

Product: 868MOD88-12

Product Order Code:

BM-02183

Narrow Band PCB Antenna

868MHz & 915MHz

ISM, LoRA, SIGFOX, ZigBee



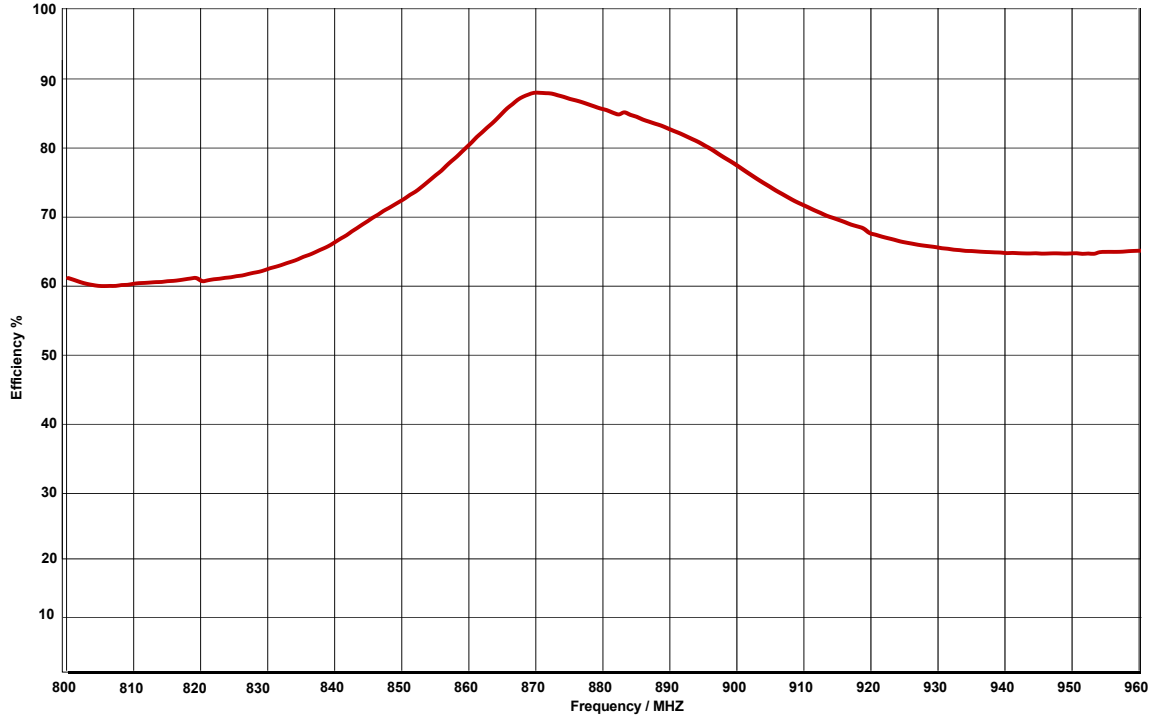
- PCB Self Adhesive Mounted Antenna
- RoHS 2011/65/EU & RoHS3 (2015/863/EU compliant)
- Request samples for test & evaluation via enquiry@bloomice.com

