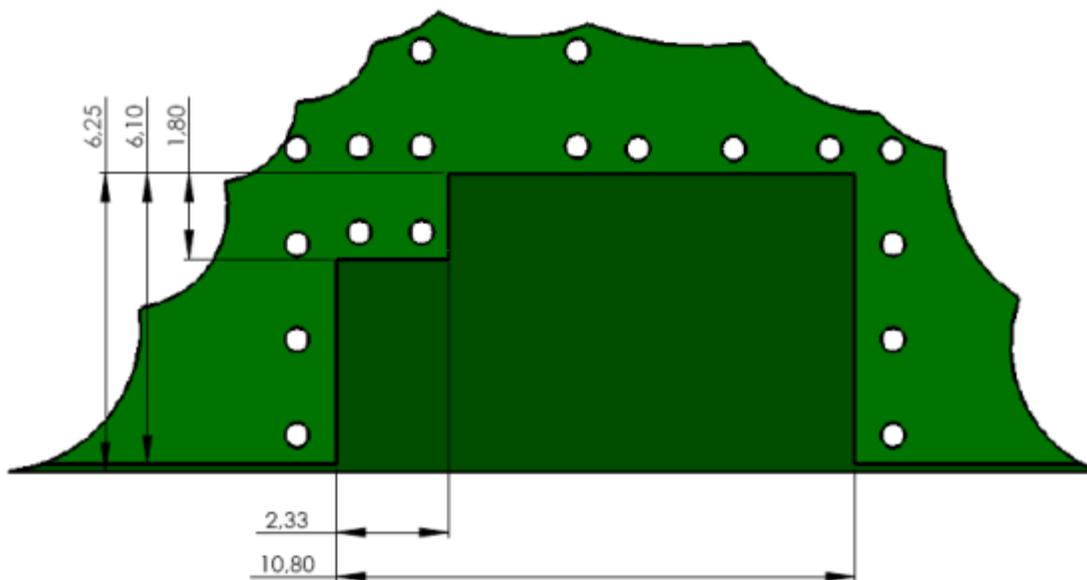
PWB features		
No.	Terminal Name	Terminal Dimensions
1	Feed	1.45 x 1.34 mm
2	GND	1.45 x 1.00 mm
3	GND	3.00 x 1.70 mm
4	GND	3.00 x 1.70 mm

TEST SETUP

Recommended ground clearance area under antenna on PWB (top surface)



Recommended ground clearance area under antenna on PWB (bottom surface)



