

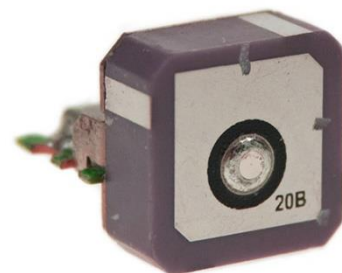


GPS ANTENNA

Internal GPS active patch antenna 11.5x10x10; 25 dBi, SMT; Front SAW filter

AP-AP10FSF-25SM

SECTRON company offers a wide portfolio of GPS antennas with various versions differing in shape, level of gain and manner of attachment. SECTRON guarantees a compatible connection between an antenna and all antenna adaptors produced by SECTRON.

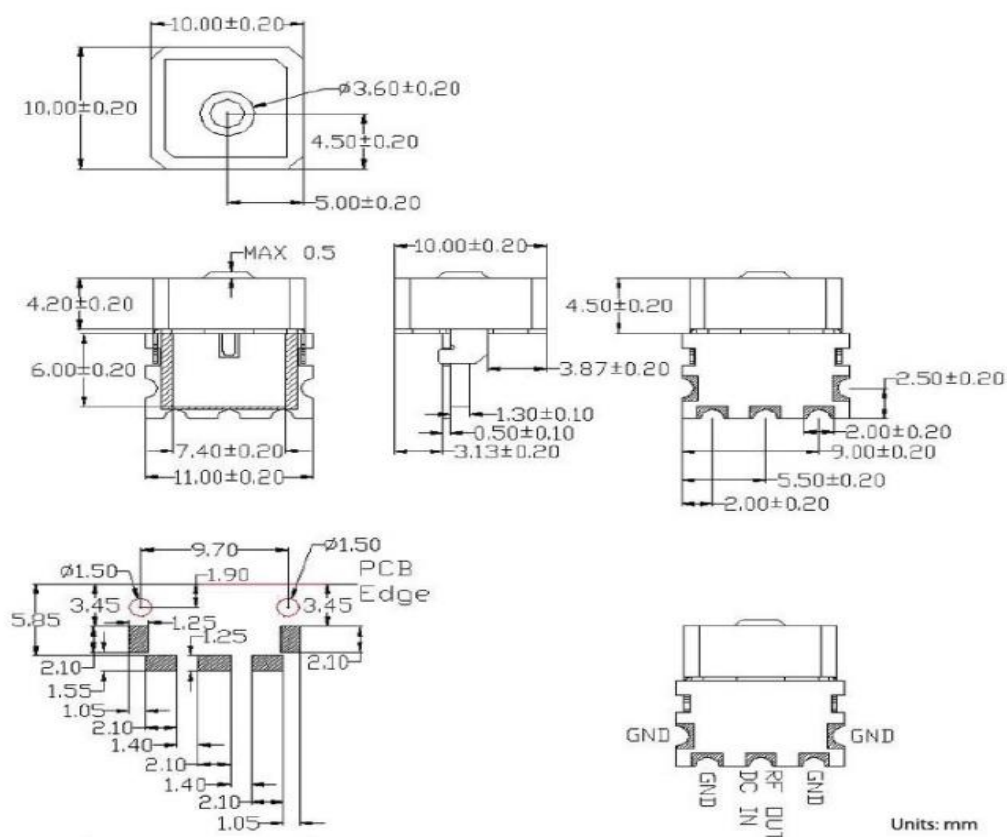


BENEFITS

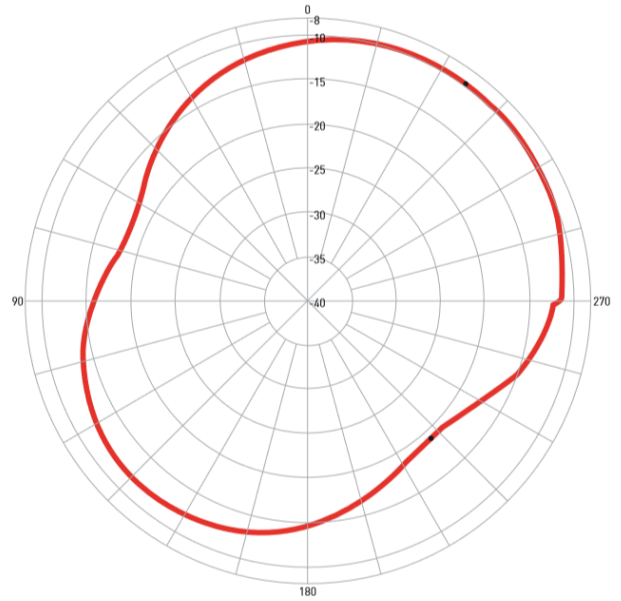
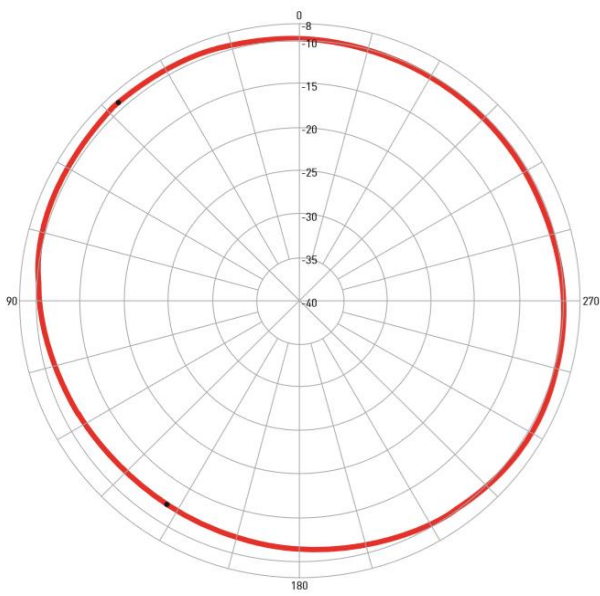
- Low VSWR
- Optimized high frequency gain

