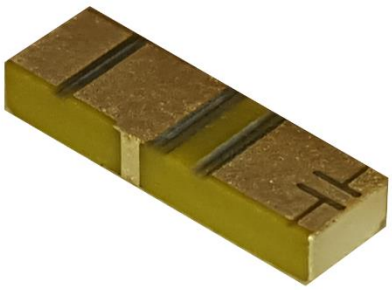
PulseLARSEN Antennas

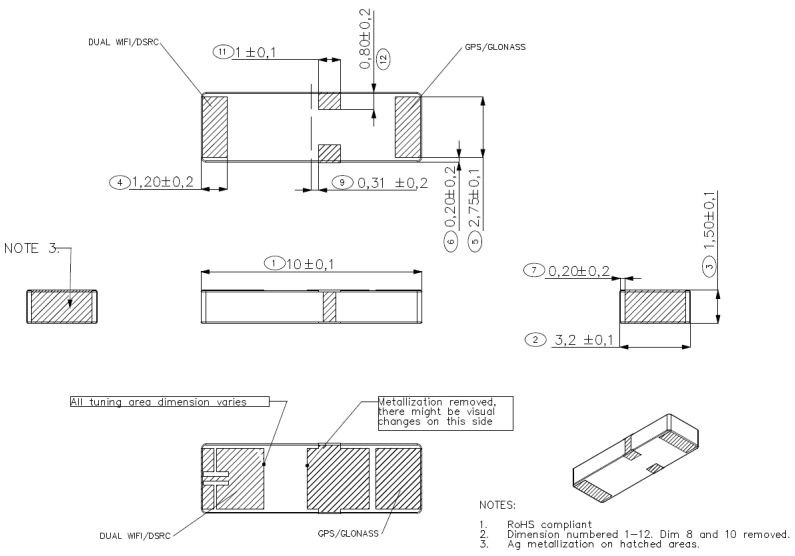
TECHNICAL DATA SHEET

Description: GNSS-DUAL WIFI-DSRC ANT

Series: CERAMIC CHIP

PART NUMBER: W3095





Features:

- 3 in 1 solution on a ceramic chip with two separate feeds.
- Need smaller antenna space on PCB to integrate GPS/GLONASS, Dual WiFi and DSRC bands
- Compact Size (L x W x H) 10 x 3.2 x 1.5mm.
- Fully SMD compatible

Applications:

- GPS / GLONASS (1575-1610MHz)
- IEEE 802.11 a/b/g/n compliant 2.4 and 5GHz. (2400-2485/ 4900-5850MHz)
- DSRC (5850-5925MHz)
- Mobile navigation device

All dimensions are in mm / inches

Issue: 1804

RoHS COMPLIANT

For more information:

Pulse Worldwide Headquarters
15255 Innovation Drive #100
San Diego, CA 92128
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Pulse/Larsen Antennas
18110 SE 34th St Bldg 2 Suite 250
Vancouver, WA 98683
USA
Tel: 1-360-944-7551

Europe Headquarters
Pulse GmbH & Do, KG
Zeppelinstrasse 15
Herrenberg, Germany
Tel: 49 7032 7806 0

Pulse (Suzhou) Wireless Products Co, Inc.
99 Huo Ju Road(#29 Bldg,4th Phase
Suzhou New District
Jiangsu Province, Suzhou 215009 PR China
Tel: 86 512 6807 9998

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TECHNICAL DATA SHEET

Description: GNSS-DUAL WIFI-DSRC ANT

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ELECTRICAL SPECIFICATIONS

Frequency, Port 1	1.575-1.610 GHZ
Frequency, Port 2	2.4-2.485/ 4.9-5.925 GHz
Normal Impedance	50 Ohm
VSWR, Port 1	<2.5:1
VSWR, Port 2	<2:1at low band <2.8:1 at high band
Efficiency (Typ.), Port 1	60 %
Efficiency (Typ.), Port 2	80/ 50 %
Peak Gain, Port 1	1.5 dBi
Peak Gain, Port 2	2.5/ 3.5 dBi
Isolation (Min.) at 1.575-1.610 GHz	22 dB
Isolation (Min.) at 2.4-2.485 GHz	20 dB
Isolation (Min.) at 4.9-5.925 GHz	22 dB
Polarization	Linear
Interface	SMD Mount

RoHS COMPLIANT

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MECHANICAL SPECIFICATIONS

Block material	Dielectric ceramic
Plating material	Ag
Weight	0.24 g
RoHS Compliant Product	
Tape and reel packing	
Lead free materials	
Lead free soldering compatible	

ENVIRONMENTAL SPECIFICATIONS

Operating temperature	-30 to +80° C

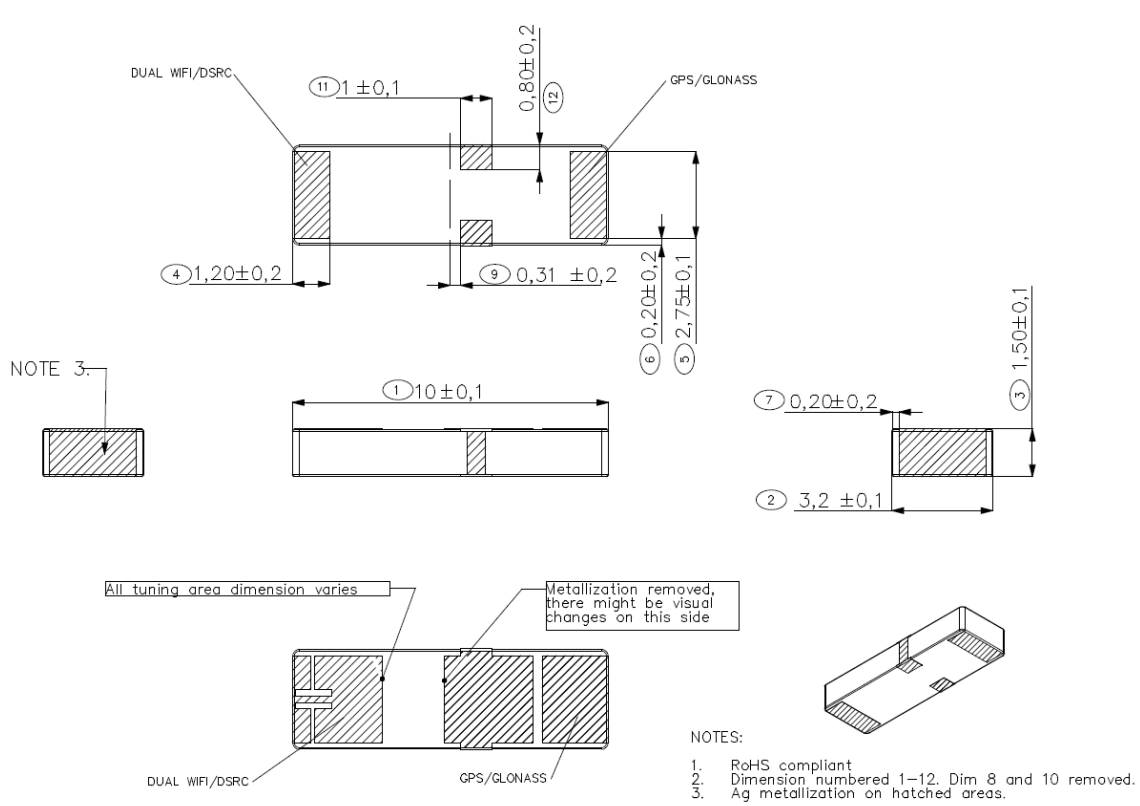
RoHS COMPLIANT

Description: GNSS-DUAL WIFI-DSRC ANT

Series: CERAMIC CHIP

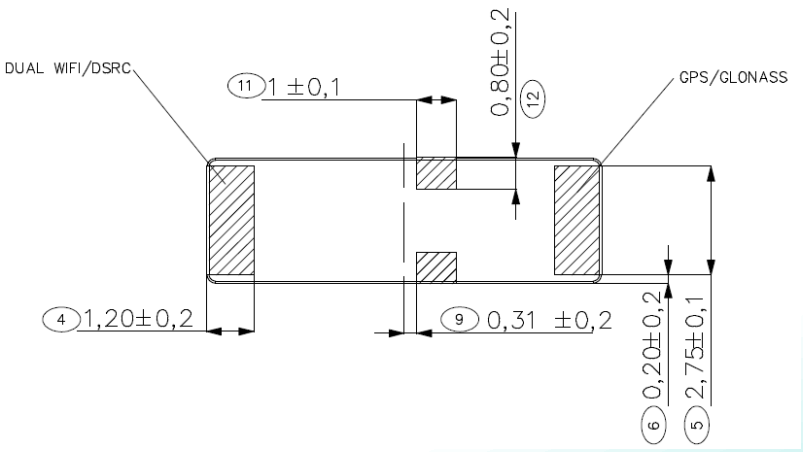
PART NUMBER: W3095

MECHANICAL DRAWING



Dimensions: (mm)

Details of antenna pad dimension on the bottom in mm.