Issue: 1837

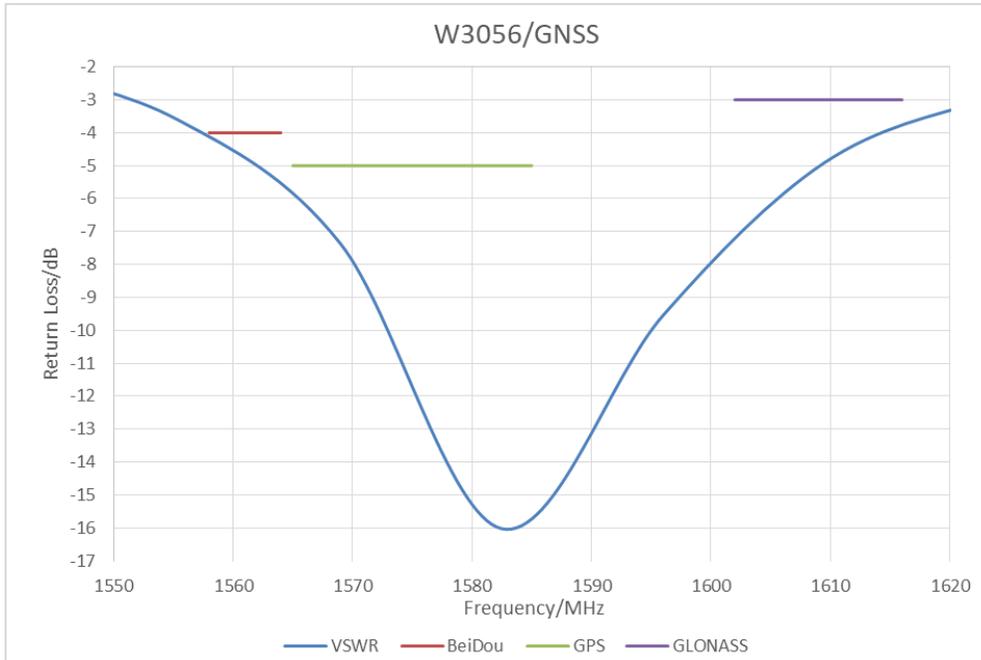
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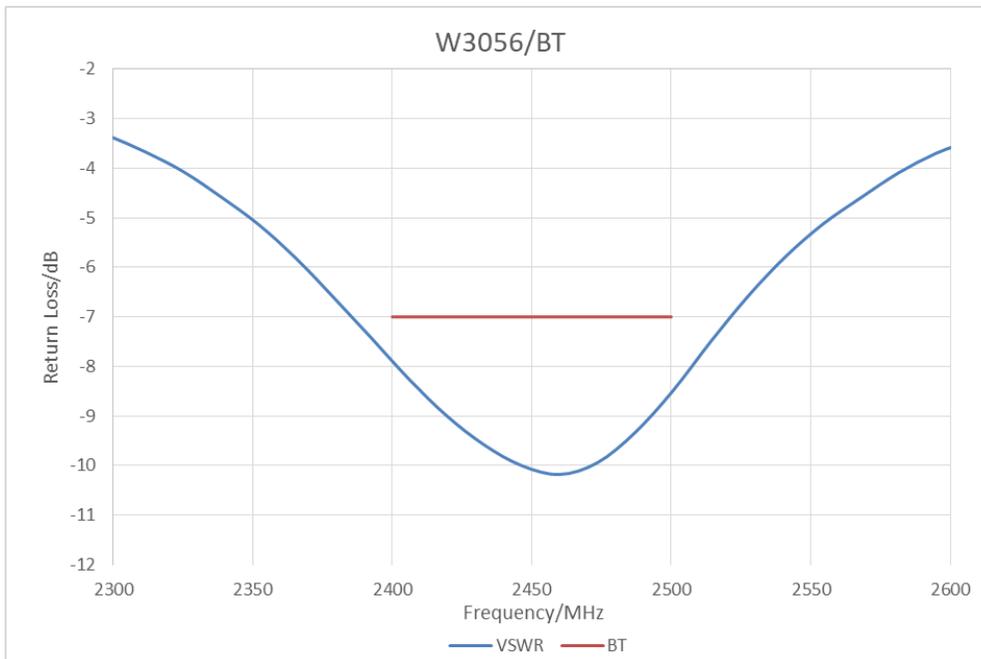
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CHARTS

