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2J Brick 5GNR/4GLTE/3G/2G High-Performance Mini Embedded Surface Mount Antenna

SKU
ANT-2J-00031
MPN
2JE71

Description

The 2J Brick Mini Embedded Surface Mount Antenna (SKU: ANT-2J-00031) is a versatile, high-performance solution designed for seamless integration into 5GNR, 4G LTE, 3G, and 2G applications. Manufactured by 2J, this PCB-type antenna features a compact design with dimensions of 40 x 8 x 3 mm and is constructed from durable fibreglass (GRP), ensuring reliability in demanding environments ranging from -40°C to 105°C.

Engineered for efficiency, the antenna operates across a broad frequency spectrum of 617 MHz to 5925 MHz with a 50 Ω impedance and supports up to 25 W of input power. Its linear polarisation and SISO configuration optimise connectivity for applications in automotive, marine, telematics, automation, and M2M markets. The antenna’s robust RF performance, characterised by various gain and efficiency metrics, makes it suitable for a wide array of telecommunication needs.

Compliant with RoHS standards, the 2J Brick antenna is ideal for...

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2J

2J is a worldwide supplier of antenna solutions for Automotive, Marine, Telematic, Automation and M2M markets. 2J utilise a plethora of modern engineering tools, from network analysers and anechoic chambers, to simulation software and 3D printers. These tools help reduce design phases, and enable us to react to customers' needs promptly and efficiently.

Over the past decade, 2J has established ...

RF Specification

PCB Surface Mount

Start Frequency
617 MHz
Stop Frequency
5925 MHz
Max. Input Power
25 W
Polarisation
Linear
Input Impedance
50 Ω
Frequency Test Data

Start Freq.	Stop Freq.	Peak Gain	Return Loss	VSWR	Avg. Gain	Efficiency
617 MHz	960 MHz	0.5 dBi	> 6.7 dB	< 3.1:1	-2.8 dBi	55%
1427 MHz	2690 MHz	2.7 dBi	> 10.3 dB	< 2:1	-2.2 dBi	61%
3300 MHz	5000 MHz	3.1 dBi	> 10.2 dB	< 2:1	-2.4 dBi	60%

Start Freq.	Stop Freq.	Peak Gain	Return Loss	VSWR	Avg. Gain	Efficiency
5150 MHz	5925 MHz	2.2 dBi	> 5.7 dB	< 3.5:1	-4.2 dBi	40%

Physical Specification

Subtype
PCB / Surface Mount
MIMO
1x1 SISO
Min. Operating Temperature
-40 °C
Max. Operating Temperature
105 °C
Dimensions
40 x 8 x 3
Materials
Fibreglass (GRP)
Compliance/Certifications
RoHS