Issue: 1804

RoHS COMPLIANT

Description: GNSS-DUAL WIFI-DSRC ANT

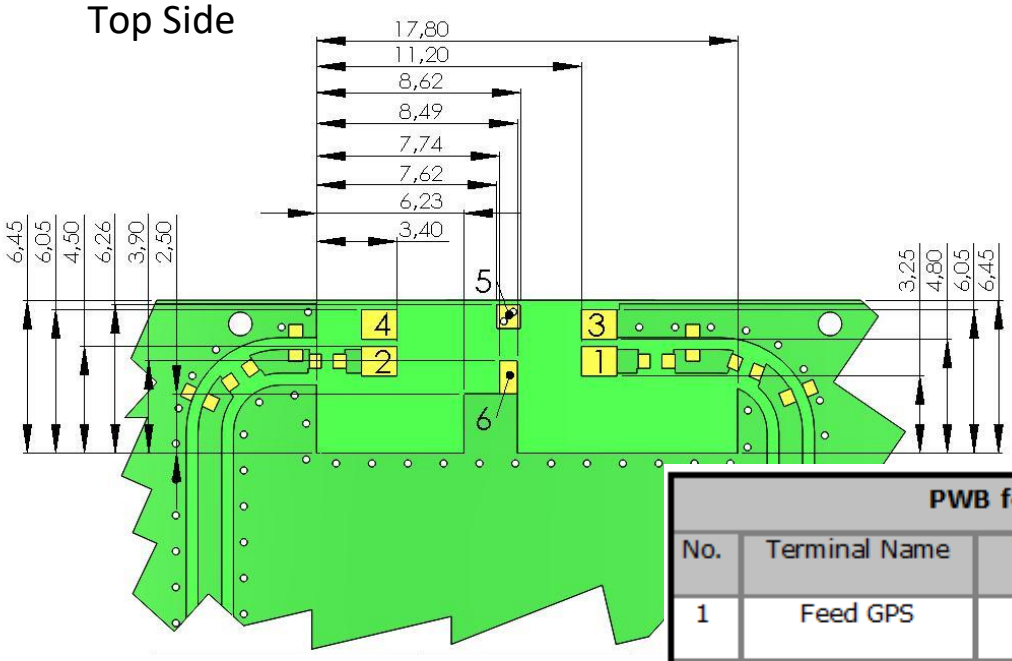
Series: CERAMIC CHIP

PART NUMBER: W3095

OTHER SPECIFICATIONS

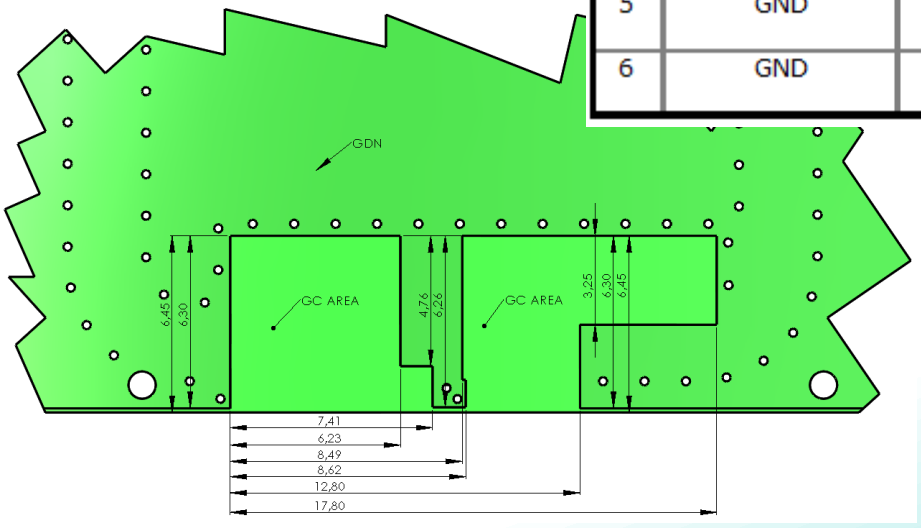
PCB Layout Recommendation

Top Side



PWB features		
No.	Terminal Name	Terminal Dimensions
1	Feed GPS	1.25 x 1.50 mm
2	Feed 2,4-5,925GHZ	1.25 x 1.50 mm
3	GND	1.25 x 1.50 mm
4	Support pad	1.25 x 1.50 mm
5	GND	1.00 x 1.00 mm
6	GND	1.40x 0.75 mm

Bottom Side



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RoHS COMPLIANT

Description: GNSS-DUAL WIFI-DSRC ANT

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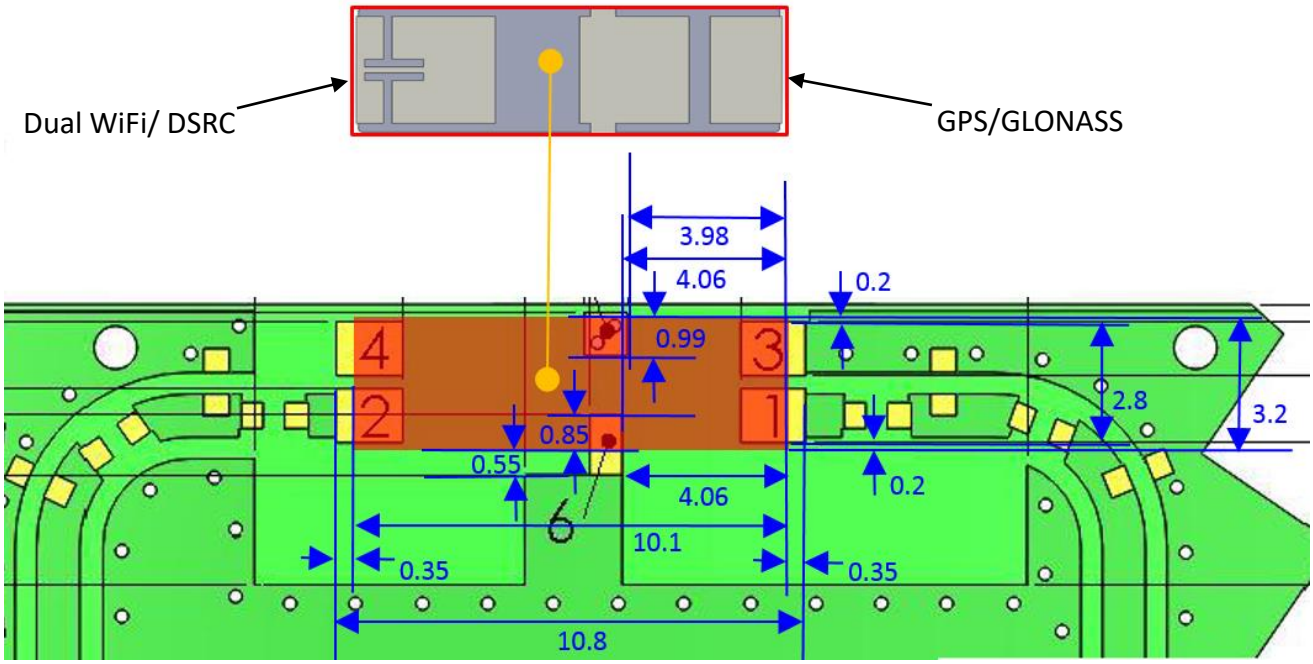
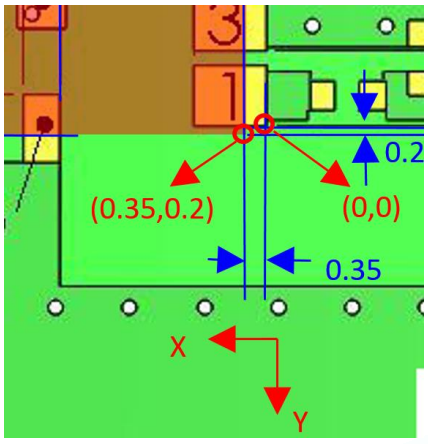
PART NUMBER: W3095