Return Loss/GNSS



Return Loss/ BT



Issue: 1837

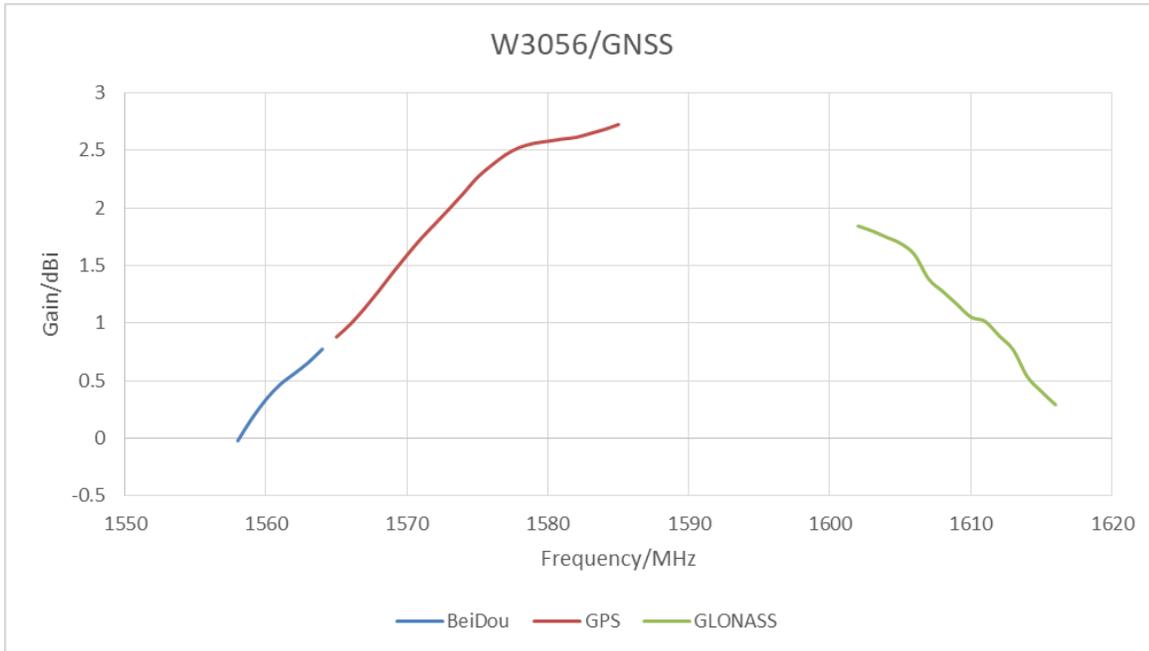
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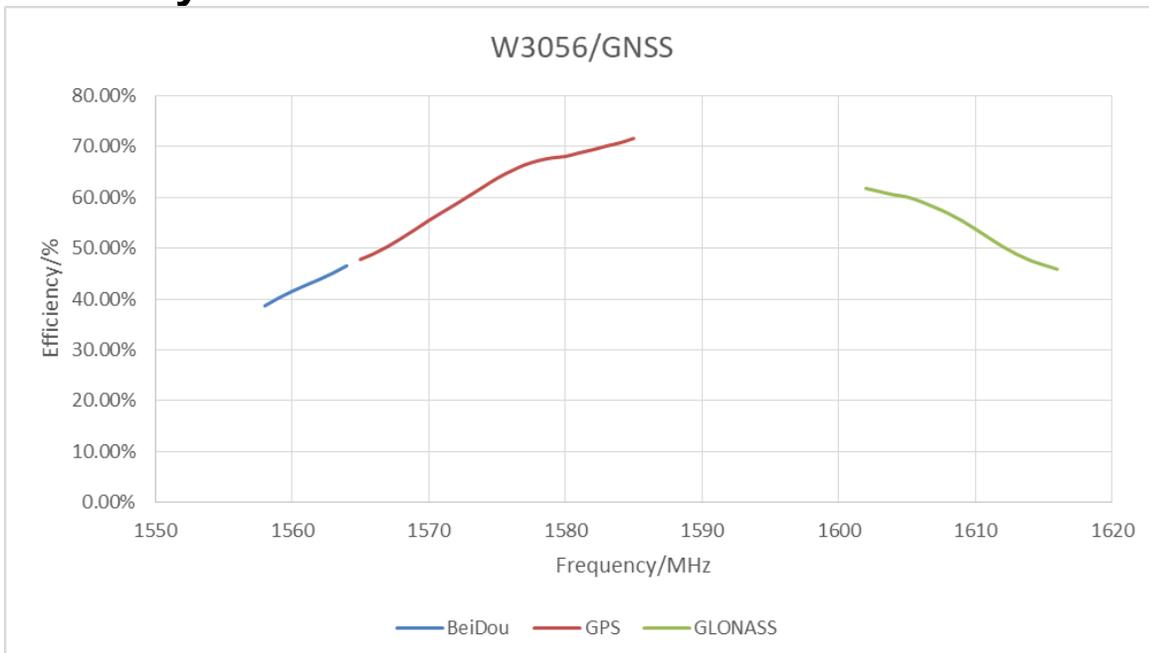
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CHARTS

