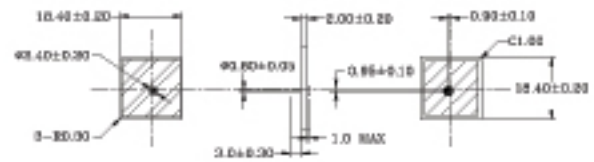


GPS Patch Antenna - J2 Type Dimensions

Features

1. High Antenna Gain up to +1.0dBic.
2. Miniaturized to 18.4*18.4*2 mm³.
3. Low profile 2mm is available.
4. Antenna tuning in special design is available.
5. No connectors needed, fed by direct pad.
6. Stable Frequency Temperature Coefficient ($\pm 20\text{ppm}/^\circ\text{C}$), from -40°C to 85°C



Application

Automotive, recreational, military, marine, aviation, surveying

Part Number

SeriesType	Dimensions	Center Frequency
PA1575MZ50	J2	04

- Series Type
- Dimensions J2— 18.4*18.4*2mm³
- Center Frequency

XX	fo	XX	fo	XX	fo	XX	fo	XX	fo
00	1576	10	1586	20	1596	30	1606	40	1616
01	1577	11	1587	21	1597	31	1607	41	1617
02	1578	12	1588	22	1598	32	1608	42	1618
03	1579	13	1589	23	1599	33	1609	43	1619
04	1580	14	1590	24	1600	34	1610	44	1620
05	1581	15	1591	25	1601	35	1611	45	1621
06	1582	16	1592	26	1602	36	1612	46	1622
07	1583	17	1593	27	1603	37	1613	47	1623
08	1584	18	1594	28	1604	38	1614	48	1624
09	1585	19	1595	29	1605	39	1615	49	1625

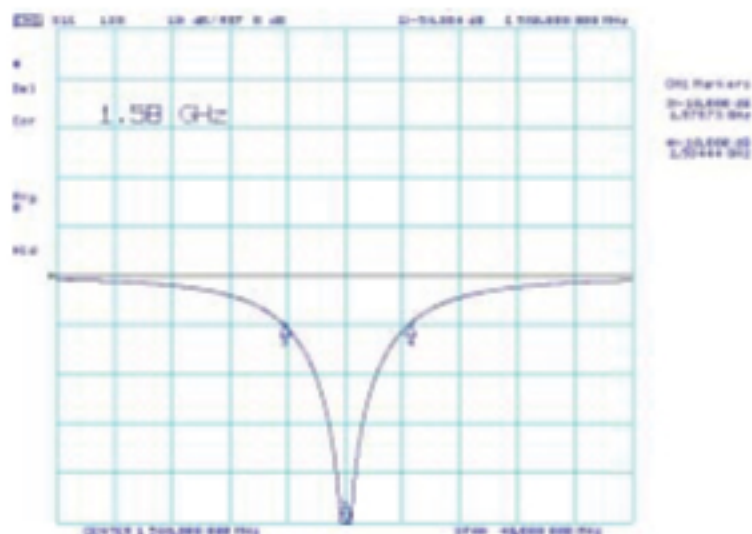
Electrical Characteristics

Characteristics	Specification	Unit	Conditions
Center Frequency f_0	1580.0 \pm 2.0*	MHz	with 50mm Square ground plane
Bandwidth	7.0 min	MHz	Return Loss \leq -10dB
Gain at Zenith	+1.0 typ	dBic	@1580.0 MHz*
Gain at 10° elevation	-5.5 typ	dBic	@1580.0 MHz*
Impedance	50	Ω	
Frequency Temperature Coefficient	0 \pm 20	ppm/ $^\circ\text{C}$	-40 $^\circ\text{C}$ to +85 $^\circ\text{C}$
Working Temperature			-40 $^\circ\text{C}$ to +120 $^\circ\text{C}$