OTHER SPECIFICATIONS

Antenna Alignment on PCB Layout





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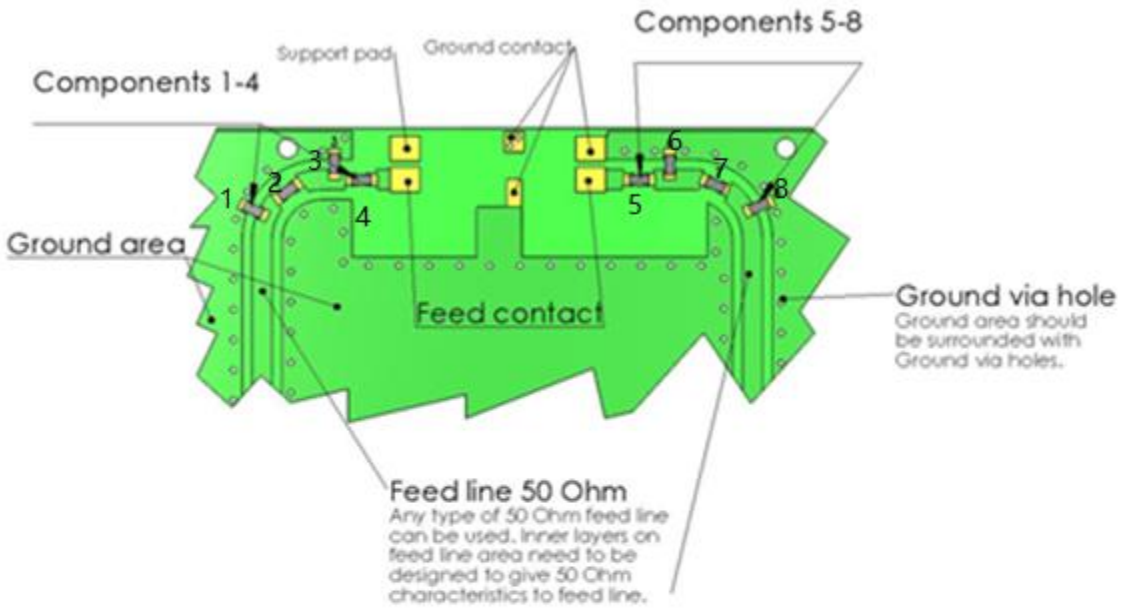
OTHER SPECIFICATIONS

Suggested Matching on PCB



Antenna	Component NO.	Value
2.4-5.925GHz	1	Optional, not in use
2.4-5.925GHz	2	0 Ohm
2.4-5.925GHz	3	2.2nH
2.4-5.925GHz	4	1.2pF
GPS/Glonass	5	0 Ohm
GPS/Glonass	6	1.8pF
GPS/Glonass	7	0 Ohm
GPS/Glonass	8	Optional, not in use

RoHS COMPLIANT

Description: GNSS-DUAL WIFI-DSRC ANT

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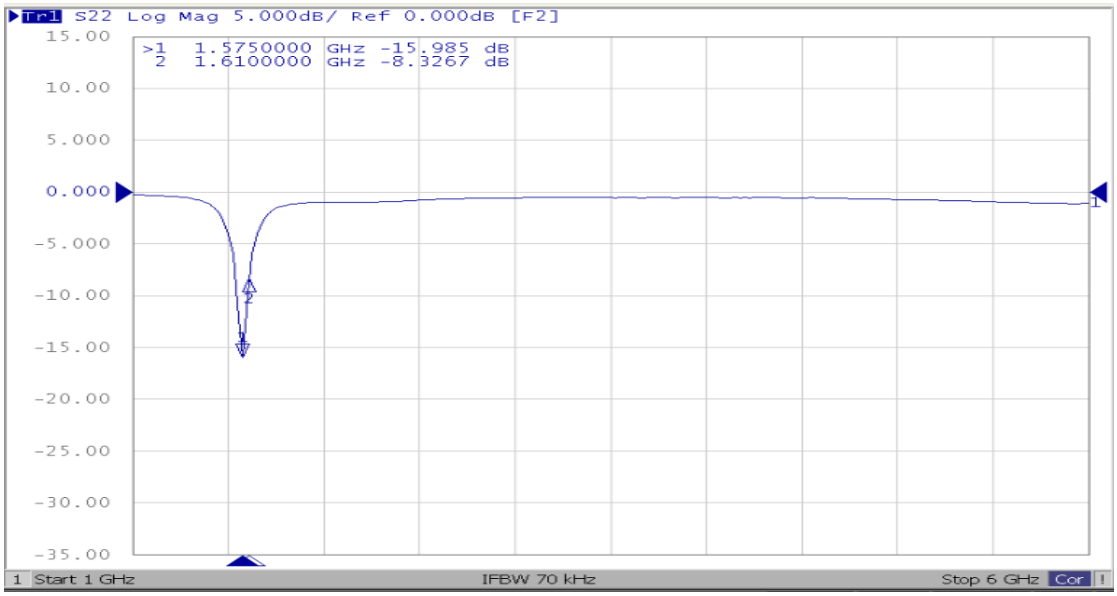
PART NUMBER: W3095