Technology	GPS
Frequency bands	1575.42 MHz
Bandwidth	2.046 MHz
Gain	25 dBi
VSWR	<2.0:1
Impedance	50 Ohm
Directivity	Omnidirectional
Beam angle	H 270° V 90°
Polarization	R.H.C.P.
Maximum input power	10 W
Power voltage	1.8 – 5.5 V DC
Dimensions	10 x 10 x 11 mm
Weight	2.75 g
Operating temperature	-40 to +85 °C
Execution	Internal
Method of attachment	Patch
Cable type	-
The cable length	-
Connector type	-

DRAWING

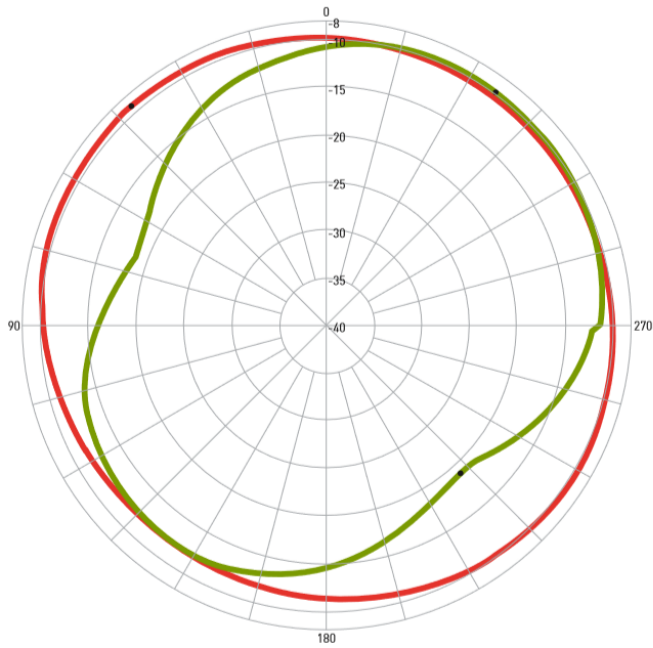


Radiation pattern:



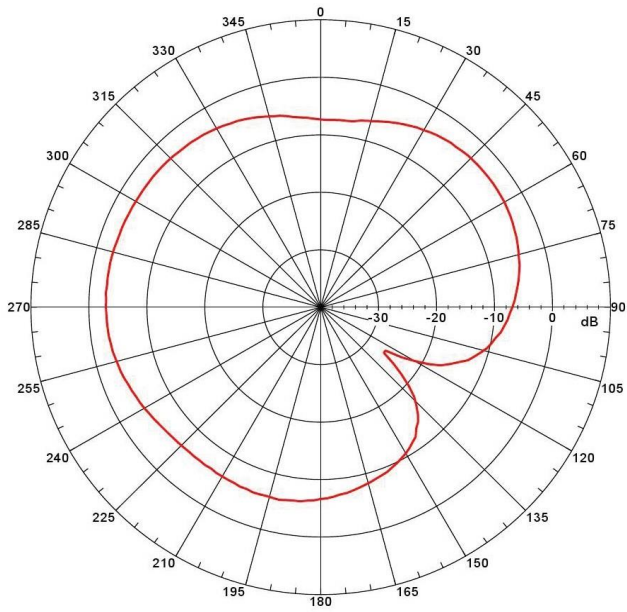
Pattern	Model No.	Test Mode	Freq (MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	AP.10H.01	XZ	1620.00	-9.20 / 42.00	-11.99 / 147.00	-10.24	RHCP	2010/4/29

