

LPWA: 915 MHz Board Antenna

ABR3407I9

Request Samples



Check Inventory



34 x 7 x 0.8 mm

RoHS/RoHS II Compliant

MSL Level = 1

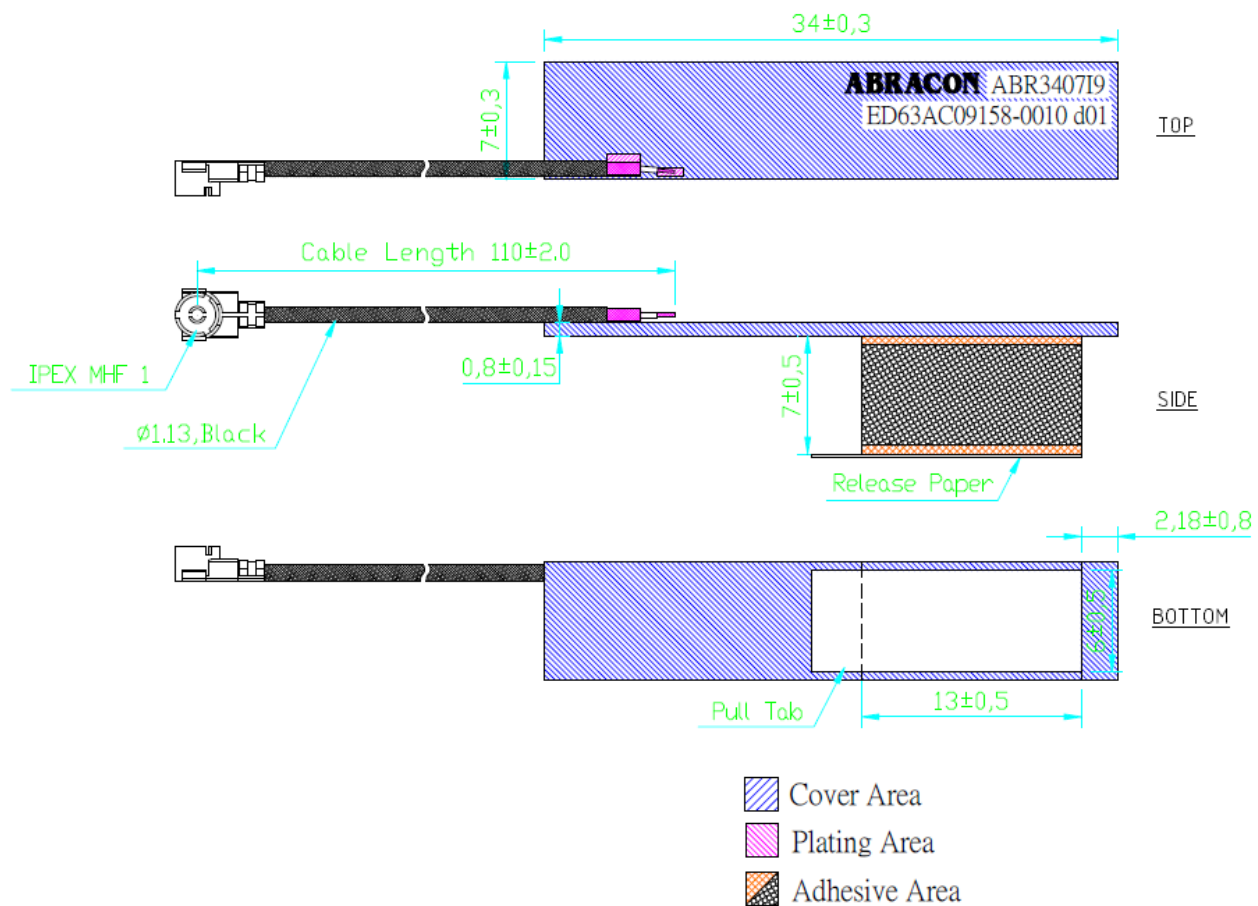
Features

- Low Profile PCB Antenna
- Compact Design
- Peak Gain of 1.84 dBi
- Linear Polarization
- Adhesive Mount
- Customizable RF cable and connector options

Applications

- LPWA/LoRA/SigFox/ISM Applications
- Remote Technology / Monitoring
- Network Devices
- Smart Home
- Consumer Tracking