Technical Data

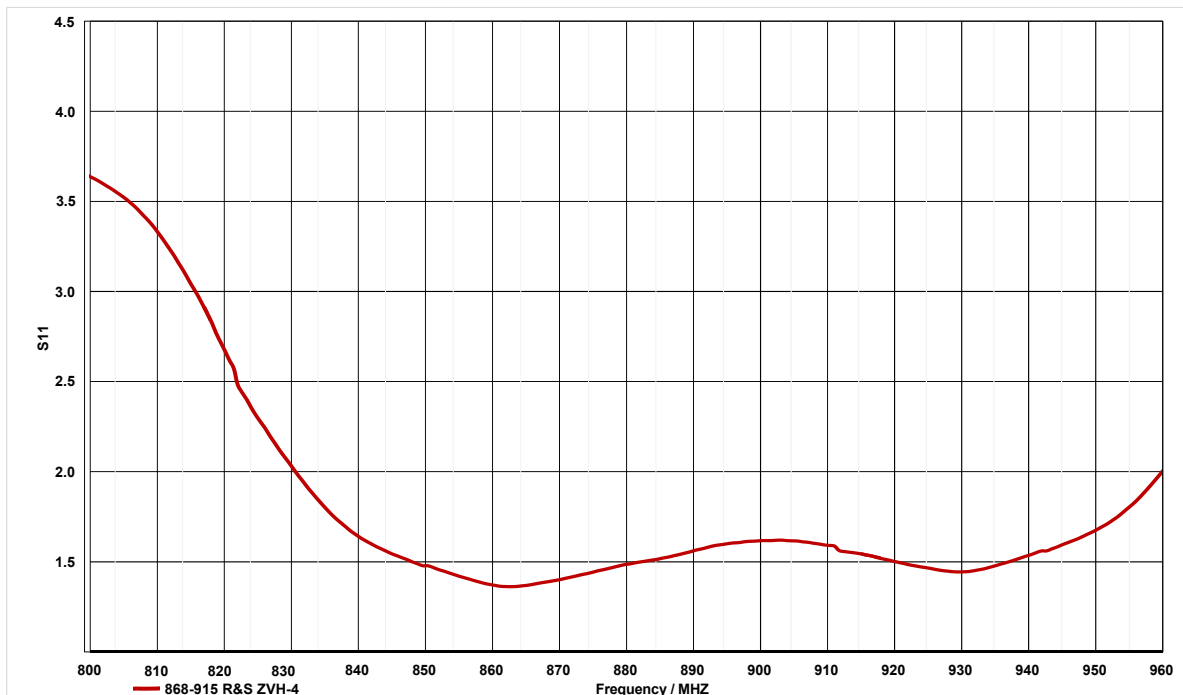
Dimensions	88mm (W) x 12mm (H) x 1.6mm (D) (Exc. Adhesive Pad)	
Weight	11g	
Construction Materials	FR4 - Reinforced Epoxy Resin (1L)	
Mounting Arrangement	3M Self Adhesive Pad Ground Plane Independent - Mount on any non metallic surface	
Temperature Range	-40°C to +85°C	
Protection Class	IPXX	
Frequency Range	ISM, LoRA, SIGFOX, ZigBee 868:	863 - 870 MHz
	ISM, LoRA, SIGFOX, ZigBee 915:	902 - 928 MHz
Impedance	50 Ohm	
Polarisation	Linear	
Gain	ISM, LoRA, SIGFOX, ZigBee 868:	@ 863 - 870 MHz; 3.1dBi
	ISM, LoRA, SIGFOX, ZigBee 915:	@ 902 - 928 MHz; 0dBi
Radiation Pattern	Omni-Directional	
Max Power @ 30°C	ISM, LoRA, SIGFOX, ZigBee 868:	25 Watts @ 863 - 870 MHz
	ISM, LoRA, SIGFOX, ZigBee 915:	25 Watts @ 902 - 928 MHz
Return Loss (VSWR)	≤ 1.6:1 (All Bands)	
Radiator Type	Dipole	
Cable Type	MICRO 1.13 Diameter	
Cable Length	100mm	
Connector	IPEX / U.FL	
Test & Measurement Conditions	300mm x 300mm x 2mm ABS / 100mm MICRO 1.13 Dia. / IPEX U.FL	