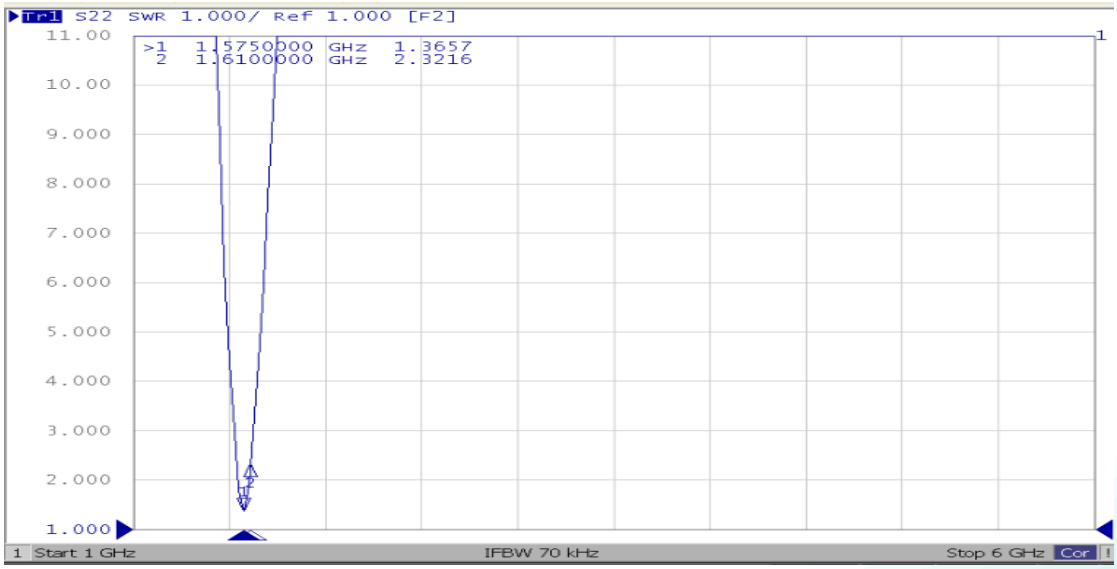
CHARTS

Typical GPS/GLONASS antenna Return Loss

LOG



VSWR



RoHS COMPLIANT

Description: GNSS-DUAL WIFI-DSRC ANT

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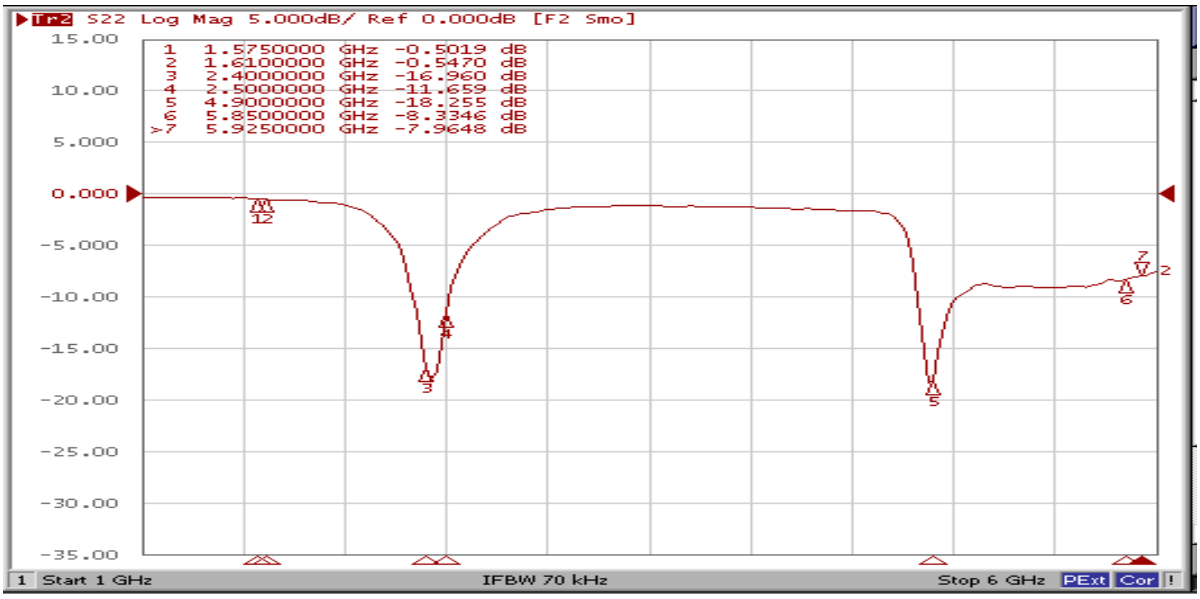
PART NUMBER: W3095

