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M1575CQA713A

Ceramic Quadrifilar Antenna for GPS L1 Band



PRODUCT DESCRIPTION

The World's smallest Ceramic Quadrifilar Antenna with active LNA and single-ended 50ohm standard interface offering the highest efficiency and lowest axial ratio in its class. Its ultra small size and ground-plane independence coupled with 10MHz operating bandwidth make it ideal for integration into both commercial and military handsets. The M1575CQA713A integrates LNA+SAW filter so you can have reduced parts count and better performance in your handset.

PRELIMINARY SPECIFICATIONS

	Min	Typical	Max	Unit
Frequency GPS L1	1570	1575.42	1580	MHz
Polarization		RHCP		
Efficiency (upper hemisphere)		25		%
Efficiency (total spherical)		35		%
Passive Gain		-3.5		dBic
Total Realized Gain	+9.5		+10	dBic
LNA Noise Figure		0.85		dB
LNA Input P1dB	-4		-2	dB
LNA DC Voltage	1.5		2.0	V
LNA DC Current	7.3		10.5	mA
Out of Band Rejection (800MHz)		55		dBc
Out of Band Rejection (1.9GHz)		45		dBc
Beamwidth (3dB)		140°		degrees (both axis)
Bandwidth (1dB)		10		MHz
Cross Pole Rejection		15		dB
Axial Ratio		0.5		dB
Front to Back Ratio		15		dB
Return Loss		-13		dB
Impedance		50		Ohms
Overall Dimensions	7 (diameter) x 13 (height)			mm
Operating Temperature	-40	20	+75	°C