Product Dimensions



Unit: mm



5101 Hidden Creek Ln Spicewood TX 78669
Phone: 512-371-6159 | Fax: 512-351-8858
For terms and conditions of sales, please visit:
www.abracon.com

REVISED: 08-09-21

ABRACON IS
ISO9001-2015
CERTIFIED

LPWA: 915 MHz Board Antenna

ABR3407I9

Request Samples



Check Inventory



34 x 7 x 0.8 mm

RoHS/RoHS II Compliant

MSL Level = 1

Part Number Builder

ABR3407I9 - □□□□□

Cable length in 'mm'	
Cable length supported : Ø1.13 mm (50 mm to 500 mm)	
Code	Description
0110 (Standard)	110 mm
Other Examples :	
0050	50 mm
0200	200 mm

Cable Type & Connector Type		
Code	Cable Type	Connector Type
S (Standard)	Ø1.13 mm	IPEX-1 (F)
A		IPEX-4 (F)
B		MMCX (F)
C		MMCX (M)
D		MCX (F)
E		MCX (M)
F		SMA (F)
G		SMA (M)
H		RP-SMA (F)
I		RP-SMA (M)
J		SMB (F)
K		SMB (M)
L		FAKRA-D (F)

Example Configurations:

Part Number	Cable length	Cable Type / Connector Type
ABR3407I9-0100S	0100 mm	Ø1.13 mm with IPEX-1 (F) (Standard)
ABR3407I9-0050A	0050 mm	Ø1.13 mm with IPEX-4 (F)

Note:

- For the standard part number (ABR3407I9-0100S), please refer to the packaging at the end of the document.
- For custom configurations (ABR3407I9- □□□□□), MOQs, pricing and packaging changes may be applicable.

LPWA: 915 MHz Board Antenna

ABR3407I9

Request Samples



Check Inventory



34 x 7 x 0.8 mm

RoHS/RoHS II Compliant

MSL Level = 1

Electrical Specification

Parameter	Specification			Unit
	Min	Typ	Max	
Operating Frequency	902		928	MHz
Return Loss			-12	dB
Peak gain			1.84	dBi
Impedance		50		Ω
Polarization	Linear			

Mechanical Specification

Parameter	Specification
Antenna Dimensions	34 x 7 x 0.8 mm
Antenna Type	PCB
Mounting Type	Adhesive
RF Connector	IPEX MHF 1
RF Cable Type	\varnothing 1.13 mm
Cable Length	110 mm

Environmental Specification

Parameter	Specification
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C
Relative Humidity	Up to 95%
ROHS Complaint	Yes
PB Free	Yes
MSL Level	1



5101 Hidden Creek Ln Spicewood TX 78669
Phone: 512-371-6159 | Fax: 512-351-8858
For terms and conditions of sales, please visit:
www.abracon.com