Peaking Gain/ GNSS



Rad Efficiency/ GNSS



Issue: 1837

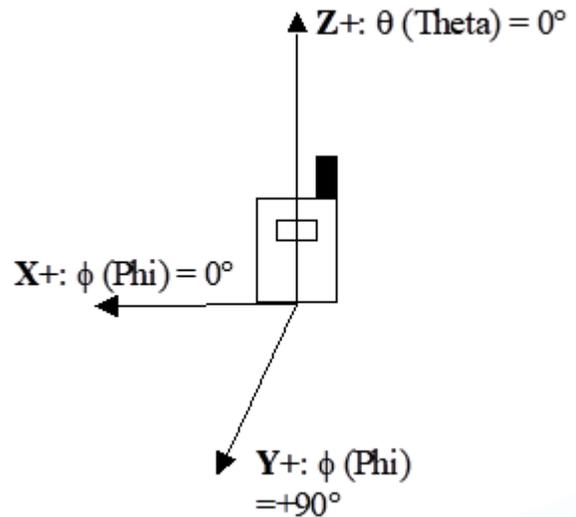
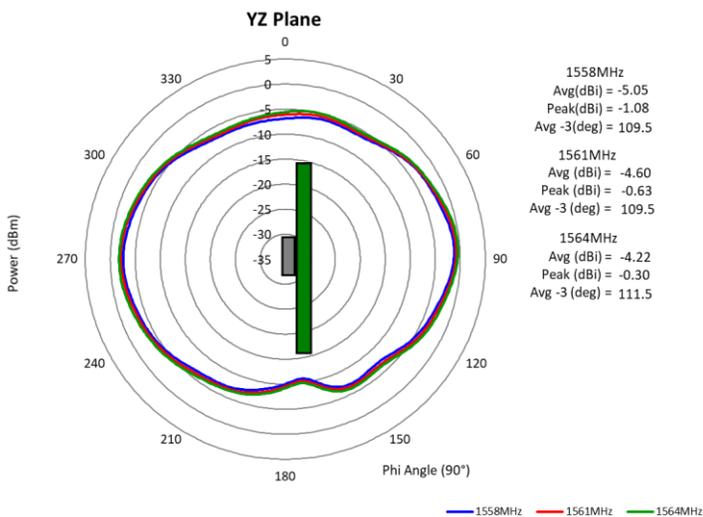
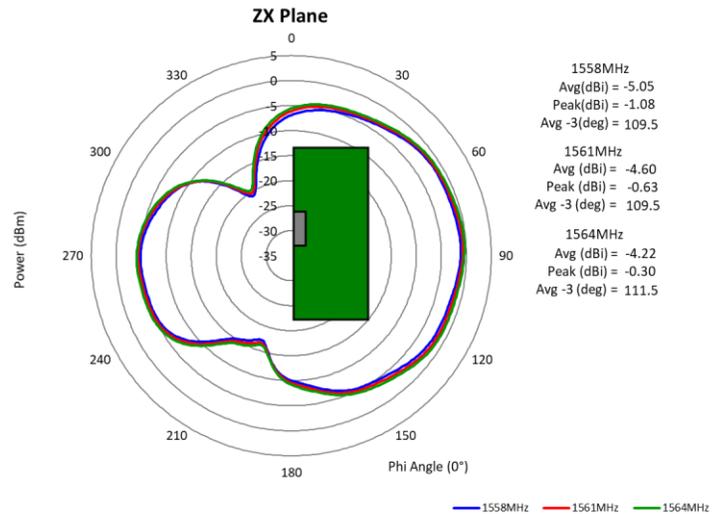
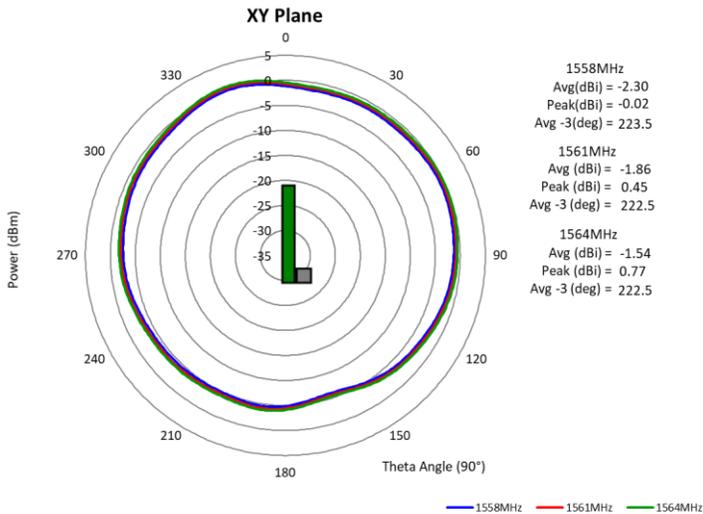
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CHARTS

