



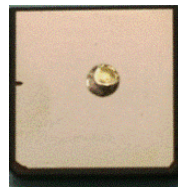
**JDGA**

**GPS antennas for demanding requirements**

**JDGA Ceramic Patch SMT GPS Antenna**

**18 X 18 X 4mm**

**Available Frequencies 1576MHz to 1598MHz**



**Typical Electrical Properties**

|                                               |                                             |
|-----------------------------------------------|---------------------------------------------|
| Center Frequency                              | 1580MHz $\pm$ 3.0MHz (50 X 50 ground plane) |
| Bandwidth                                     | 6.0MHz (min)                                |
| Return Loss                                   | $\leq$ -10dB                                |
| Gain @ zenith                                 | +3.5dB (typ)                                |
| Gain @ 10° elevation                          | -4.0dB (typ)                                |
| Polarization                                  | RHCP                                        |
| Impedance                                     | 50 ohm                                      |
| Frequency Temperature Coefficient             | 0 $\pm$ 20ppm/C° (-40°C to 85°C)            |
| Dielectric Constant <b>K</b>                  | 37 $\pm$ 2.5                                |
| Quality Factor, <b>Q</b> (=1/tan)             | $\geq$ 5000@9GHz                            |
| Temperature Coefficient of Resonant Frequency | 0 $\pm$ 20ppm/°C (-40°C to 85°C)            |

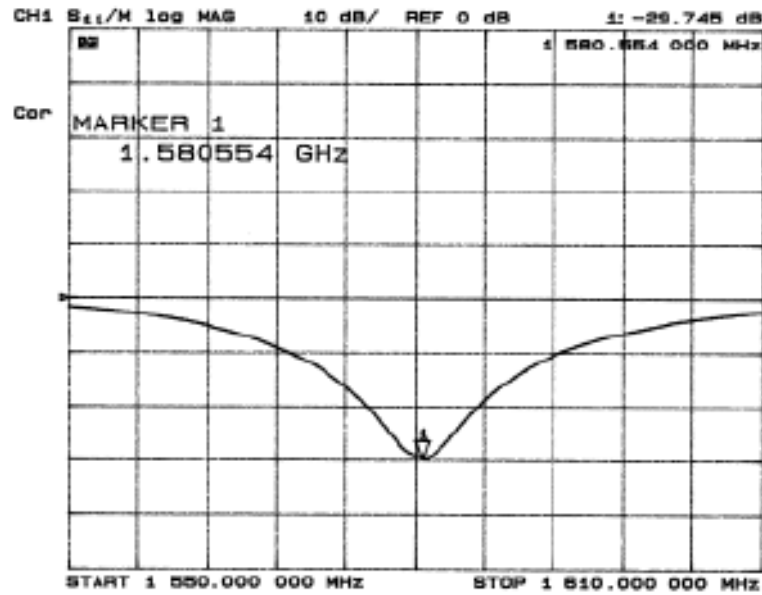




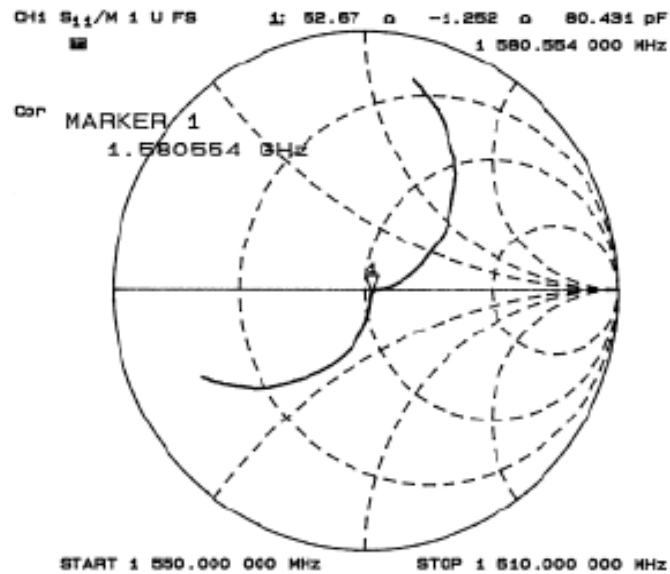
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## Reflection Coefficient