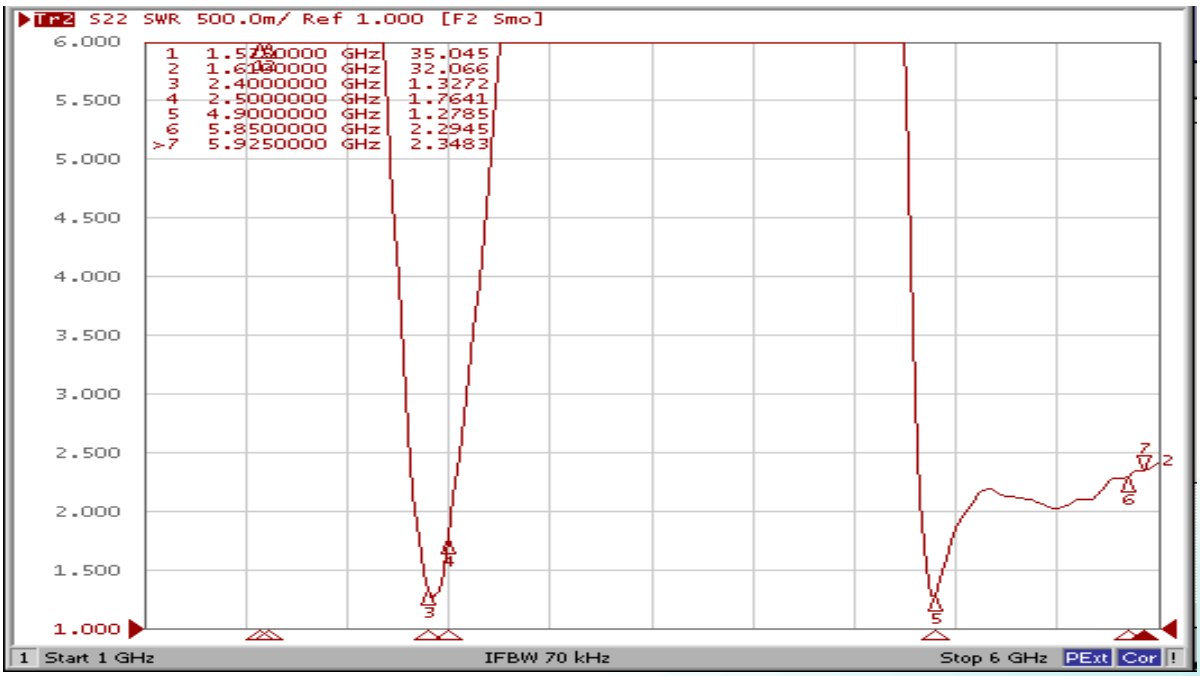
CHARTS

Typical WIFI antenna Return Loss

LOG



VSWR



RoHS COMPLIANT

Description: GNSS-DUAL WIFI-DSRC ANT

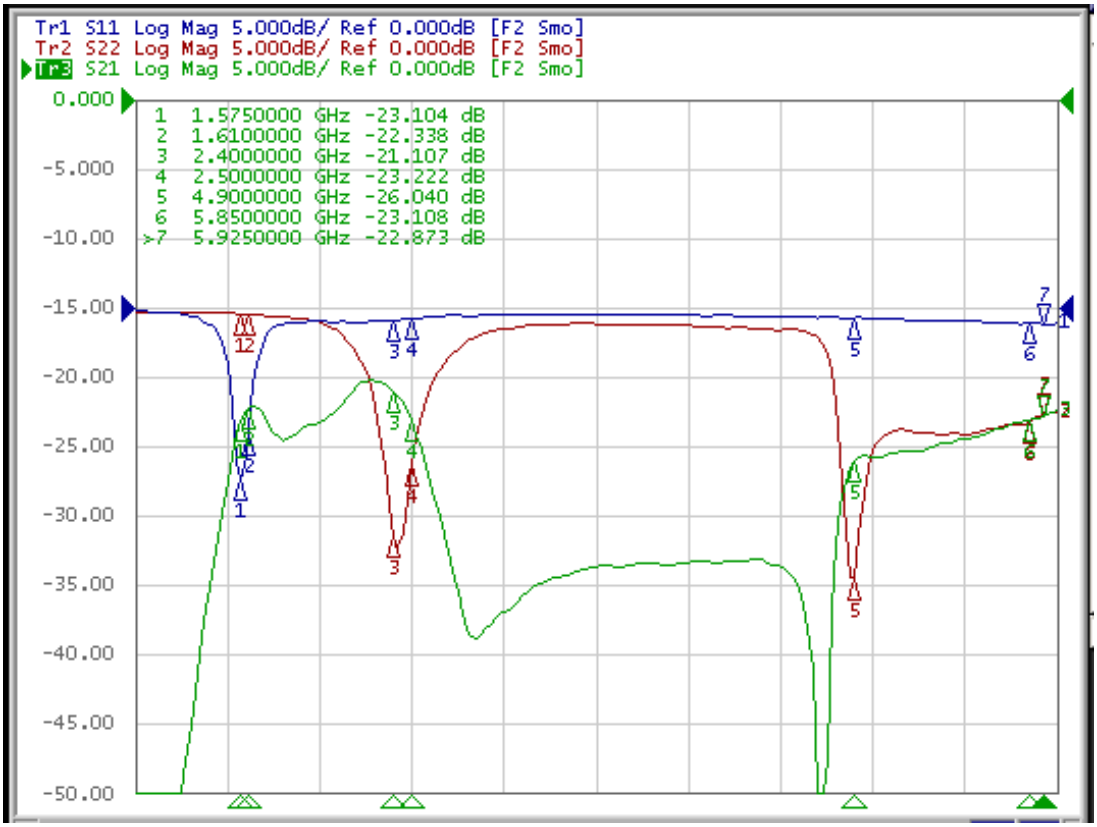
Series: CERAMIC CHIP

PART NUMBER: W3095

CHARTS

Typical Isolation

Isolation



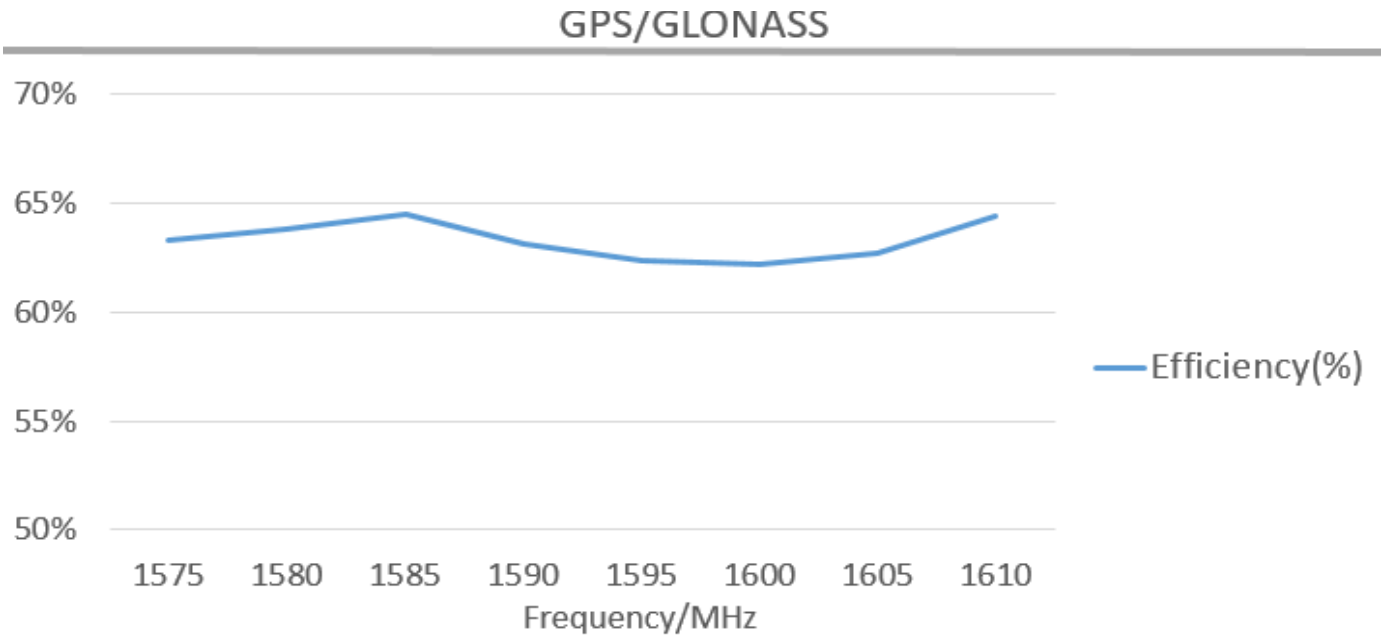
Description: GNSS-DUAL WIFI-DSRC ANT

