Quadrifilar Helix Antenna

For L1/L2/L5 G1/G2 B1/B2 E1/E5

MAN1216Q35

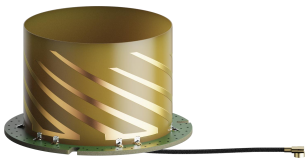
27.7 x Φ44 mm

MAN1216Q35

Quadrifilar Helix Antenna For GNSS

FEATURES

1, High gain and low Noise Figure.
2, Light weight less then 10g.
3, DC bias and RF Signal through single IPEX.



DESCRIPTION

The MAN1216Q35 is a Quadrifilar Helix antenna in structure, which has better gain and wide-angle circular polarization characteristics compared to traditional antennas. It can receive more low elevation satellite signals. Especially suitable for devices such as UAV, handheld devices, wearable devices, etc. It conveniently connects both DC bias and RF Signal through one IPEX. All Antennas are 100% RF tested.

MAXIMUM RATINGS

Characteristic	Ratings	Units
Weight	8	g
Operating Temperature Range	-40~+85	℃
Storage Temperature Range	-40~+85	℃
Moisture Sensitivity Levels	3	MSL

ANTENNA CHARACTERISTICS

Item	Frequency Range	Min.	Typ.	Max.
Gain(dBi)	GPS L1		2.5	
	GPS L2		-1	
	GPS L5		2	
	GLONASS G1		1.5	
	GLONASS G2		-3	
	BDS B1		2	
	BDS B2a		2	
	BDS B2b		0	
	E1		2.5	
	E5a		2	
	E5b		0	
Characteristics Impedance (Ω)		50 (Nominal)		
Polarization		RHCP		
Covering Range (°)		360		
Out Put VSWR (:1)				2
Axial Ratio (dB)				3

- Ta: +25±5°C

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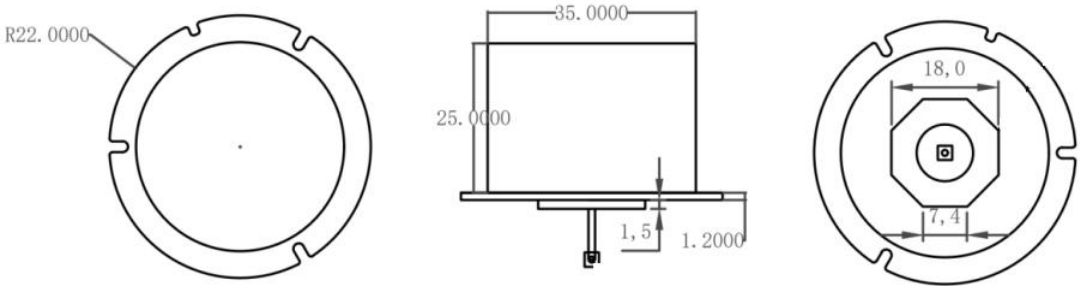
AMPLIFIER CHARACTERISTICS

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Gain (dB)			28	
Noise Figure (dB)				1.5
InPut VSWR (:1)				2
Output VSWR (:1)				2
Voltage (V)		3.0		5.5
Current (mA)				25

- Ta: +25±5°C

SHAPES AND DIMENSIONS



Revision	Description	Date
Rev0	Preliminary	2024/8/30