## Smith

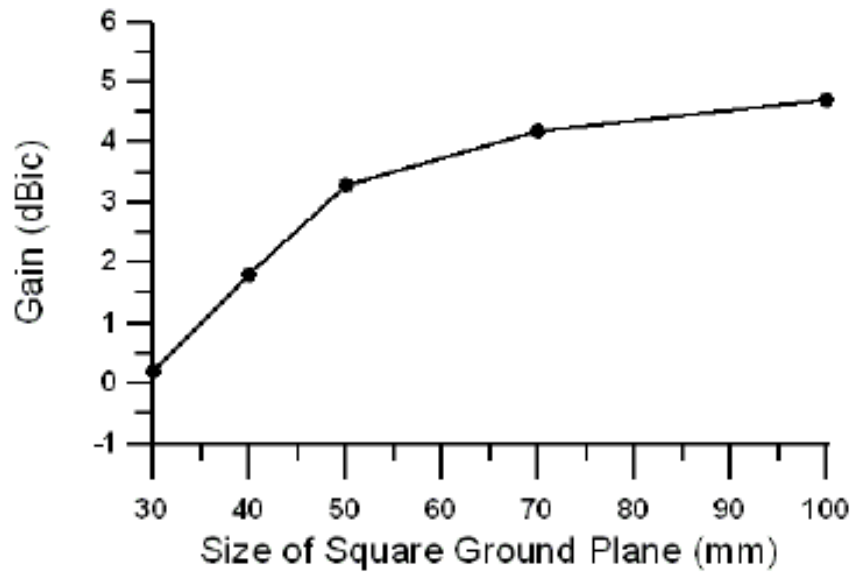




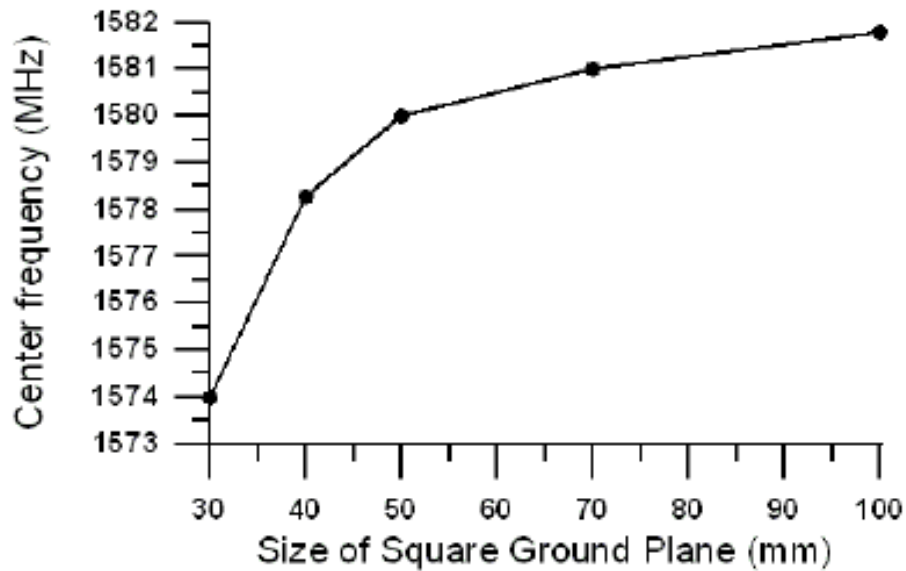
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### Gain vs Ground Plane



### Center Frequency vs Ground Plane

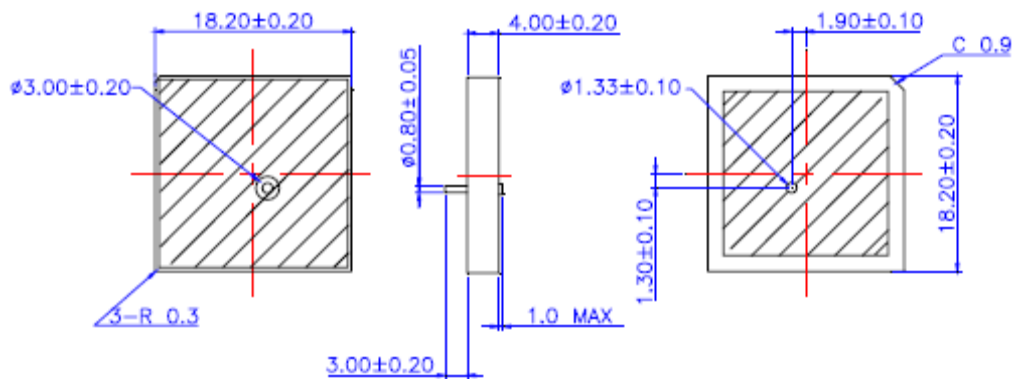




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## Mechanical Dimensions



Unit : mm

| PART NUMBERS | FREQUENCY MHz |
|--------------|---------------|
| G180476P     | 1576          |
| G180478P     | 1578          |
| G180480P     | 1580          |
| G180482P     | 1582          |
| G180484P     | 1584          |
| G180486P     | 1586          |
| G180488P     | 1588          |
| G180490P     | 1590          |
| G180492P     | 1592          |
| G180494P     | 1594          |
| G180496P     | 1596          |
| G180498P     | 1598          |