Typical Free Space Radiation Patterns / BeiDou



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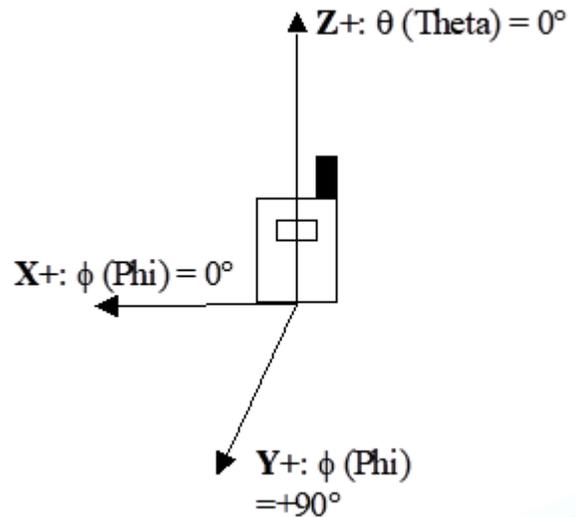
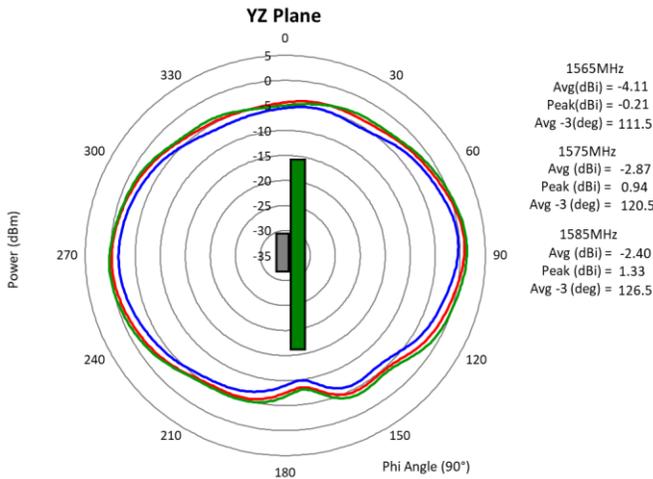
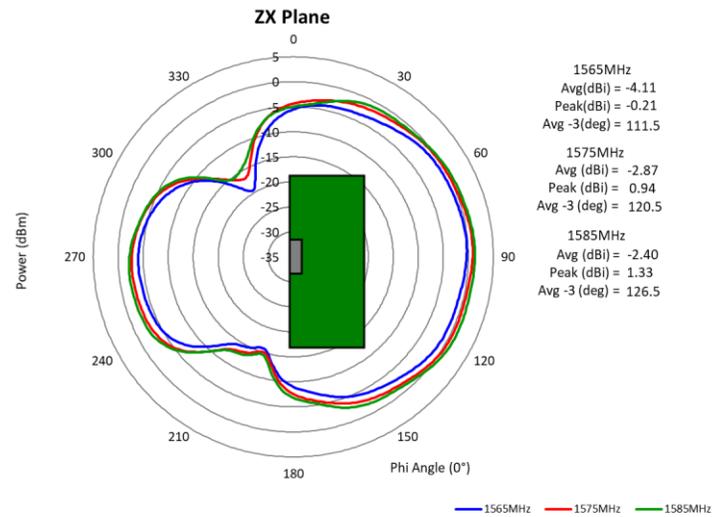
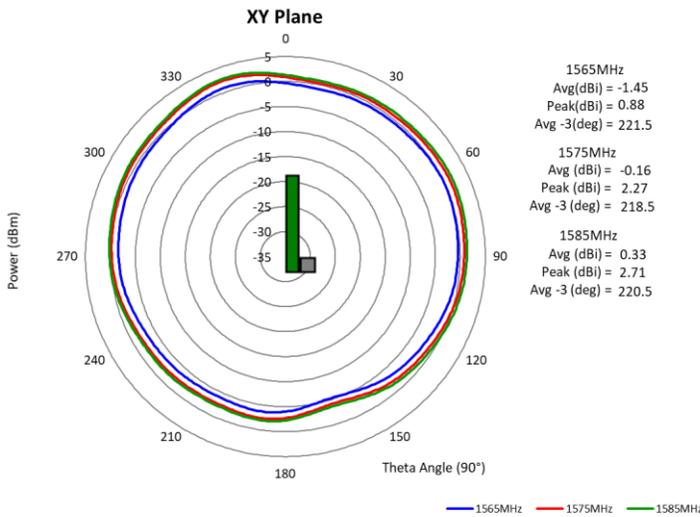
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CHARTS

