



DESCRIPTION

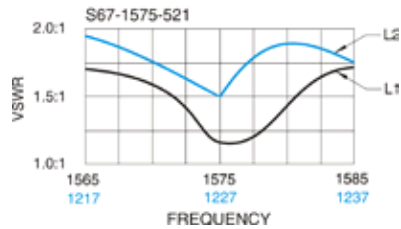
S67-1575-521: Sensor Systems has developed a small, 4.50 inch diameter, four (4) element anti-jam GPS array. The utilization of different techniques and dielectric materials provided a reduction of size without a detrimental effect on the electrical performance.

Extensive use of computer simulation has been used in the development of this anti-jam array. Actual pattern measurement taken in an anechoic chamber matched well with the computer simulation.

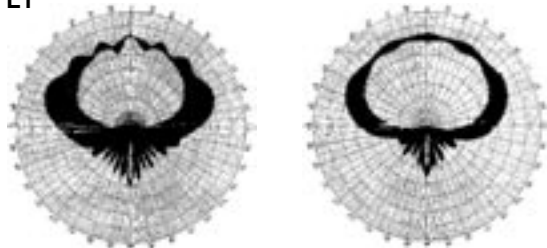
The array is housed in an aluminum base with thermoplastic radome. The base/radome assembly is sealed and filled with a closed cell foam.

FEDERAL & MILITARY SPECS: AMS-C-5541, Mil-E-5400, MIL-STD-810

PERFORMANCE



1575 MHz L1 **1227 MHz L2**



RADIATION PATTERNS

SPECIFICATIONS

GPS

S67-1575-521

ELECTRICAL

- Frequency 1560-1590 MHz (L1)
1212-1242 MHz (L2)
- VSWR 2.0:1
- Polarization RHCP
- Impedance 50 ohms
- Antenna Gain 3 dBic @ Zenith
- Gain Coverage (min) ... -1.0 dBic 0° ≤ θ ≤ 75°
-2.5 dBic 75° < θ ≤ 80°
-4.5 dBic 80° < θ ≤ 85°
-7.5 dBic θ = 90° @ Horizon
- Power Handling 1 watt
- Lightning Protection ... DC grounded

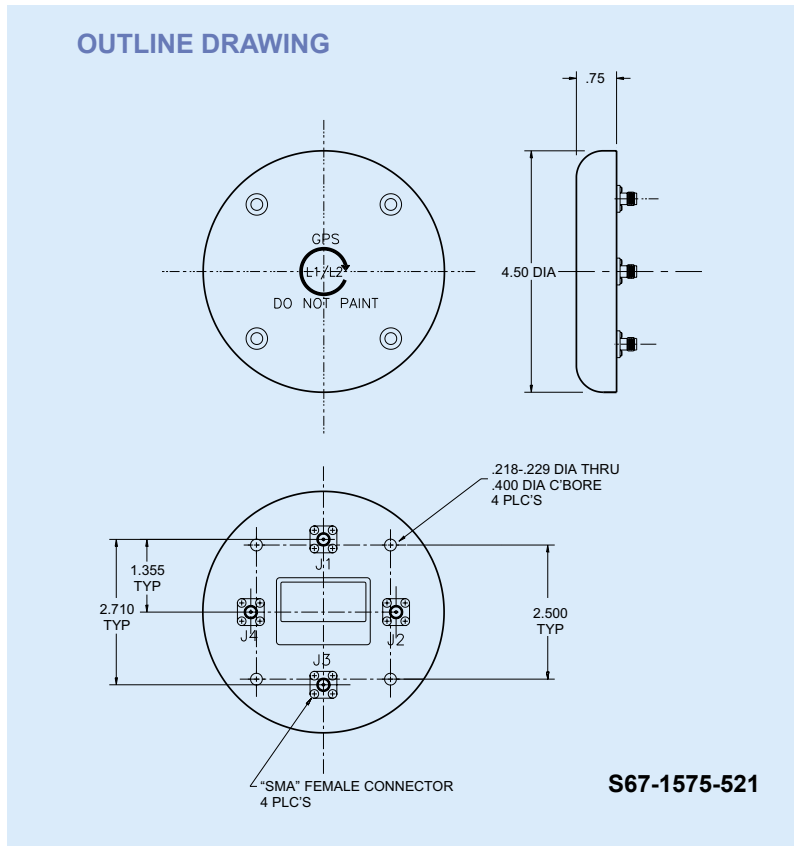
MECHANICAL

- Weight 18 oz.
- Height 1.25 in.
- Diameter 4.50 in.
- Material 6061-T6 aluminum / thermoset plastic
- Finish Skydrol resistant enamel
- Connector (4) SMA female

ENVIRONMENTAL

- Temperature -55°F to +185°F
- Vibration 10 G's
- Altitude 70,000 ft.

OUTLINE DRAWING



S67-1575-521