The AS-49034 consists of a cavity-backed helix antenna. The dielectric material for the antenna is fused silica. This antenna is inherently circularly polarized. The materials used in the construction of the antenna were chosen to minimize the effects of the severe environments.

A resin quartz composite heat shield collar was mounted to the antenna to make the antenna flush with the heat shield of the vehicle. The mounting flange can be modified to meet the mounting requirements of a particular vehicle.

**FEATURES:**
- High Temperature
- High Pyrotechnic Shock
- Ideal TT&C Antenna
- Circular Polarization
- Flush Mounted

**SPECIFICATIONS FOR: AS-49034 CAVITY-BACKED HELIX ANTENNA**

**ELECTRICAL**
- Frequency Range: 2.0 to 2.3 GHz
- VSWR: 2.5:1, max
- Gain: +3 dBi, min
- Polarization: Right Hand Circular
- 3 dB Beamwidth: 80°, min
- Axial Ratio: 3 dB, max
- Power Handling: 2 watts avg, 200 watts Peak

**MECHANICAL**
- Connector: TNC Female
- Weight: 40 ounces, (1,14 kg)
- Finish: Chemical film per Mil-C-5541

**ENVIRONMENTAL**
- Temperature: -14.8° F (-26° C), +249.8° F (121° C)
- Altitude: Operating 21 mmHg to 8 mmHg
- Humidity: MIL-STD-810D Method 507.3 Procedure I Natural
- Pyrotechnic Shock: Triaxial
- Freq: 50-20,000, G Level: 150-4,653

<table>
<thead>
<tr>
<th>Freq (Hz)</th>
<th>g²</th>
<th>dB/oct</th>
<th>G_rms</th>
<th>Duration/Axis</th>
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<tbody>
<tr>
<td>20-300</td>
<td>0.04</td>
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<tr>
<td>300-450</td>
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<td>15.9</td>
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<td>450-1000</td>
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<td>1000-2000</td>
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<tr>
<td>2000-3000</td>
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</tr>
</tbody>
</table>

This unit was designed for 2500°F for 5 minutes and 5000°F for 20 to 30 seconds.

49.3  4 min/axis
AS-49034
Cavity-Backed Helix Antenna

INCHES [CENTIMETERS]

Consult with factory for mounting specifications.