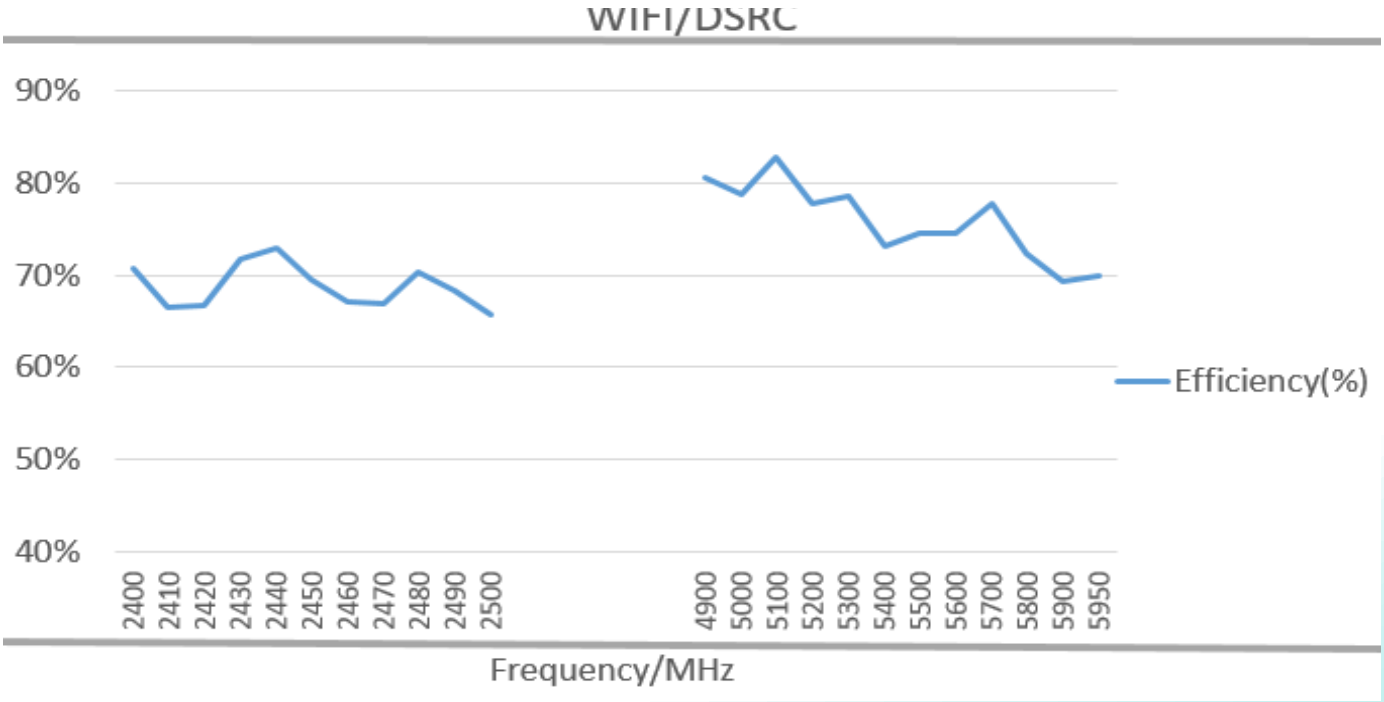
Series: CERAMIC CHIP

PART NUMBER: W3095

CHARTS

Typical Antenna Total Efficiency





RoHS COMPLIANT

Description: GNSS-DUAL WIFI-DSRC ANT

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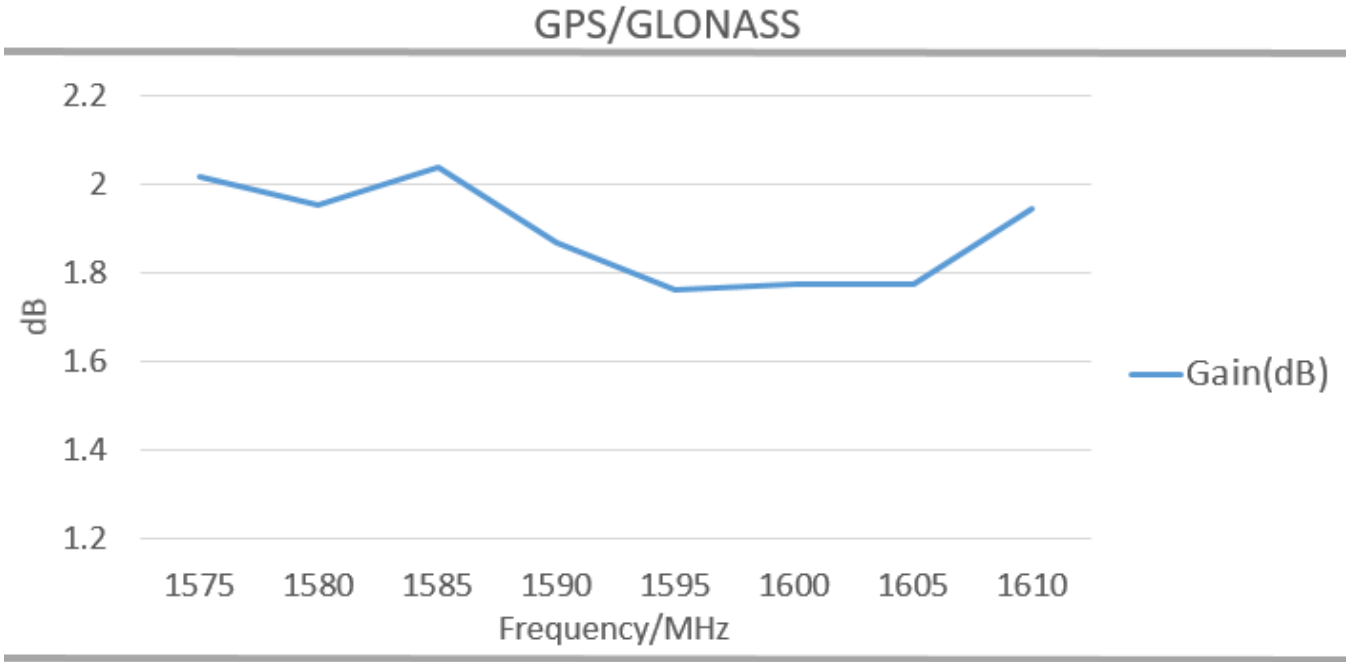
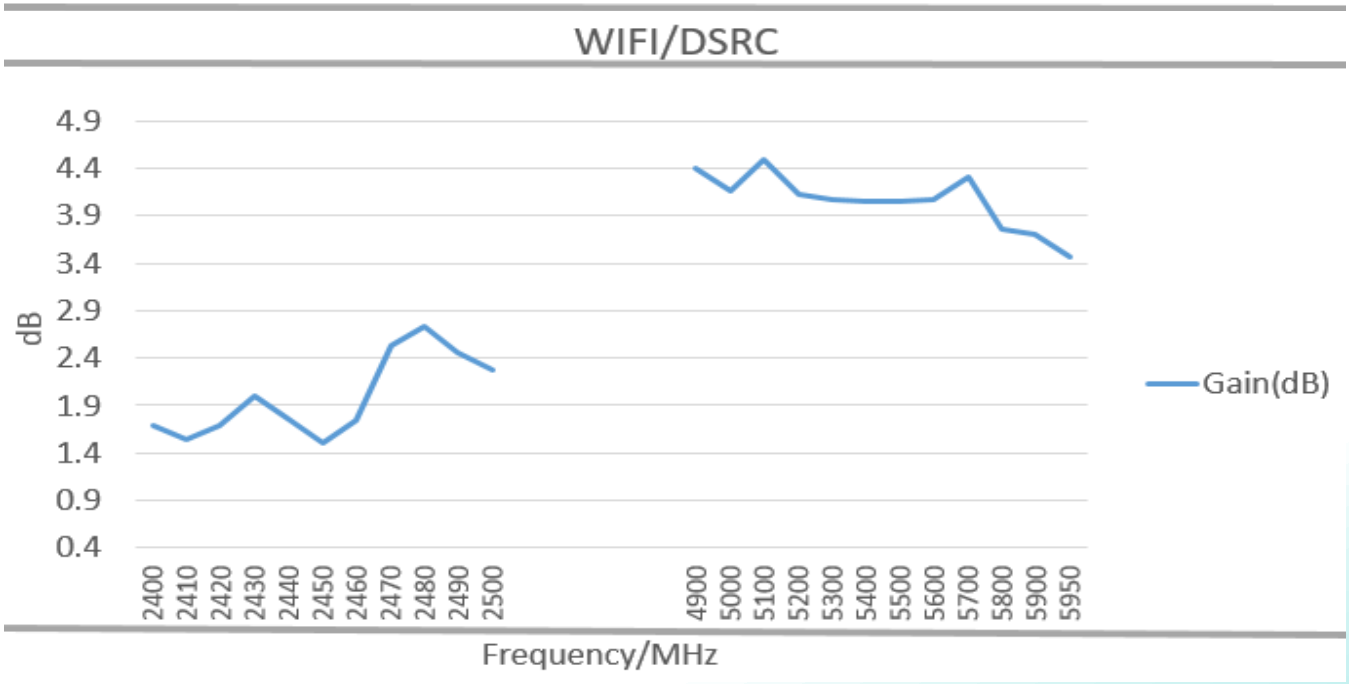
PART NUMBER: W3095

