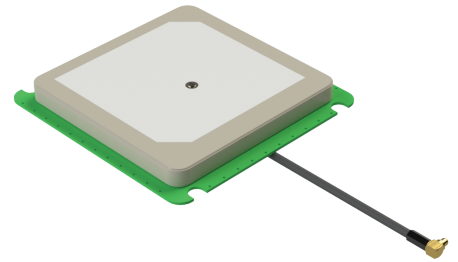




MPA-716-868

868MHz ISM passive Patch
Part #: 189-00069-01



Description

The MPA-716-868 passive antenna is an optimized high performance LoRa and Sigfox patch antenna. This antenna is perfect for projects with a smaller scope and budget. This antenna is designed for embedded applications such as automotive ISM applications, and Short range 868 MHz mesh networks. This ceramic patch has an excellent directional hemispherical radiation pattern antenna. The MPA-716-868 antenna has an interface connector (through pin solution), with RG178 and MMCX male right angle connector.

Electrical Specifications

Parameter	Specification
Frequency Range	865 MHz - 867MHz
Center Frequency (without PCB)	865MHz \pm 3MHz
Bandwidth (without PCB)	\geq 14 MHz
Return Loss (without PCB)	-10 dB
Center Frequency (with PCB)	868MHz \pm 3MHz
Bandwidth (with PCB)	\geq 16 MHz
Return Loss (with PCB)	-10 dB
VSWR	\leq 1.5
Gain at Zenith	+3.0 dBi typ.
Gain at 10° Elevation	-5.0 dBi typ.
Axial Ratio	\leq 5 dB
Polarization	RHCP
Impedance	50 Ω

Mechanical Specifications

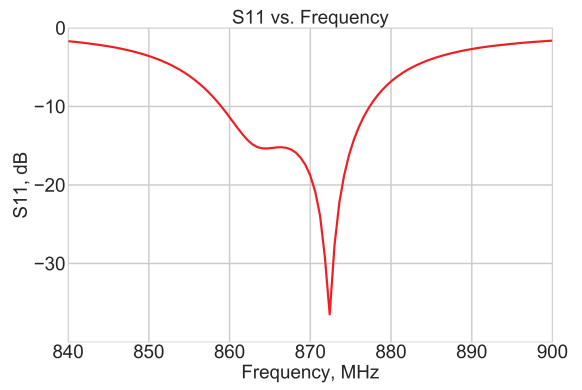
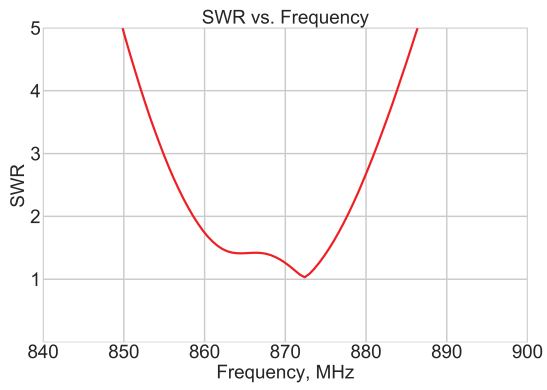
Parameter	Specification
Antenna Dimensions	82 x 80 x 6.6 mm
Operating Temperature	-40 °C to +105 °C
RF connector	MMCX(MALE)
Cable Type	RG178
Cable length	100 mm