Pattern	Model No.	Test Mode	Freq (MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	AP.10H.01	YZ	1620.00	-9.73 / 324.00	-19.18 / 222.00	-12.80	RHCP	2010/4/29

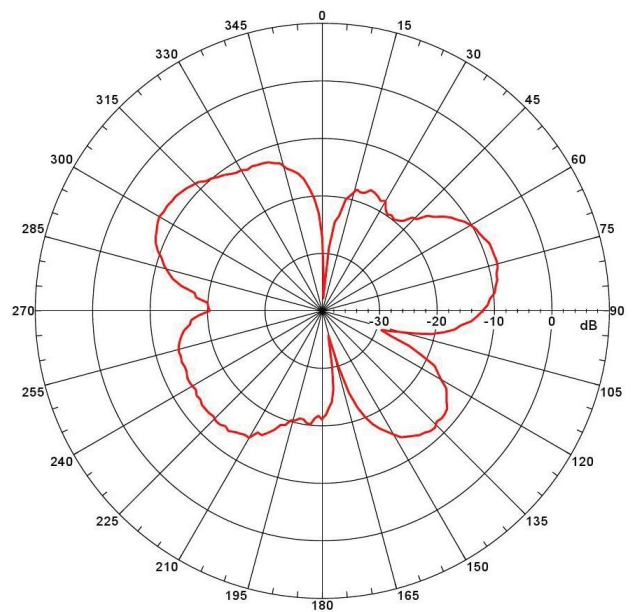


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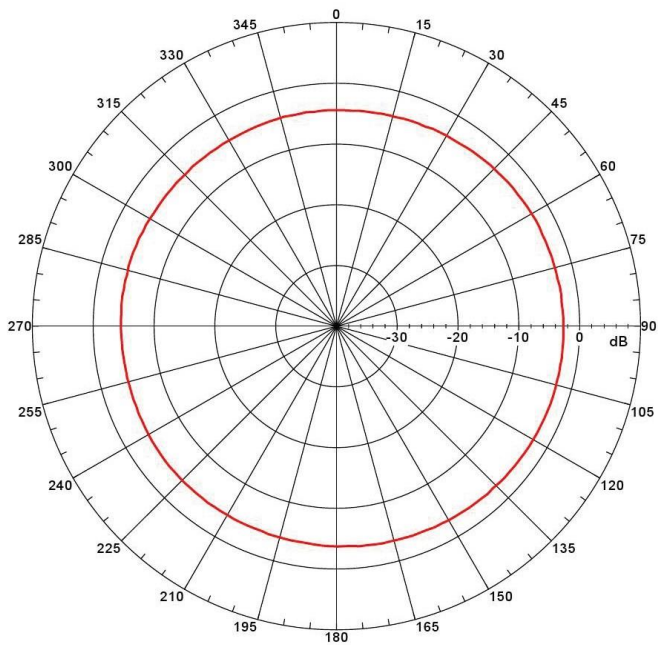
Far-field amplitude of C07+M25-1+Cable-4.5M-E.nsi