CHARTS

Typical Antenna Peak Gain





RoHS COMPLIANT

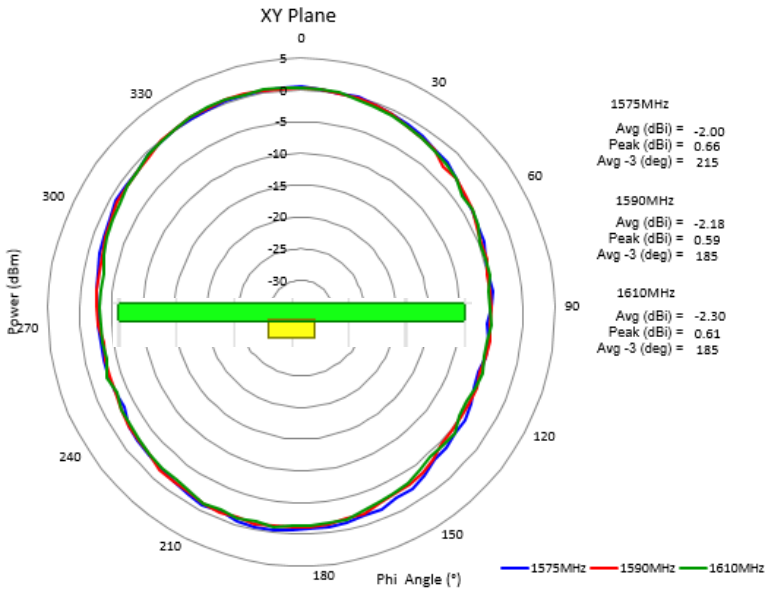
Description: GNSS-DUAL WIFI-DSRC ANT

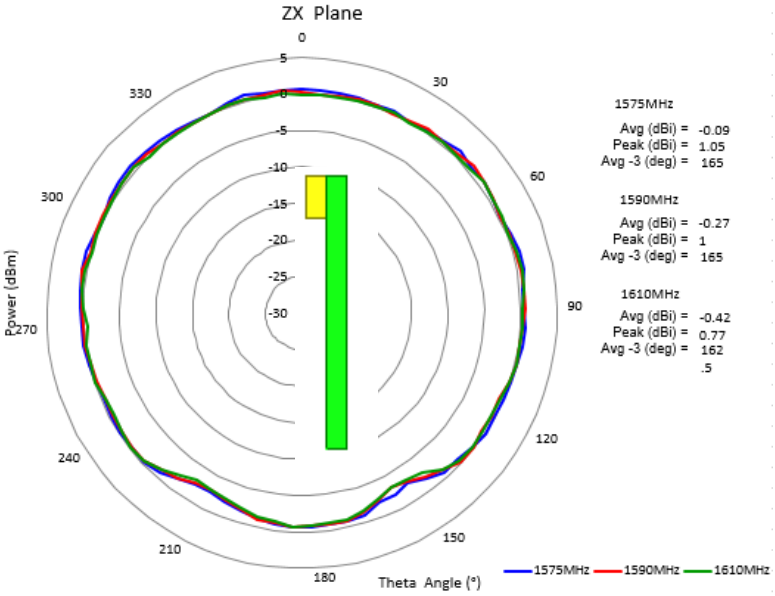
Series: CERAMIC CHIP

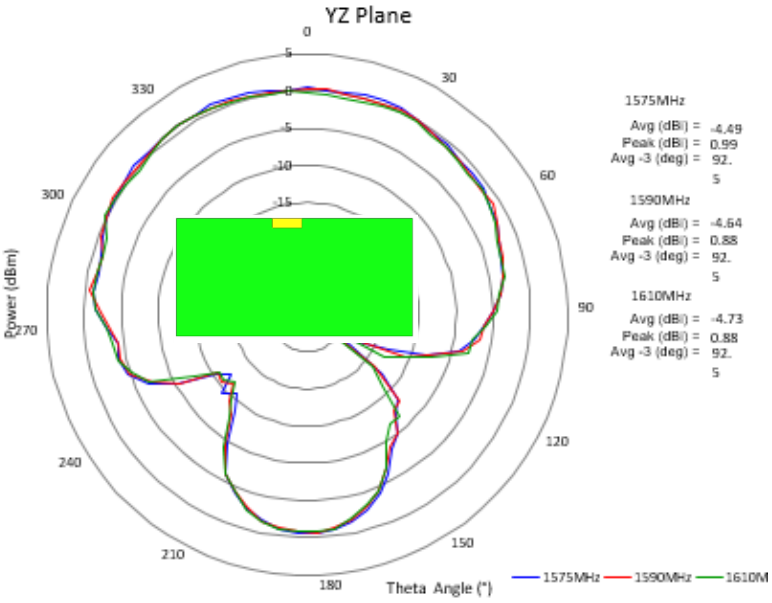
PART NUMBER: W3095

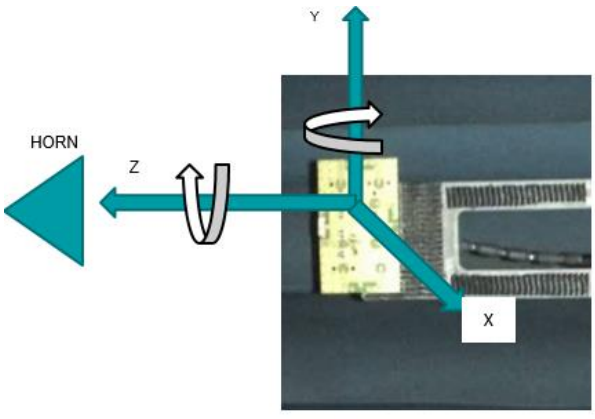
CHARTS

Typical free space radiation pattern—GPS/GLONASS









RoHS COMPLIANT

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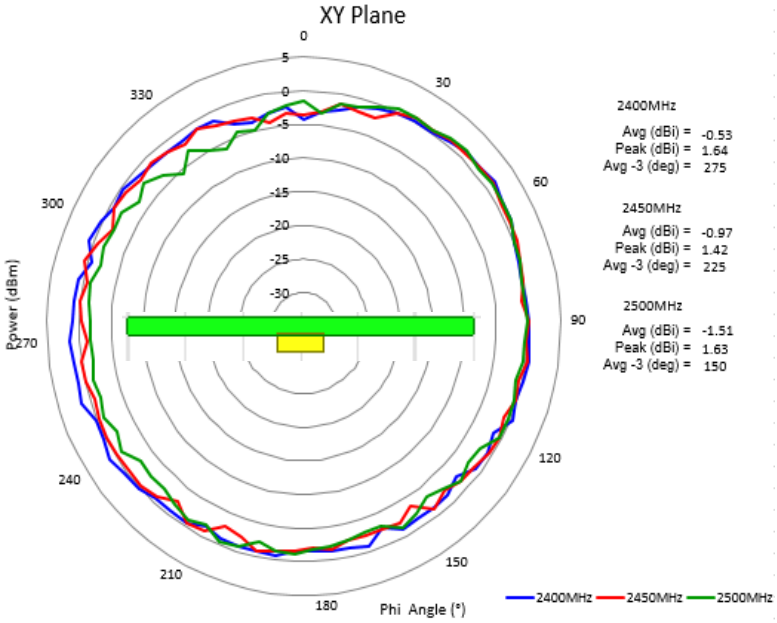
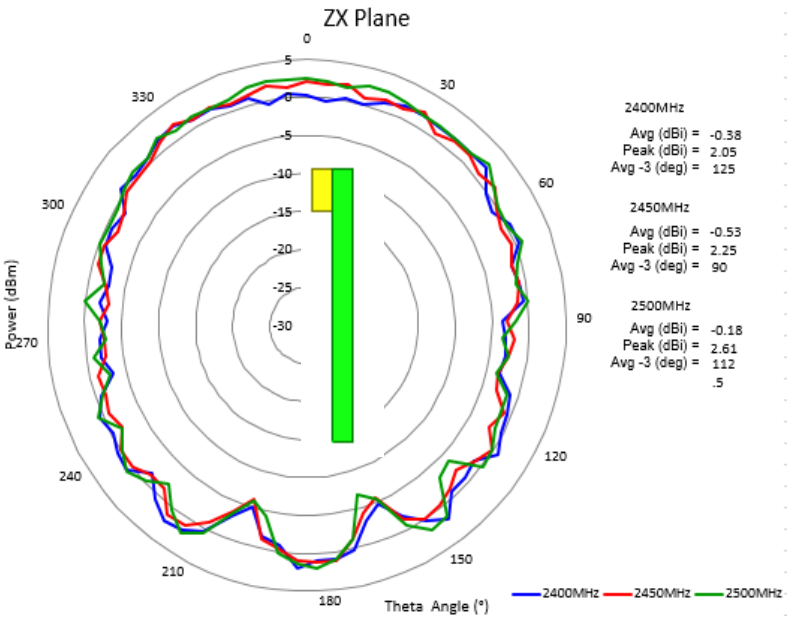
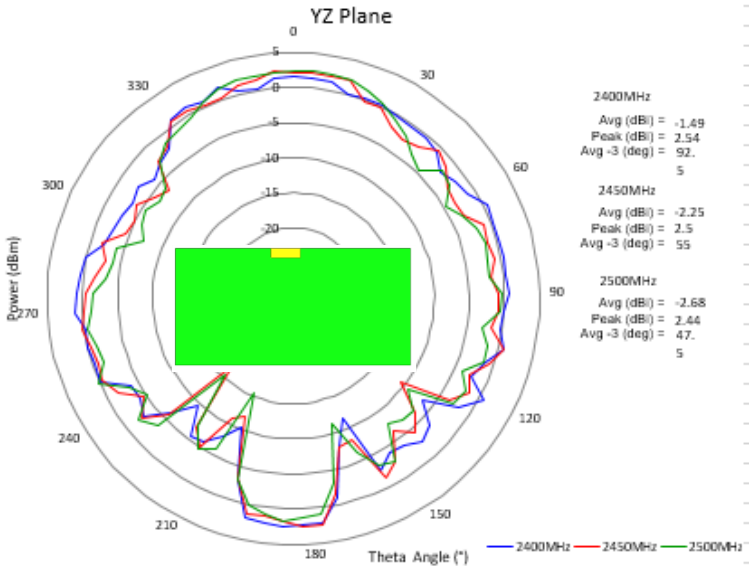
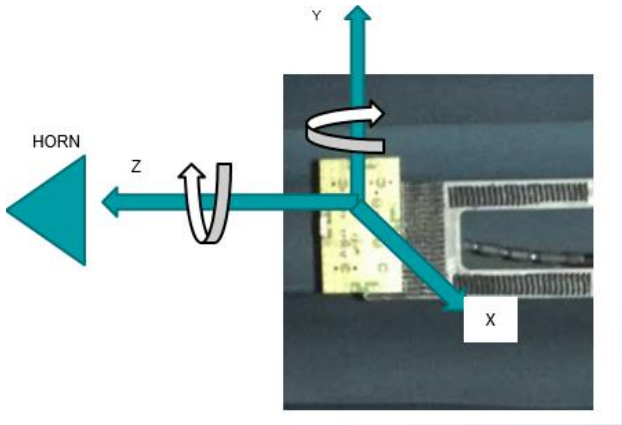
CHARTS