Typical Free Space Radiation Patterns / GPS



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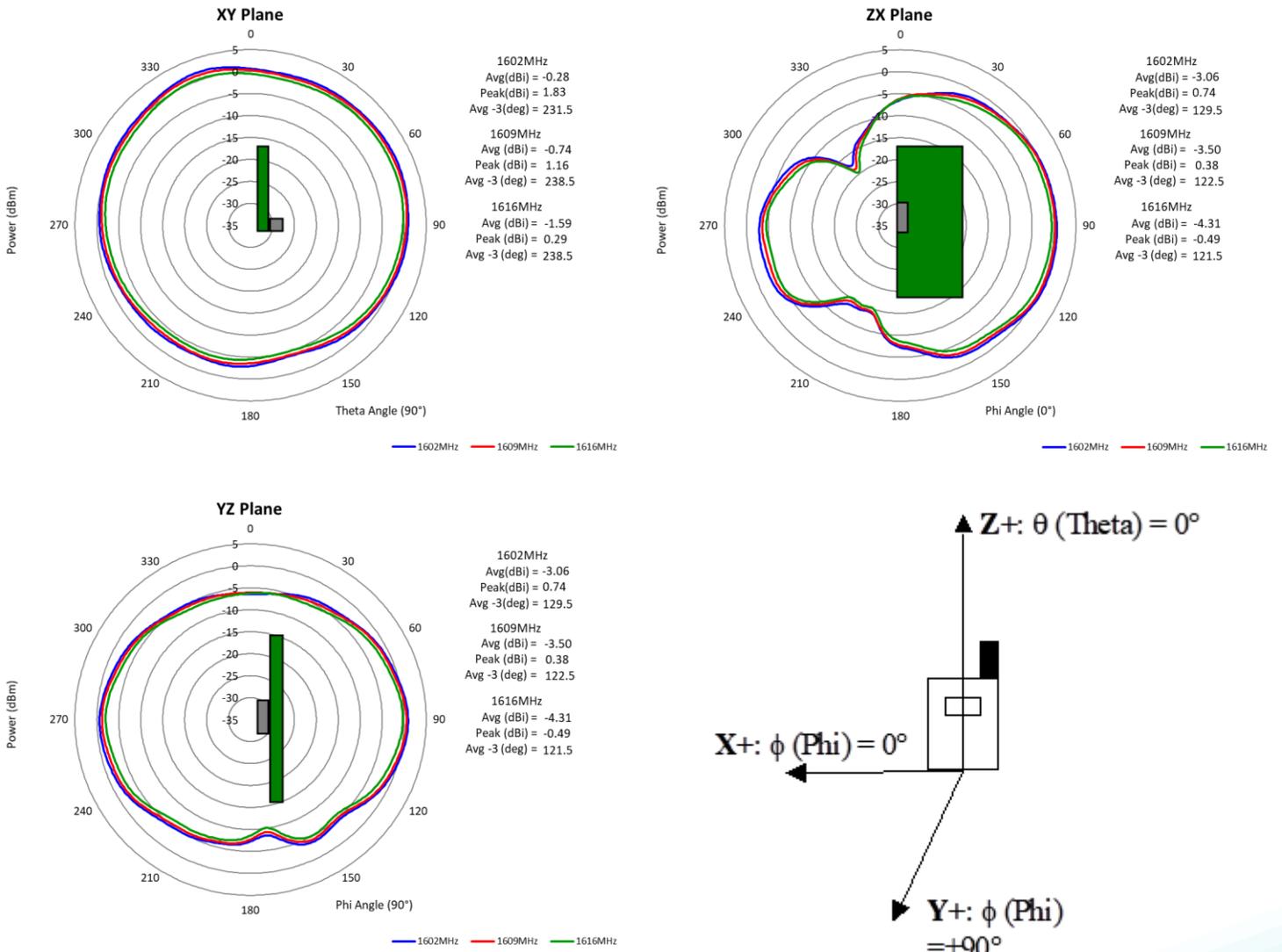
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CHARTS

Typical Free Space Radiation Patterns / GLONASS



