antenna conceptor

Product Datasheet

2J7739MGF

915 MHz ISM and GPS/GLONASS Magnetic Mount

Key Features

Cable 1: 915 MHz ISM
- 902-928 MHz

Cable 2: GPS/GLONASS/QZSS/Galileo
- 1575-1610 MHz

Magnetic Mount
Ground Plane Dependent
Customizable Cable and Connector
Dimensions: Ø 54 x 68.2 mm
Certificates: IP67, IP69, IK09



1. Antenna and electrical specifications

Cable 1

Parameters	915 MHz ISM Antenna
Standards	ZigBee, ISM, SIGFOX, LoRa
Band (MHz)	915 MHz
Frequency (MHz)	902-928
Return Loss (dB)	~-10.1
VSWR	~1.8:1
Efficiency (%)	~59
Peak Gain (dBi)	~2.0
Average Gain (dB)	~-2.4
Impendance (Ohm)	50
Polarisation	Linear
Radiation Pattern	Omni-Directional
Max. Input Power (W)	25
Connector Type	SMA-Male Standard (Other Connectors Available)
Cable Length	300 cm Standard (Any Cable Length Available)
Cable Type	LL100 Standard (Other Cables Available)

Cable 2

Parameters	GPS/GLONASS Antenna	
Standard	GPS/QZSS/Galileo	GLONASS
Band (MHz)	1575	1602
Frequency(MHz)	1575.42	1598-1606
Patch Size (mm)	25 x 25 x 4	
Return Loss (dB)	<=-15.0 dB	
VSWR	<=1.4:1 dB	
Impedance	50	
Radiation Pattern	Hemispherical	
Polarization	RHCP	
Saw Filter	Pre-filter	
Active Gain (dB)	28 @ 2.7 V	
Noise Figure (dB)	1.5 Typ	
Voltage (V)	1.5 - 3.6	
Current (mA)	9 Typ	
Power Consumption (mW)	24.3 Typ	
ESD Protection (kV)	2kV	
Connector Type	SMA-Male Standard (Other Connectors Available)	
Cable Length	300 cm Standard (Any Cable Length Available)	
Cable Type	LL100 Standard (Other Cables Available)	

Antenna Measurement Conditions:

Mounted on 30 x 30 cm Ground Plane

LL100 200 cm Cable Length

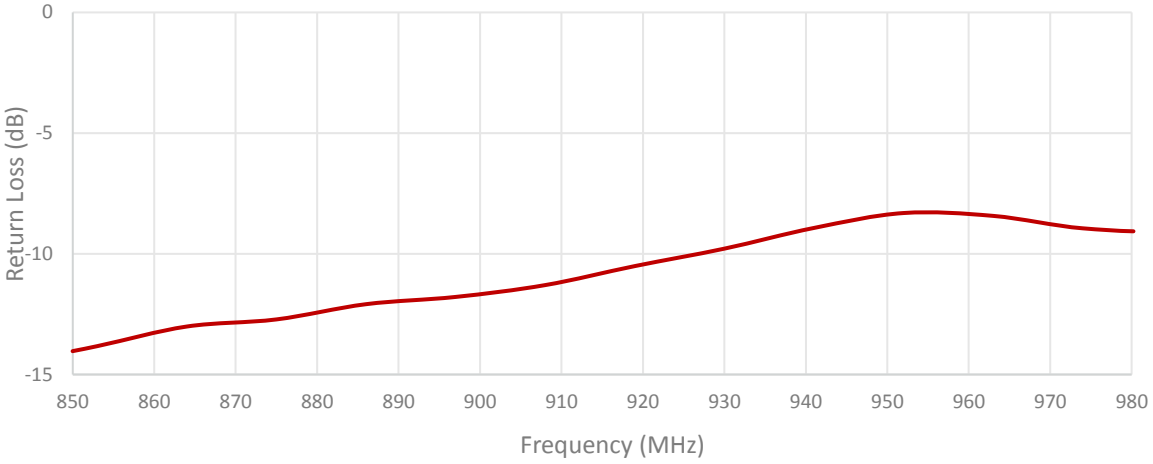
Measured in Certified CTIA 3D Anechoic Chamber