REVISED: 08-09-21

ABRACON IS
ISO9001-2015
CERTIFIED

LPWA: 915 MHz Board Antenna

ABR3407I9

Request Samples



Check Inventory

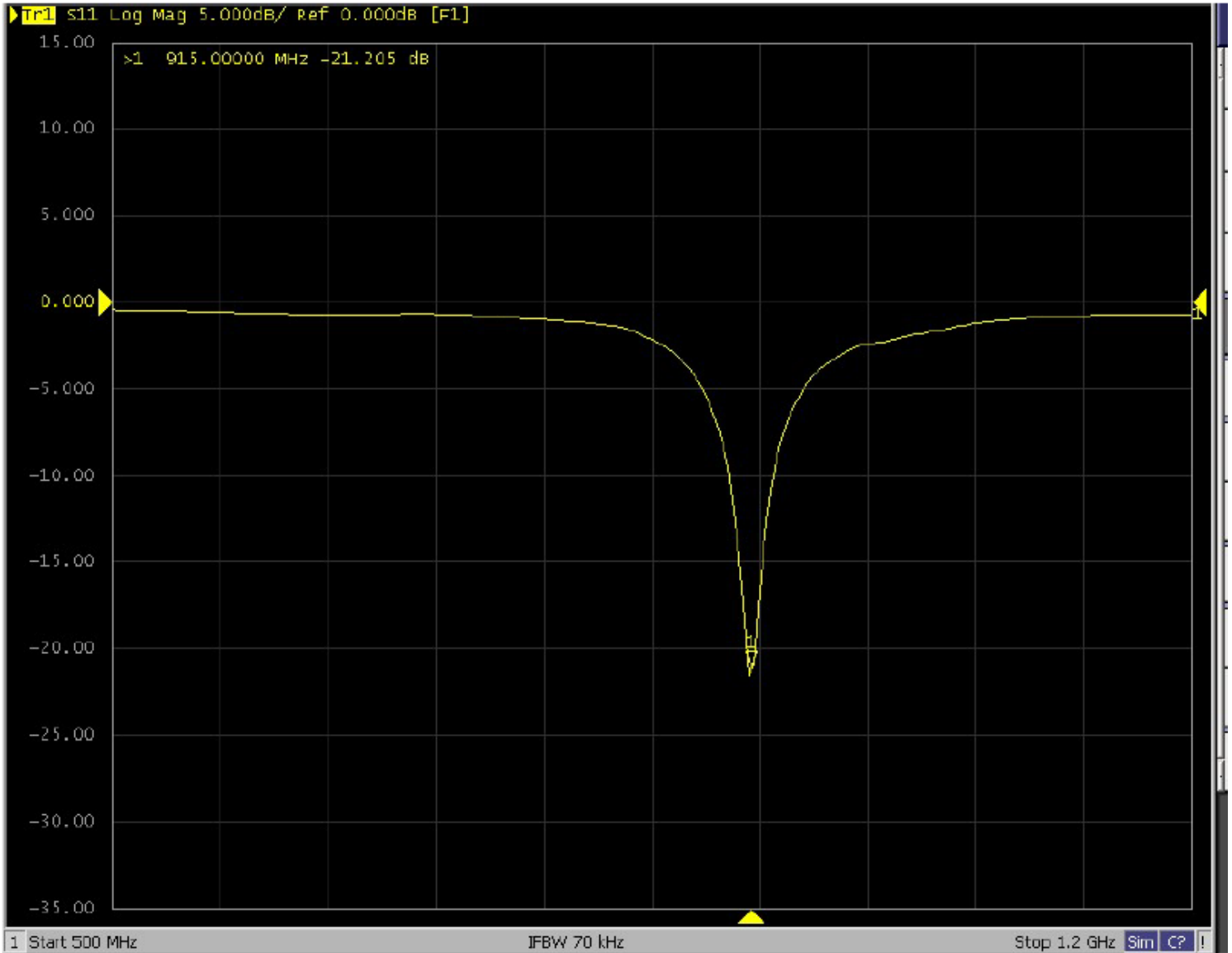


34 x 7 x 0.8 mm

RoHS/RoHS II Compliant

MSL Level = 1

Frequency Response Chart



5101 Hidden Creek Ln Spicewood TX 78669
Phone: 512-371-6159 | Fax: 512-351-8858
For terms and conditions of sales, please visit:
www.abracon.com

