

Features and Benefits

- 18 - 50 GHz coverage
- SMPM (GPPO) connector interface
- 0.5" diameter package
- 3 dBi realized gain
- Weighs 10 grams (Max)

Applications

- Wideband Direction Finding
- Radar Warning Receivers
- SIGINT/ELINT
- Interferometry

Part Number PSA1850



18-50 GHz Sinuous Antenna

Description

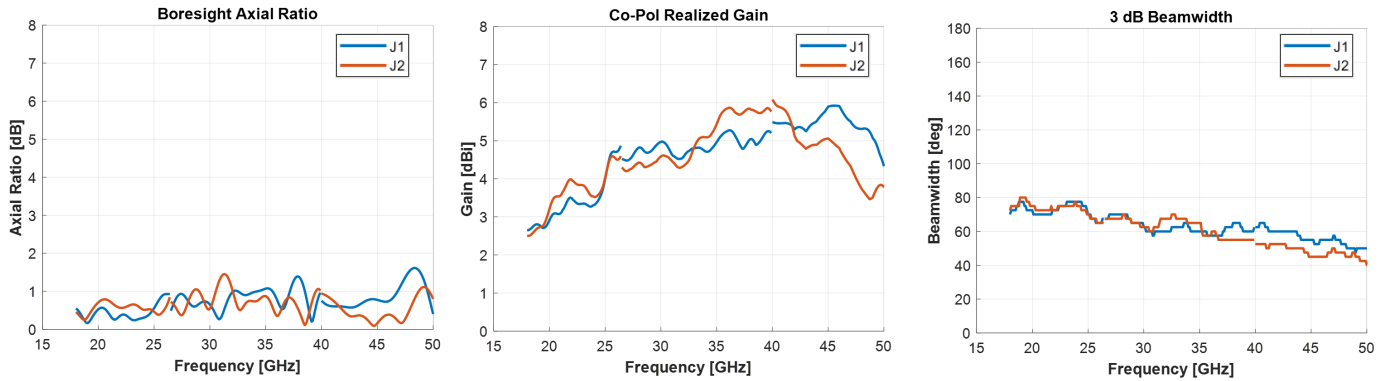
Nuvotronics offers a market leading cavity backed sinuous antenna in a 1/2 inch diameter package. The 4-arm antenna is offered in a dual circular and dual linear configuration with a SMPM (GPPO) connector interface.

Frequency	Antenna Type	Part Number
18 - 50 GHz	Dual Circular	PSA1850C-4
18 - 50 GHz	Dual Linear	PSA1850L-4

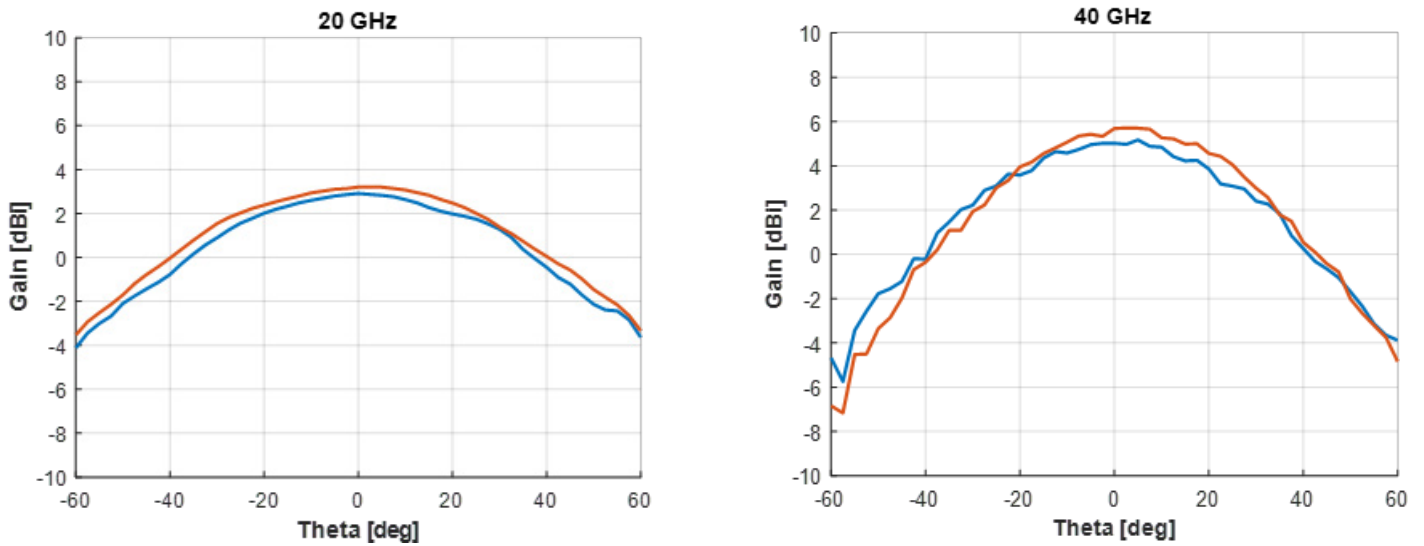
Performance Summary of PSA1850C-4

Parameter	Units	Min	Typ	Max	Min	Typ	Max
Frequency	GHz	18 - 40 GHz			40 - 50 GHz		
Return Loss	dB						
Peak Gain	dBi	2	4.5	6.5	2.5	4	6.5
Boresight A.R.	dB	-	1	2	-	1	2
A.R. over 90 deg B.W.	dB	-	2	5	-	2	9
Gain over 90 deg B.W.	dBi	-2	-	-	-6	-	-
Half-power Beamwidth	deg	50	65	85	40	50	70

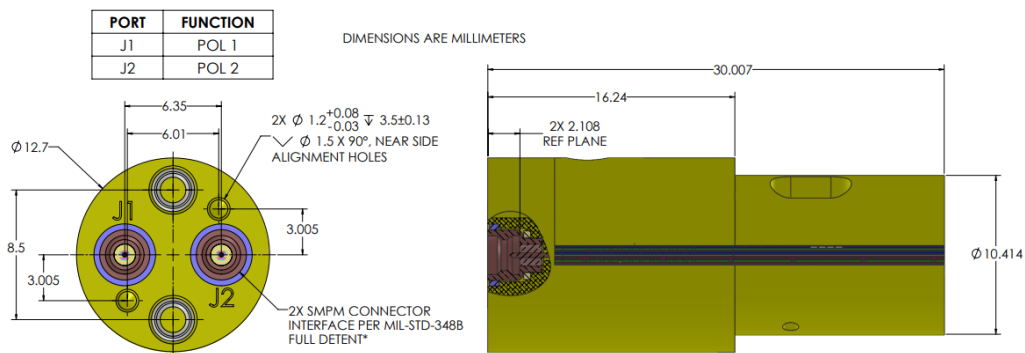
Performance Data



Antenna Patterns, Azimuth Cut and Co-Pol Gain Plots



Mechanical Drawing



* DETENT MAY BE MODIFIED TO LIMITED OR SMOOTH BORE IF DESIRED. PLEASE CONTACT NUVOTRONICS FOR DETAILS.