dB: Referenced to an isotropic radiator

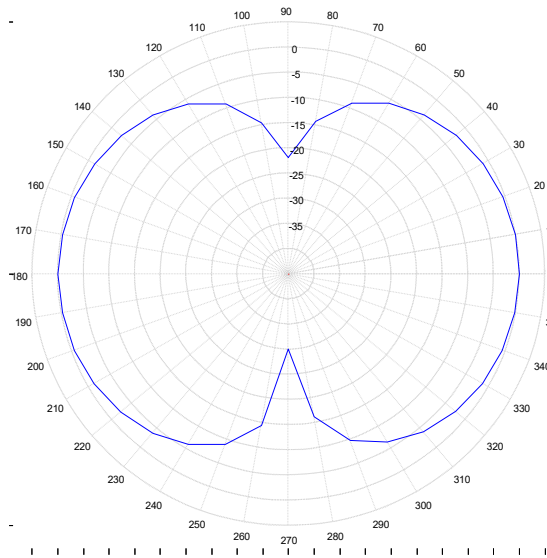
Radiated Efficiency



Typical VSWR

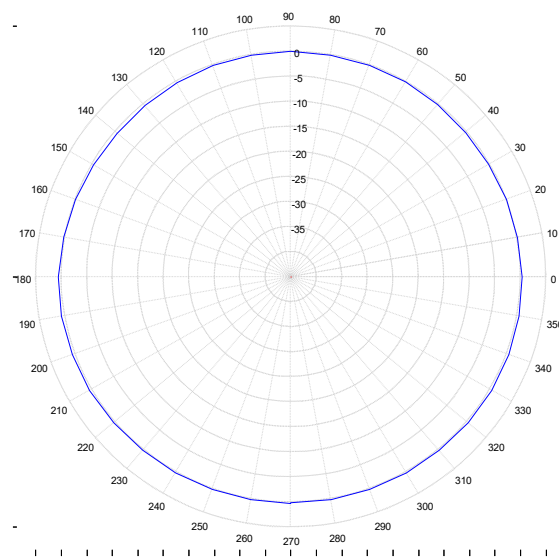


Radiation Patterns



Name: .
Date/Time = 23/11/2023 11:03:25
Plot Scale: 5 dB/Div
Beamwidth: 88.67 Degrees

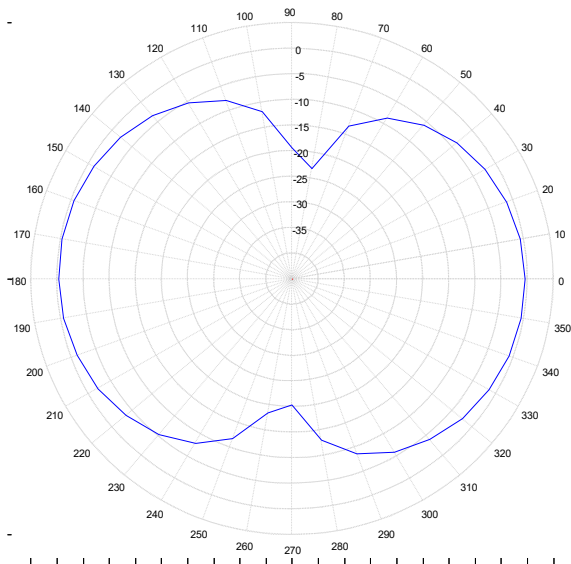
Frequency: 867 MHz
MAX dB= -0.055 @ 360 Deg.
MIN dB= -30.11 @ 270 Deg.
dB Min/Max Delta = 30.062 dB



Name: .
Date/Time = 23/11/2023 11:04:15
Plot Scale: 5 dB/Div
Beamwidth: 370 Degrees

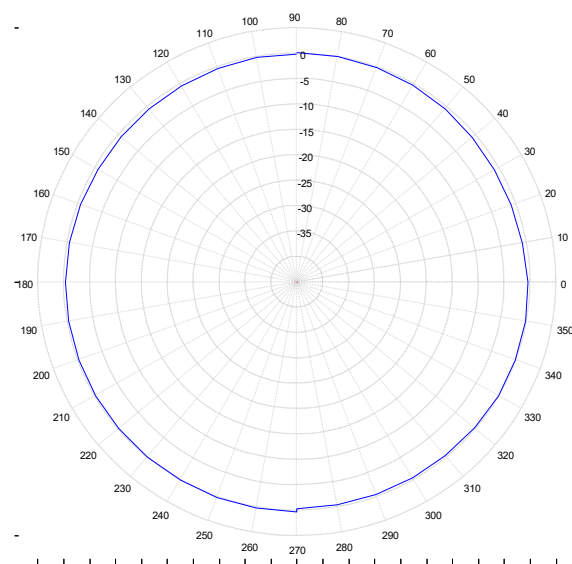
Frequency: 867 MHz
MAX dB= 0.6927 @ -170 Deg.
MIN dB= -0.482 @ -220 Deg.
dB Min/Max Delta = 1.1752 dB