Typical free space radiation pattern—2.4G









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RoHS COMPLIANT

Description: GNSS-DUAL WIFI-DSRC ANT

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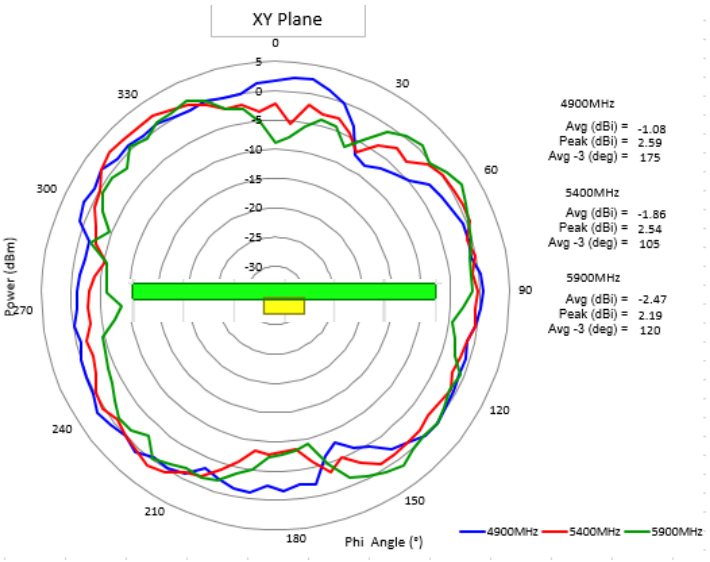
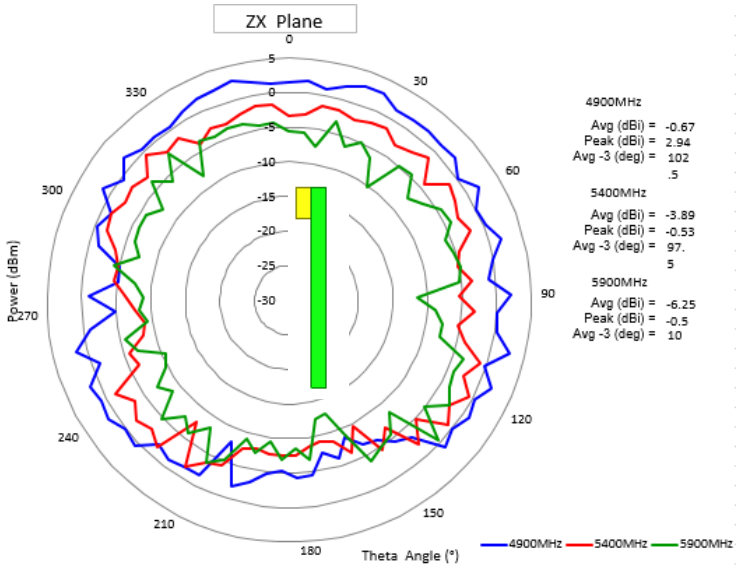
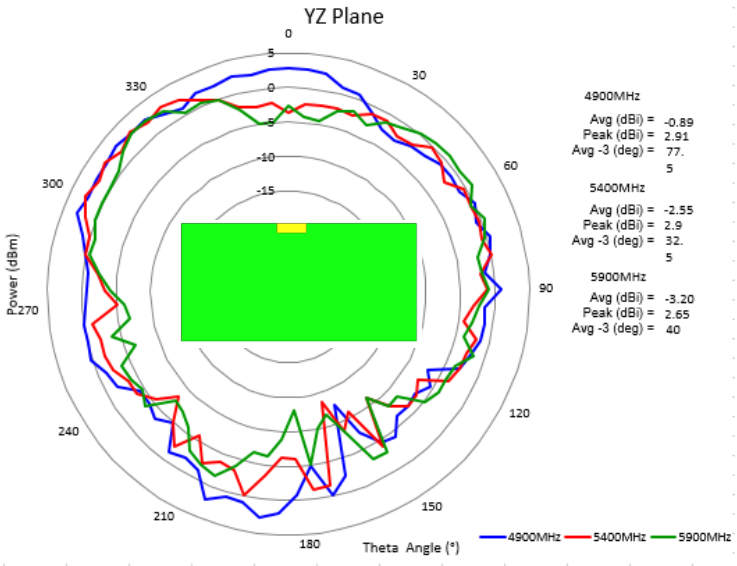
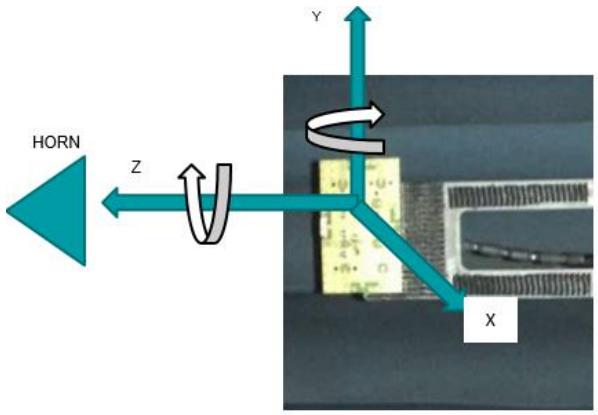
CHARTS

Typical free space radiation pattern—5G









Description: GNSS-DUAL WIFI-DSRC ANT

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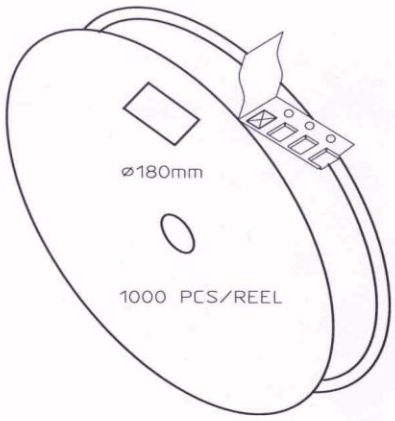
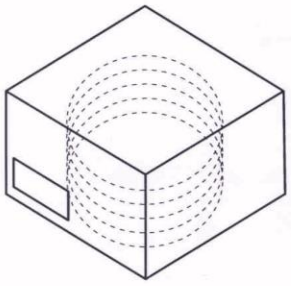
PACKAGING





CARRIER TAPE H85-00188
width=24,00 depth=2.20
COVER TAPE H85-00159
width=21.20

LENGTH OF TAPE:

- Leader section: min 350 mm before component section
- Trailer section: min 40 mm after component section.

Empty part cavities at leader and trailer section of the tape must be sealed with top cover tape.

BOX H85-00128 (182x182x125)	1 pcs
- LABEL	1 pcs/BOX
REEL H85-00160 (D180,W28)	4 pcs
- REEL LABEL	1 pcs/REEL

MATERIAL					
HANDLINGS					
		RATIO	DRWN	160107 PeHa	H
			DGNER		G
			CHKD		F
			APPRD		E
PRODUCT H90-0Y113-F01P01			APPRD BY		D
					C
					B
DENOMINATION PACKING FORM					A
			VERSION		MOD/DATE/NAME

Description: GNSS-DUAL WIFI-DSRC ANT

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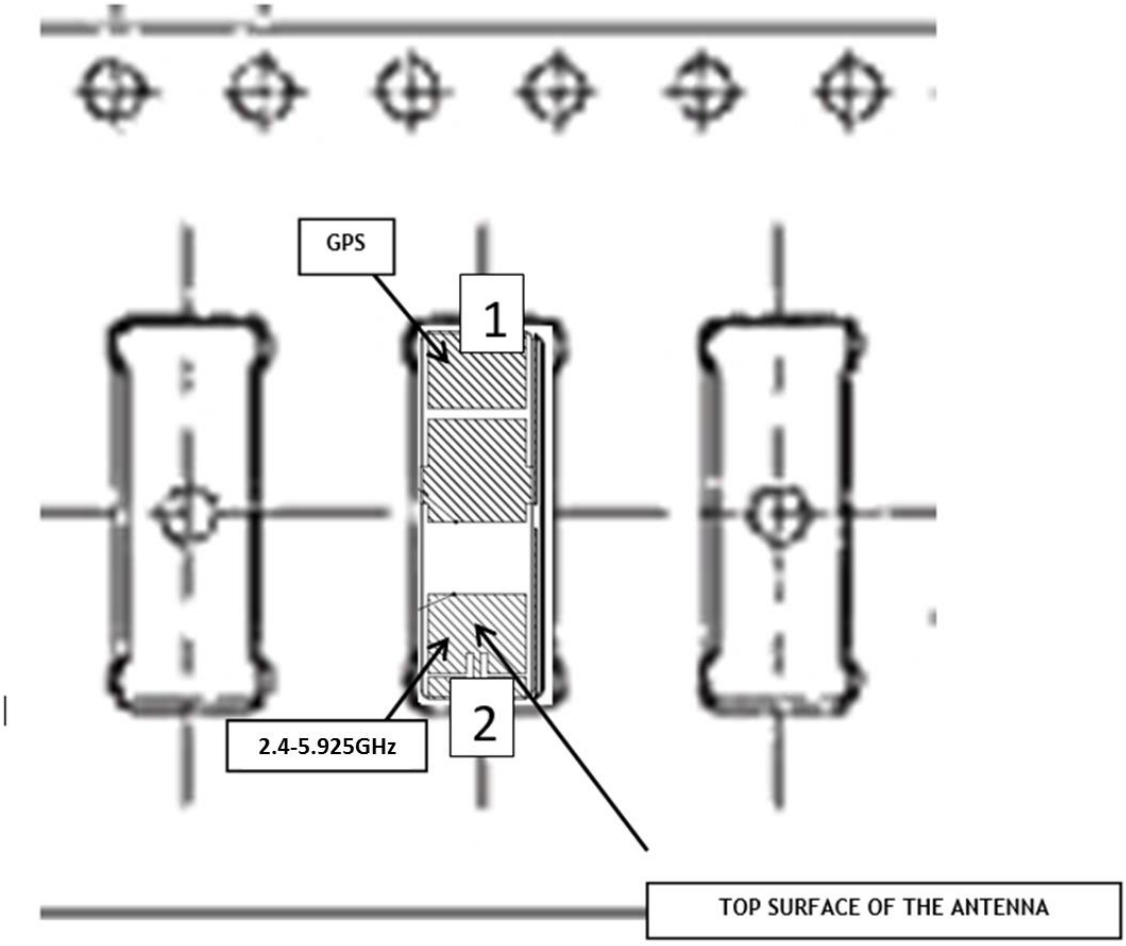
Block Orientation

Antenna soldering pads facing down to the bottom of the carrier tape

Top view of the carrier tape



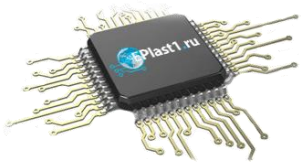
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

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

Телефон: 8 (812) 309 58 32 (многоканальный)
Факс: 8 (812) 320-02-42
Электронная почта: org@eplast1.ru
Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.