REVISED: 08-09-21

ABRACON IS
ISO9001-2015
CERTIFIED

LPWA: 915 MHz Board Antenna

ABR3407I9

Request Samples



Check Inventory

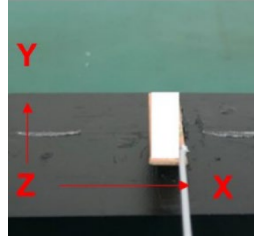


34 x 7 x 0.8 mm

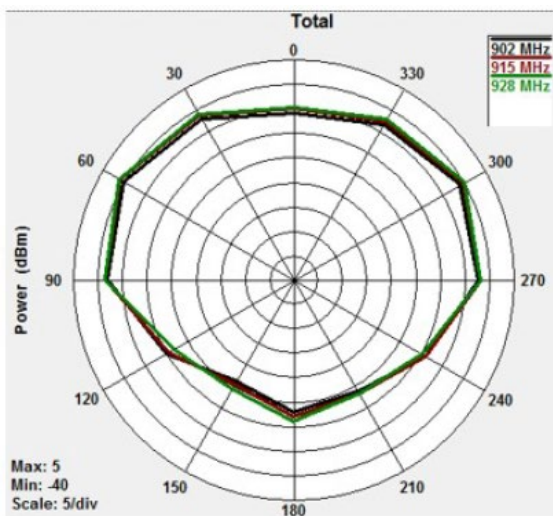
RoHS/RoHS II Compliant

MSL Level = 1

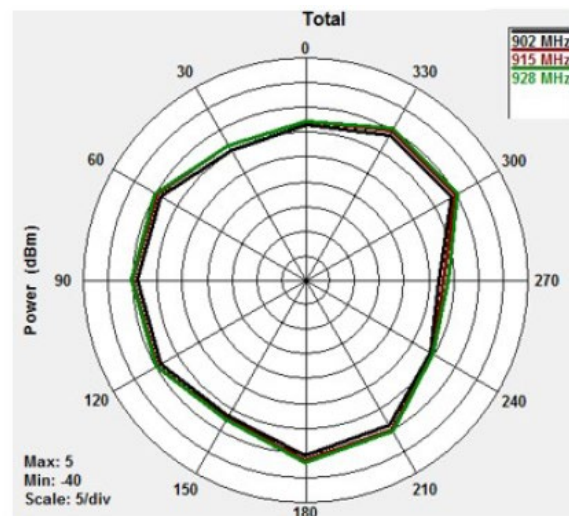
Radiation Characteristics



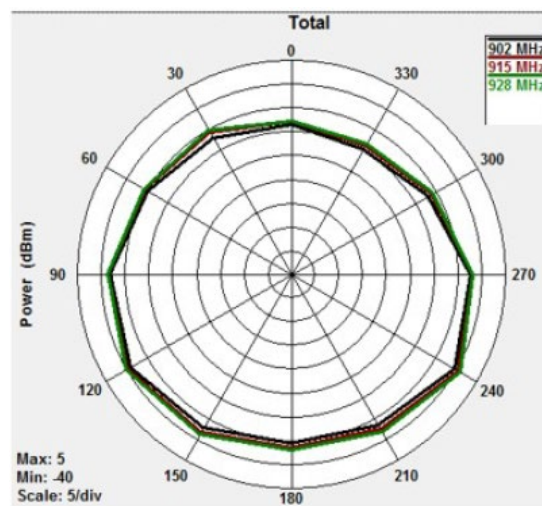
2D Patterns



XY-Plane



XZ-Plane



YZ-Plane

LPWA: 915 MHz Board Antenna

ABR3407I9

Request Samples



Check Inventory