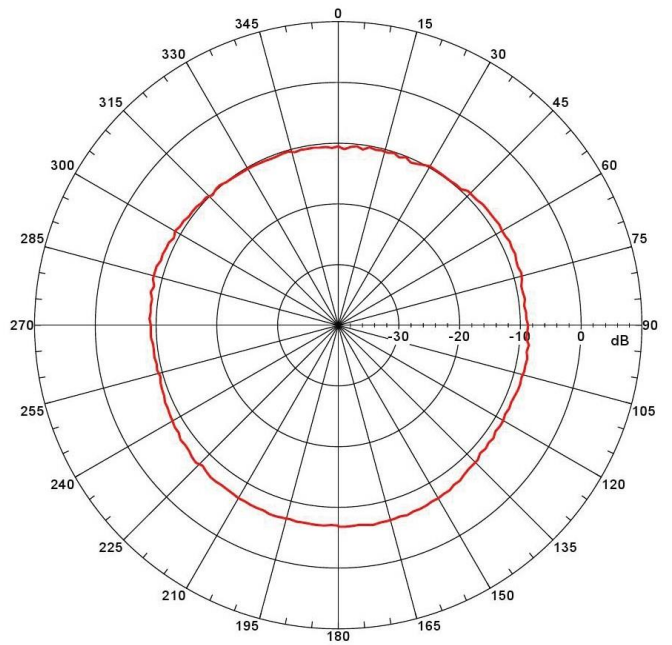
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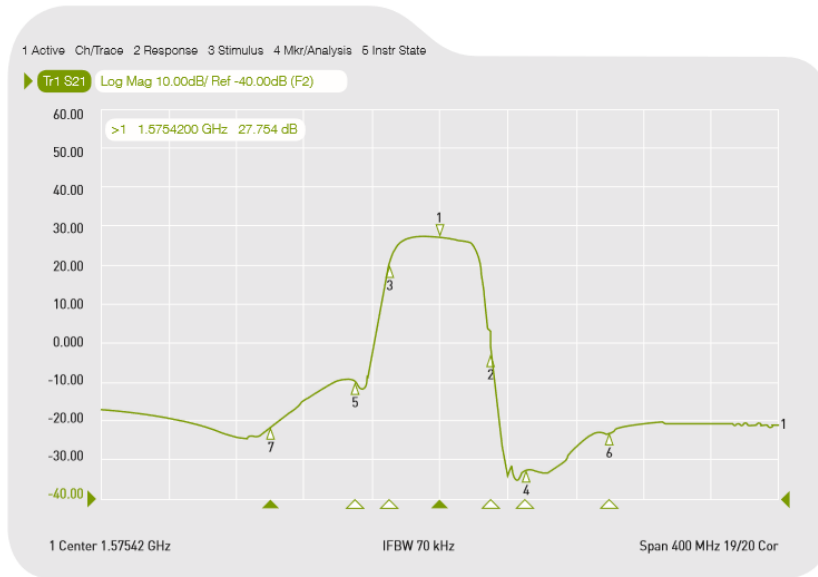
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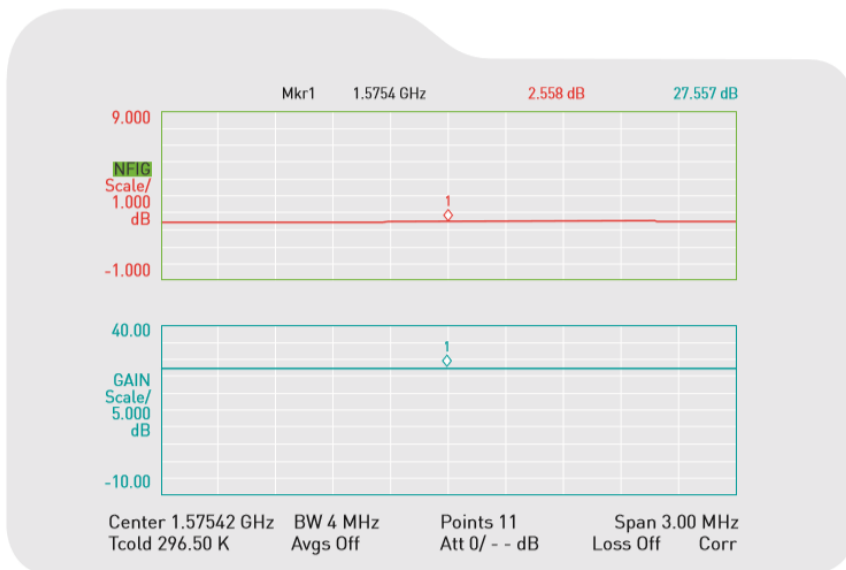


LNA Gain and Out Band Rejection @3.0V



Cg1	Tr1	S21	>1	1.5754200 GHz	27.754 dB
Cg1	Tr1	S21	2	1.6054200 GHz	- 2.2291 dB
Cg1	Tr1	S21	3	1.5454200 GHz	20.458 dB
Cg1	Tr1	S21	4	1.6254200 GHz	- 32.691 dB
Cg1	Tr1	S21	5	1.5254200 GHz	- 10.283 dB
Cg1	Tr1	S21	6	1.6754200 GHz	- 23.132 dB
Cg1	Tr1	S21	7	1.4754200 GHz	- 21.485 dB

LNA Noise Figure @3.0V



AP.10H can be assembled following Pb-free assembly. According to the Standard IPC/JEDEC J-STD-020C, the temperature profile suggested is as follows:

Phase	Profile Features	Pb-Free Assembly (SnAgCu)
PREHEAT	Temperature Min (T _{min}) Temperature Max (T _{max}) Time (ts) from (T _{min} to T _{max})	150°C 200°C 60-120 sec
RAMP-UP	Avg. Ramp-up Rate (T _{max} to TP)	3°C/sec (max)
REFLOW	Temperature (TL) Total Time above TL (tL)	217°C 30-100 sec
PEAK	Temperature (TP) Time (tp)	260°C 2-5 sec
RAMP-DOWN	Rate	3°C/sec (max)
Time from 25°C to Peak Temperature		8 min max.
Composition of solder paste		96.5Sn/3Ag/0.5Cu
Solder Paste Model		SHENMAO PF606-P26

Soldering Iron condition: Soldering iron temperature 270°C ± 10°C. Apply preheating at 120°C for 2-3 minutes. Finish soldering for each terminal within 3 seconds, if soldering iron temperature over 270°C±10°C or 3 seconds, it will make cause component surface peeling or damage.

CONTACTS

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