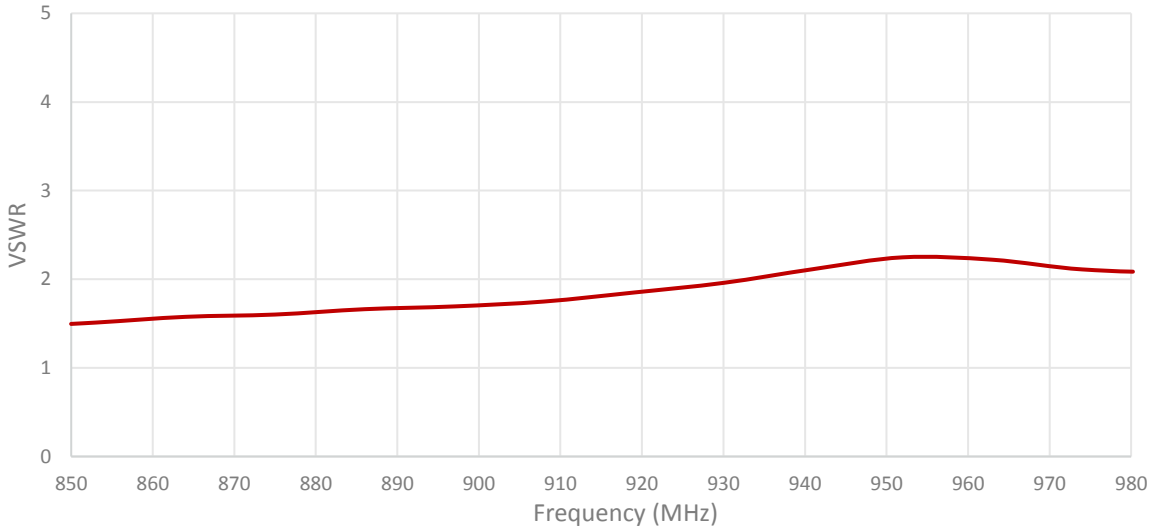
2. Mechanical and environmental specifications

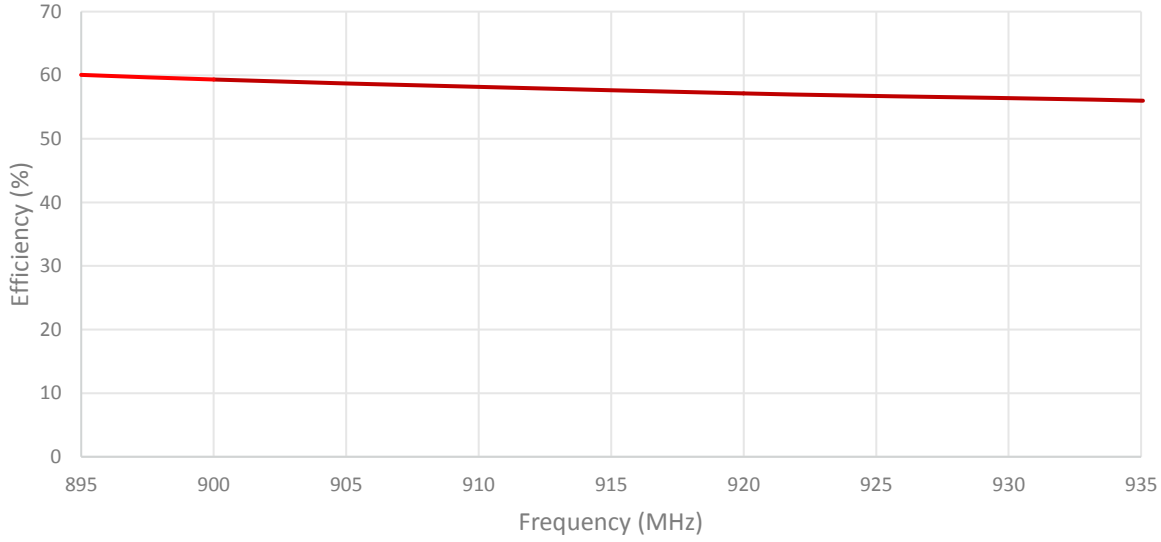
Specifications	2J7739MGF
Mounting Type	Magnetic Mount
Dimensions (mm)	Ø 54 x 68.2
Radome Type	ASA
Radome Color	Black
Antenna Base	Zamak
Operating Temperature (C)	-40 to +85
Storage Temperature (C)	-40 to +85
Substance Compliance	RoHS
Certificates	IP67, IP69, IK09