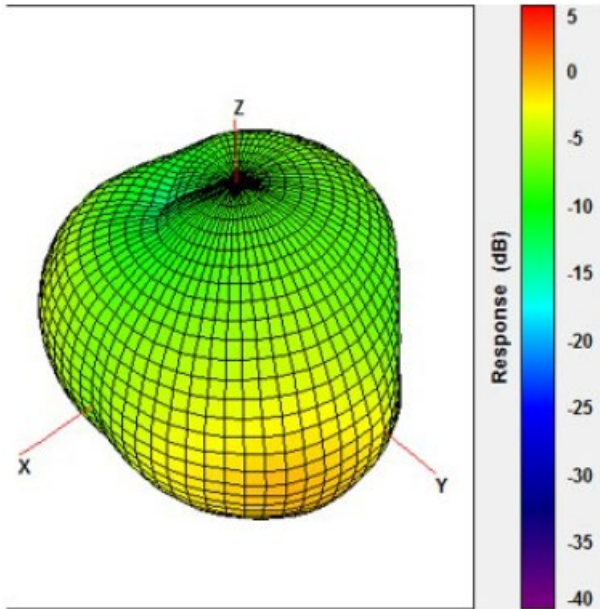


34 x 7 x 0.8 mm

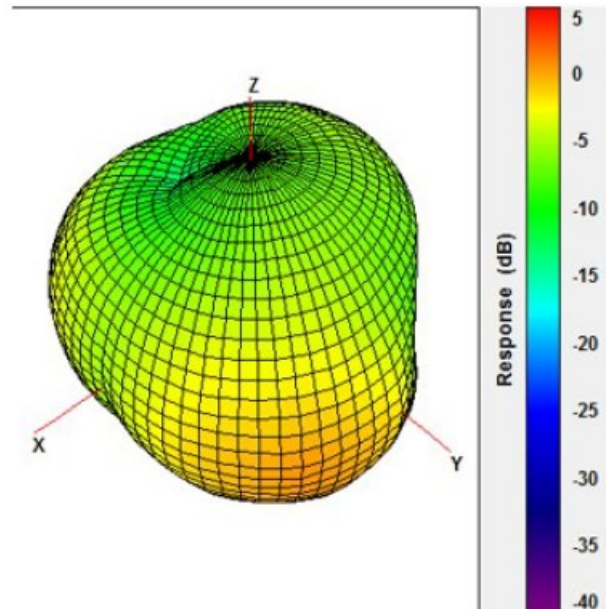
RoHS/RoHS II Compliant

MSL Level = 1

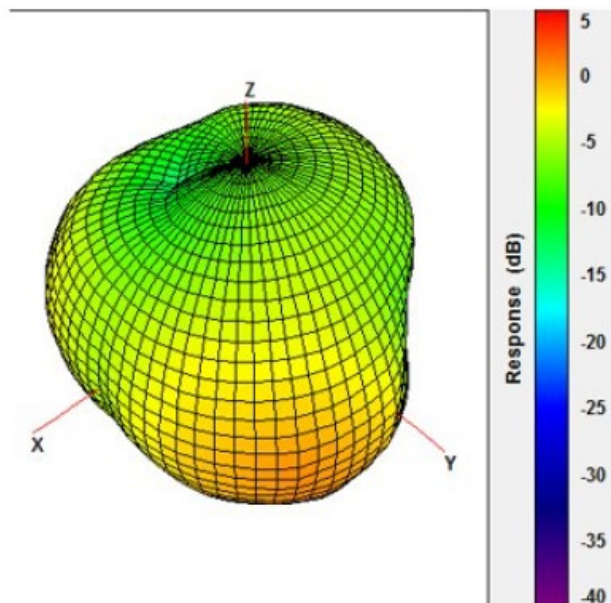
3D Patterns



902MHz



915MHz



928MHz

LPWA: 915 MHz Board Antenna

ABR3407I9

Request Samples



Check Inventory



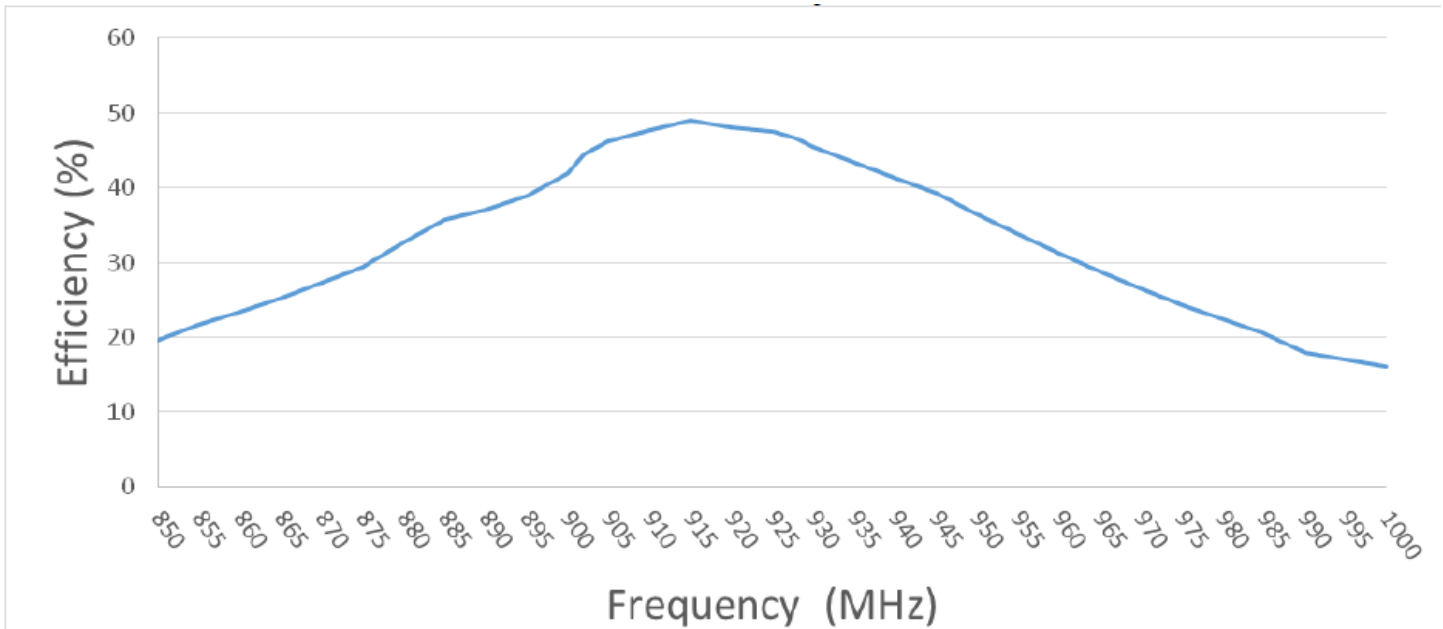
34 x 7 x 0.8 mm

RoHS/RoHS II Compliant

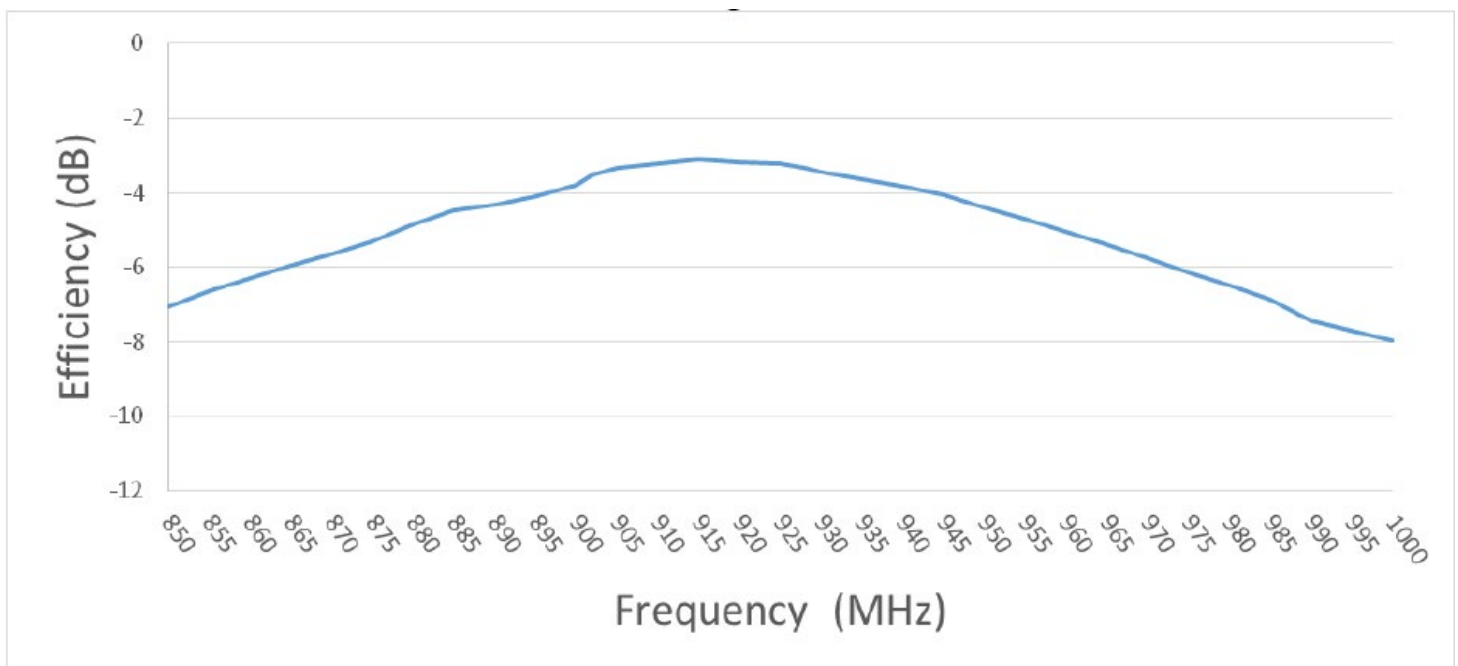
MSL Level = 1

Gain and Efficiency

Efficiency



Average Gain



LPWA: 915 MHz Board Antenna