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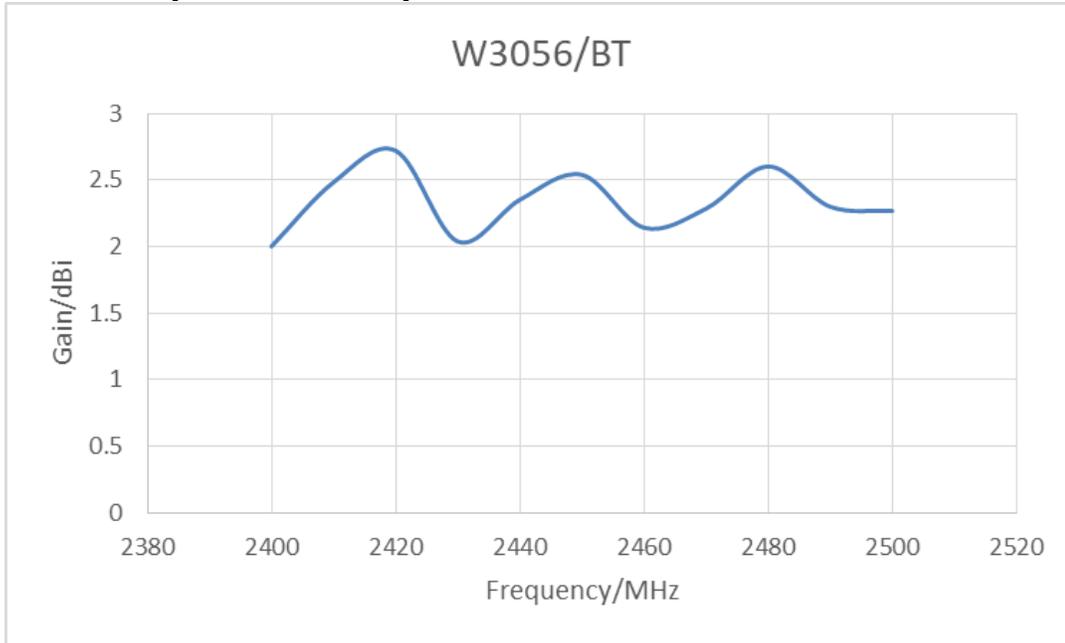
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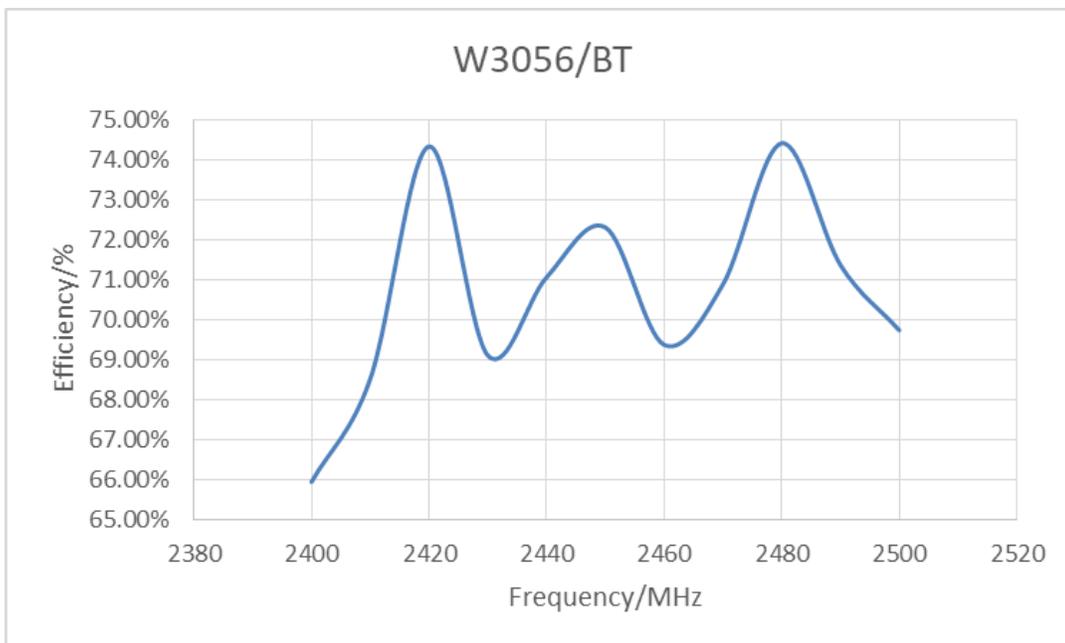
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CHARTS