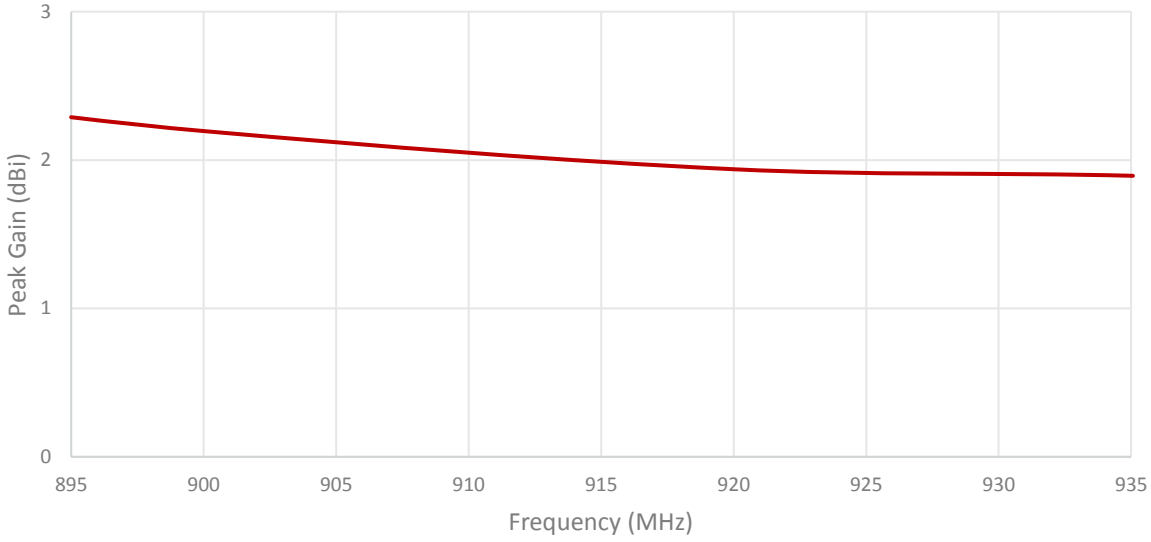
3. Antenna parameters

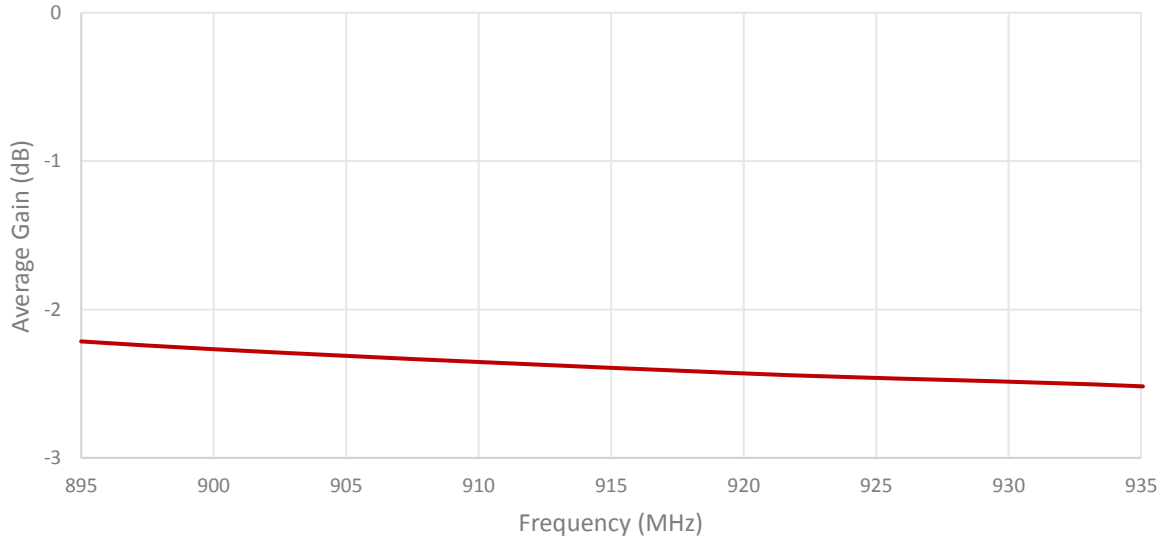
Cable 1: 915 MHz ISM

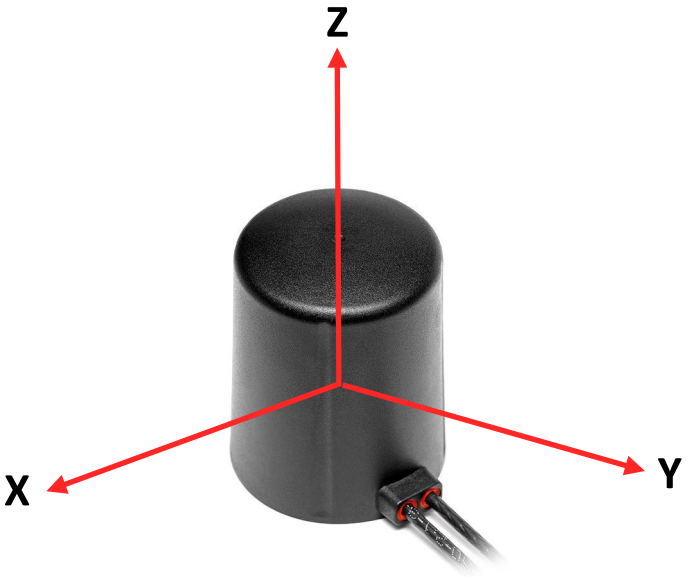





70
60
50
40
30
20
10
0
Efficiency (%)
895
900
905
910
915
920