ABR3407I9

Request Samples



Check Inventory

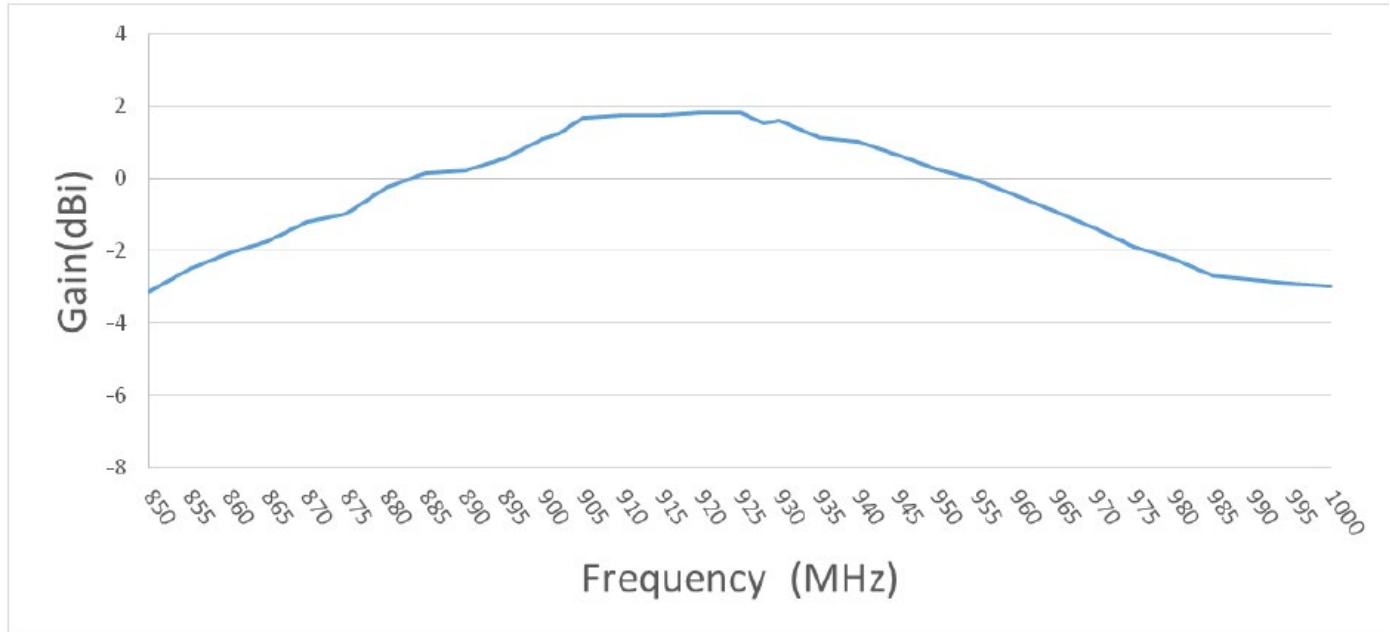


34 x 7 x 0.8 mm

RoHS/RoHS II Compliant

MSL Level = 1

Peak Gain



Frequency (MHz)	850	860	870	880	890	900	910	920	930	940	950	960	969
Efficiency (%)	19.69	23.46	27.28	32.67	36.98	41.96	47.96	48.06	45.44	41.43	36.46	31.18	26.54
Average Gain (dB)	-7.06	-6.3	-5.64	-4.86	-4.32	-3.77	-3.22	-3.18	-3.43	-3.83	-4.3	-5.06	-5.76
Peak Gain (dBi)	-3.13	-2.09	-1.2	-0.24	0.24	1.08	1.75	1.84	1.6	1.02	0.25	-0.48	-1.38

Packaging Information

Number of Antenna/ Carton: 1600 pcs

Dimension of the Carton: 330 x 280 x 254 mm

ATTENTION: Abracon LLC's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependent Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon LLC is required. Please contact Abracon LLC for more information.



5101 Hidden Creek Ln Spicewood TX 78669
 Phone: 512-371-6159 | Fax: 512-351-8858
 For terms and conditions of sales, please visit:
www.abracon.com

REVISED: 08-09-21

ABRACON IS
 ISO9001-2015
 CERTIFIED