Features

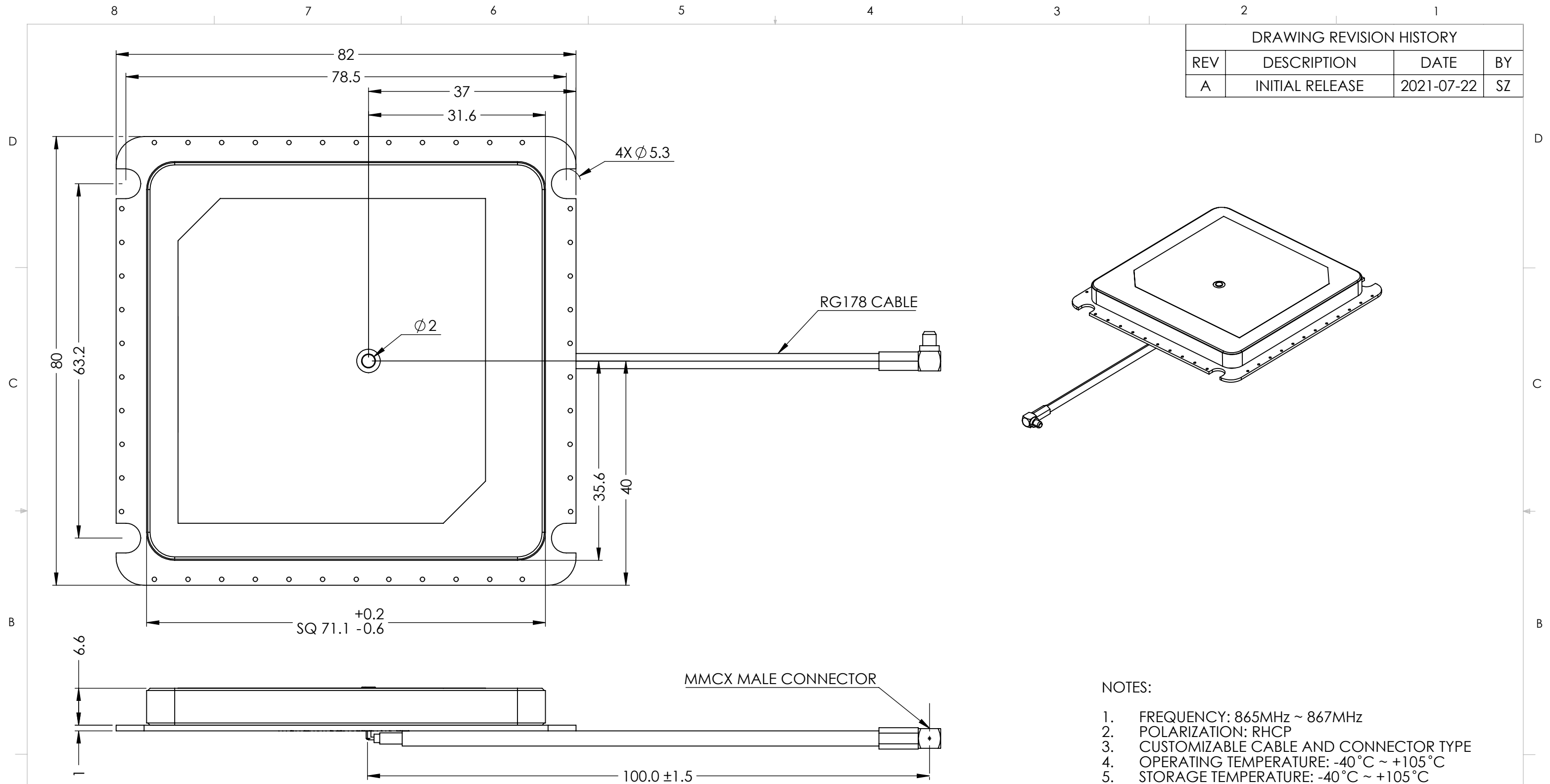
- 868MHz ISM Band
- High antenna performance
- Low profile
- Adhesive mounting
- Pin connector
- Advanced Ceramic Material

Applications

- Remote mesh networks
- Smart metering
- IOT
- Public Safety
- Smart sensors
- Supply chain & logistics



DRAWING REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2021-07-22	SZ



NOTES:

1. FREQUENCY: 865MHz ~ 867MHz
2. POLARIZATION: RHCP
3. CUSTOMIZABLE CABLE AND CONNECTOR TYPE
4. OPERATING TEMPERATURE: -40°C ~ +105°C
5. STORAGE TEMPERATURE: -40°C ~ +105°C

ITEM 189-00069 REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
1	INITIAL RELEASE	2021-07-22	SZ

189-00069 CONFIGURATION TABLE			
DASH NO	CABLE TYPE	CABLE LENGTH	CONNECTOR TYPE
-01	RG178	100 mm	MMCX MALE

UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN MM
 TOLERANCES:
 FRACTIONAL: ±
 DECIMAL: ±
 ANGULAR: MACH ± .5° BEND ±
 ONE PLACE DECIMAL ± 1.0
 TWO PLACE DECIMAL ± .5

	NAME	DATE
DRAWN	SZ	2021-07-22
CHECKED	ZX	2021-07-22
ENG APPR.	NPC	2021-07-22
MFG APPR.		
	Q.A.	

INTERPRET GEOMETRIC TOLERANCING PER:

THIRD ANGLE PROJECTION
DO NOT SCALE DRAWING

CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.

MAXTENA, INC

TITLE: 189-00069
MPA-716-868

SIZE	DWG. NO.	REV
B	117-00482-01	A

CAGE CODE: 5KQH7 SCALE: NONE SHEET 1 OF 1