925
930
935
Frequency (MHz)

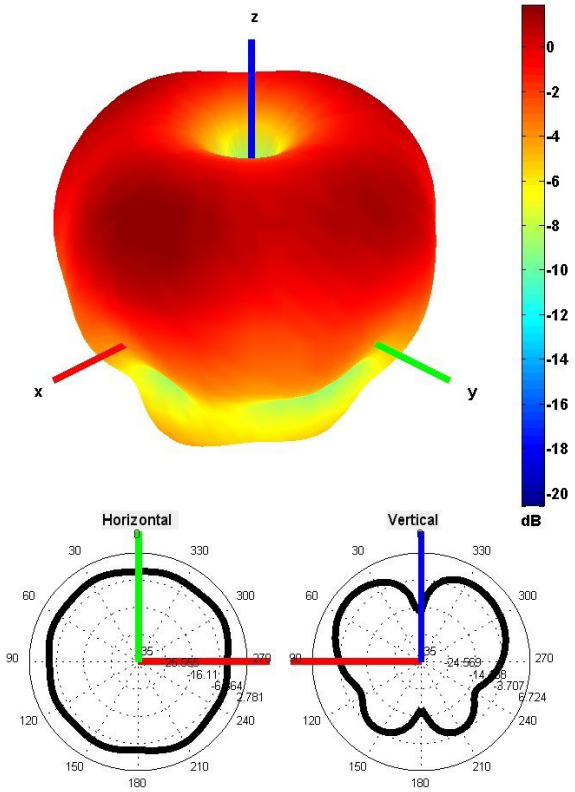

3
2
1
0
Peak Gain (dBi)
895
900
905
910
915
920
925
930
935
Frequency (MHz)


0
-1
-2
-3
Average Gain (dB)
895
900
905
910
915
920
925
930
935
Frequency (MHz)