FIGURE 3 AZIMUTH @ 0°ELEVATION AND ELEVATION @ 0° AZIMUTH - 868MHZ



Name: .
Date/Time = 23/11/2023 11:05:06
Plot Scale: 5 dB/Div
Beamwidth: 86.94 Degrees

Frequency: 915 MHz
MAX dB= -0.286 @ 170 Deg.
MIN dB= -23.11 @ 80 Deg.
dB Min/Max Delta = 22.824 dB

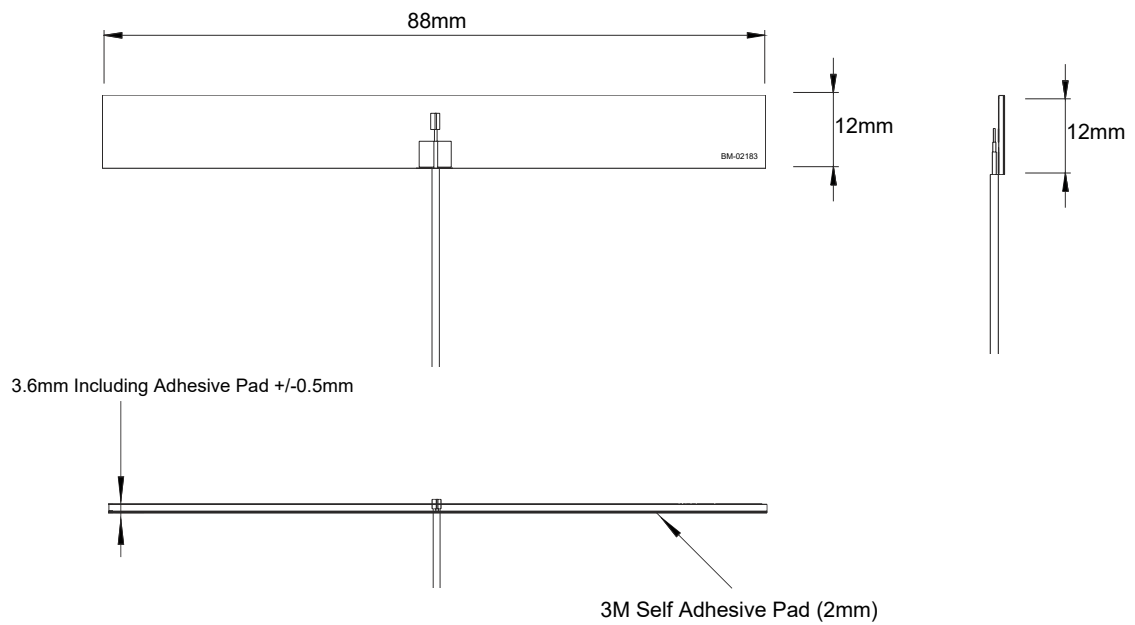


Name: .
Date/Time = 23/11/2023 11:09:27
Plot Scale: 5 dB/Div
Beamwidth: 370 Degrees

Frequency: 915 MHz
MAX dB= 0.2532 @ -90 Deg.
MIN dB= -1.037 @ 30 Deg.
dB Min/Max Delta = 1.2904 dB

FIGURE 4 AZIMUTH @ 0°ELEVATION AND ELEVATION @ 0° AZIMUTH - 915MHZ

CAD Data



Cable length and type according to customer specification (MICRO 0.81, MICRO 1.13, RG178, RG174, LL100)
Connector type according to customer specification