Data Charts

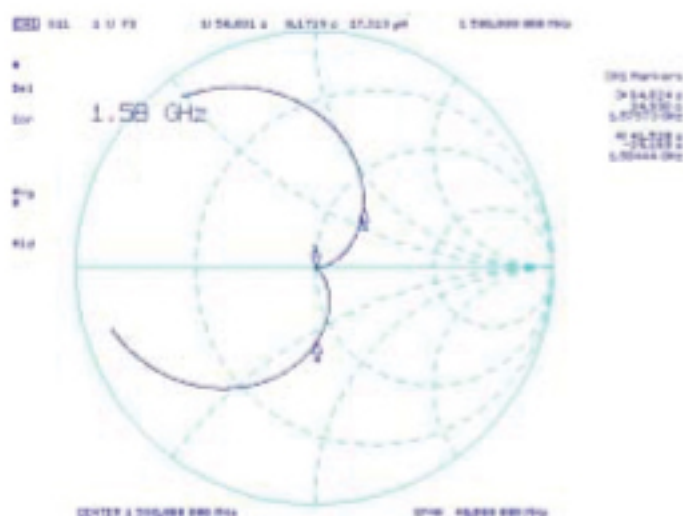
1. Return Loss Characteristics

(For Example : 1580MHz)



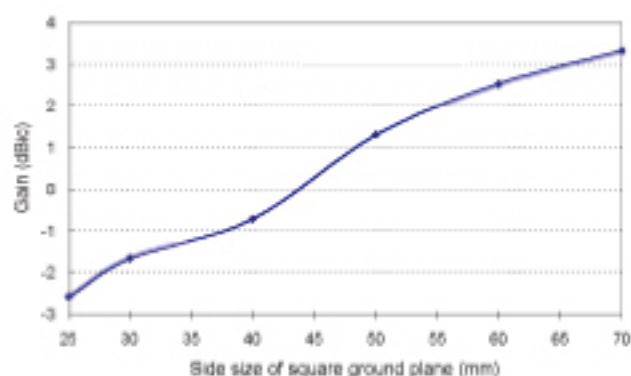
2. Measured Input Impedance on a Smith Chart

(For Example : 1580MHz)



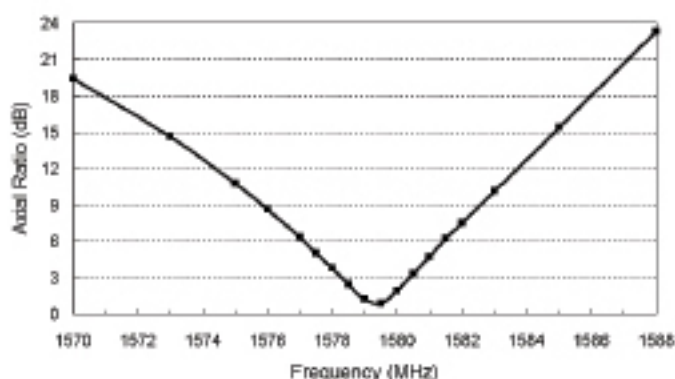
4. Antenna Gain vs. Ground Plane Size

(For Example : 1580MHz)



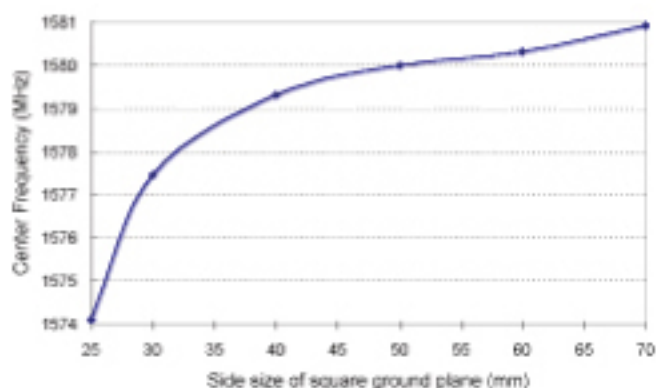
3. Measured Axial Ratio

(For Example : 1580MHz)



5. Center Frequency vs. Ground plane

(For Example : 1580MHz)



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