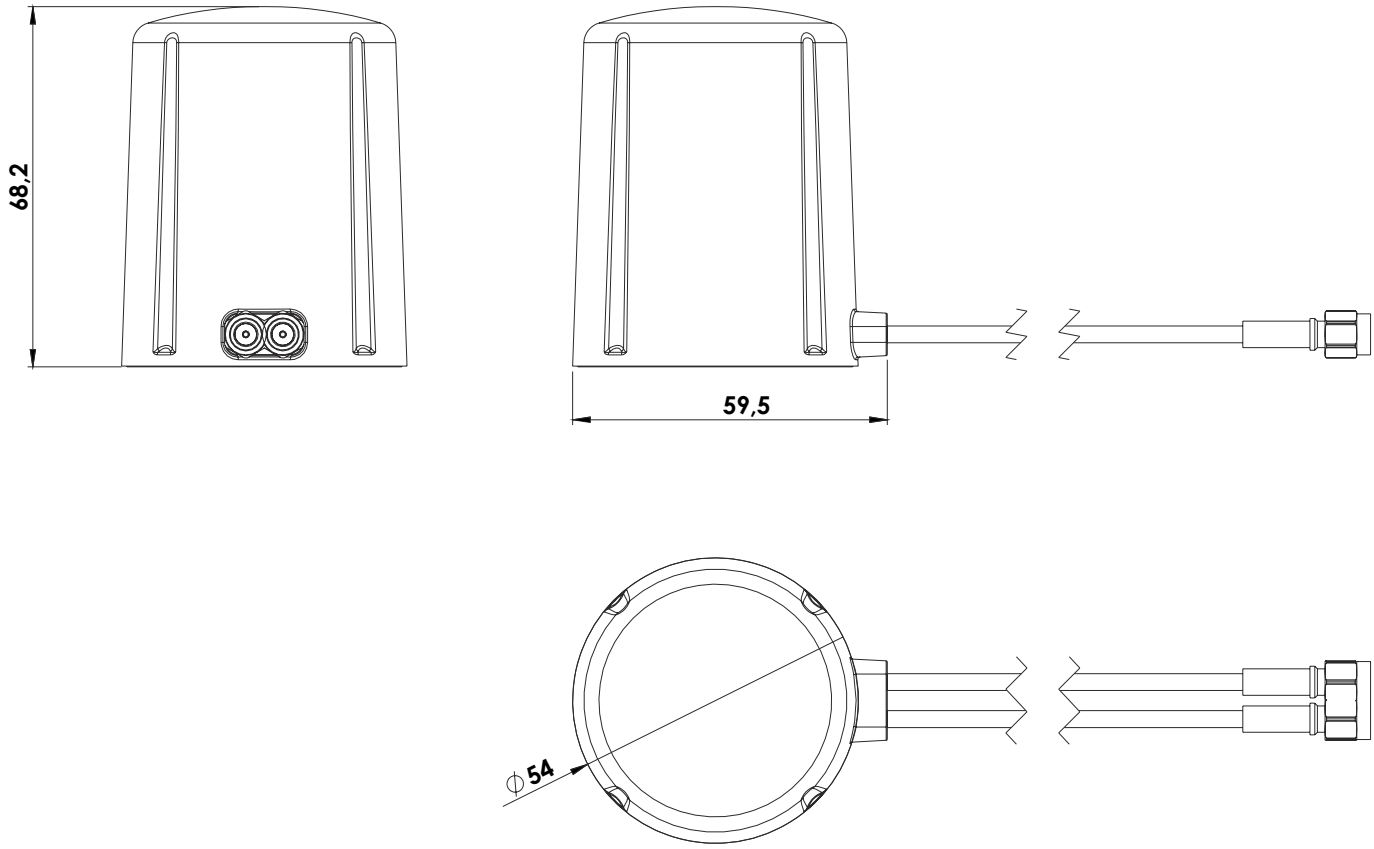
Radiation pattern reference

Cable 1: 915 MHz ISM



915 MHz Radiation pattern

4. Antenna drawings



5. Antenna Images