Peaking Gain/ BT(2.4G-2.5G)



Rad Efficiency/ BT(2.4G-2.5G)



Issue: 1837

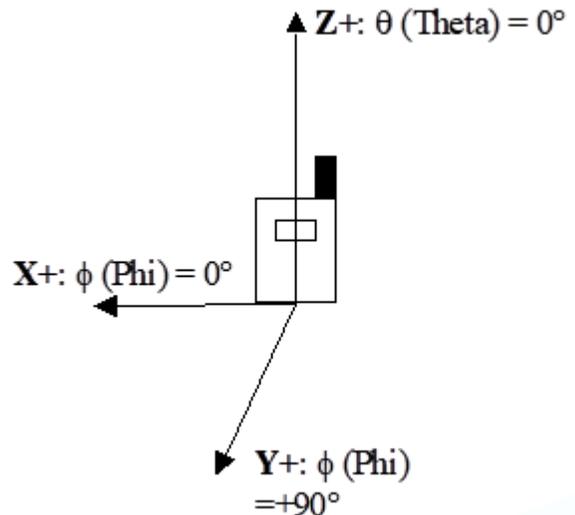
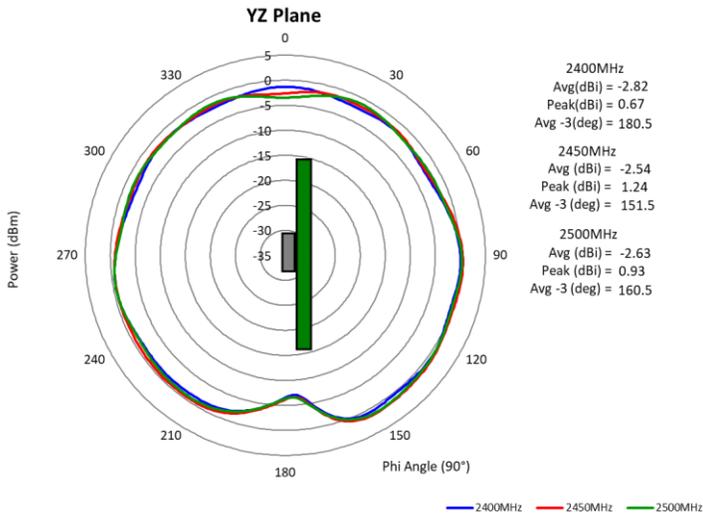
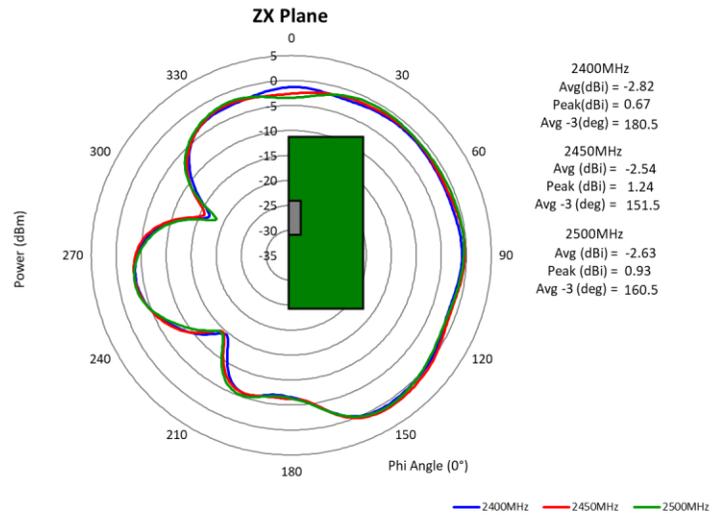
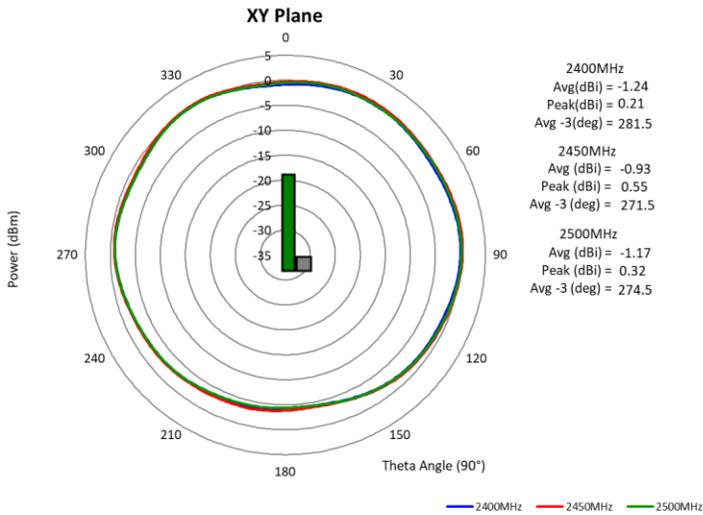
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CHARTS

Typical Free Space Radiation Patterns / BT(2.4G-2.5G)



Issue: 1837

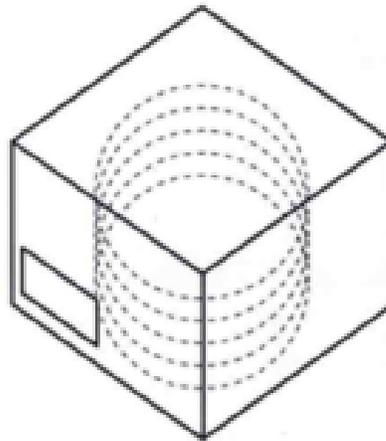
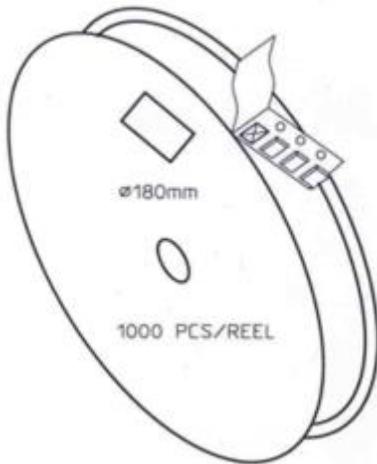
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PACKAGING

1. Tape and reel packing with plastic vacuum bag.
1000 PCS/ REEL, 4 Reels/ BOX



2. MSL: Level 3

2.1 Calculated shelf life in sealed bag: 12 months at $< 30^{\circ}\text{C}$ and 60% relative humidity (RH)

2.2 Peak temperature in reflow: 260°C

2.3 After bag is opened, devices that will be subjected to reflow solder or other temperature process must:

- a) Mount within: 168 hours of factory conditions $\leq 30^{\circ}\text{C}/60\%$
- b) stored at $< 20\%$ RH

2.4 Devices require bake, before mounting, if:

- a) Humidity Indicator Card is $> 20\%$ when read at $23 \pm 5^{\circ}\text{C}$
- b) 3a or 3b not met

2.5 If baking is required, devices may be baked for 24 hours at $125\sim 130^{\circ}\text{C}$

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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Email: org@lifeelectronics.ru