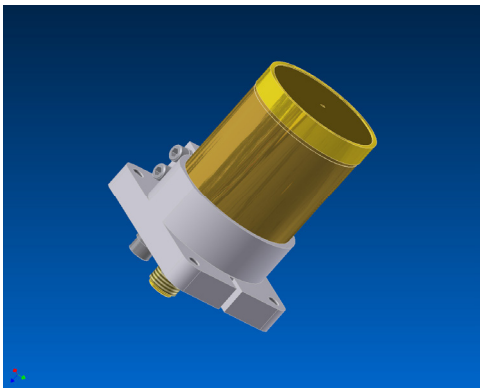
AMT
HIGH PERFORMANCE ANTENNAS

| PRODUCT DATA | 42340-01 |
|---|---|

# SPIRAL ANTENNA ASSEMBLY, 6-18 GHz
# P/N: 42340-01

| | | |
|---|---|---|
| Frequency - GHz | 6.0 - 18.0 | |
| Polarization | LHC | |
| Gain - dBiC | 2 @ 6 GHz<br>3-4 @ 8-18 GHz | Minimum, on Boresight |
| | -6 @ 2-6 GHz | Minimum, @ ±45° |
| Axial Ratio - dB | <3 @ 6-8 GHz<br><2 @ 8-18 GHz | Maximum, on Boresight |
| | <3.5 @ 6-18 GHz | Maximum, @ ±45° |
| Beamwidth - Deg | >80° @ 6 GHz<br>>70° @ 8 GHz<br>>60° @18 GHz | -3dB points |
| Beam Squint - Deg | 5.0 | Maximum |
| VSWR | 2.5 : 1 | Maximum |
| Gain Tracking - dB | < 2.5 (SET OF 6) | Unit to unit, within ±60°,<br>for C,V,H polarizations |
| Phase Tracking - DEG | < 4 on Boresight<br>< 8 @ ±60°<br>(SET OF 6) | Unit to unit, monotonically<br>rising from boresight to 60°,<br>for C,V,H polarizations |
| Power - Watts | 2 / 20 | CW / Peak |
| Connector | SMA | Female |
| Weight - Grams | 70 | Maximum |
| Environment | Flight | To 60,000 Feet |



AMT MICROWAVE CORPORATION
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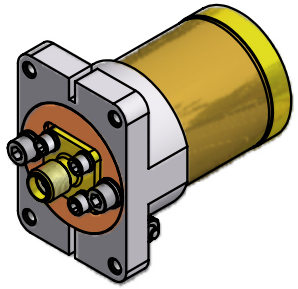
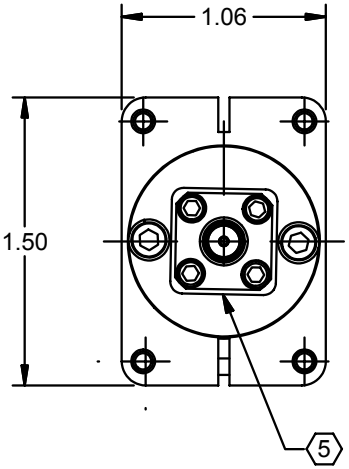
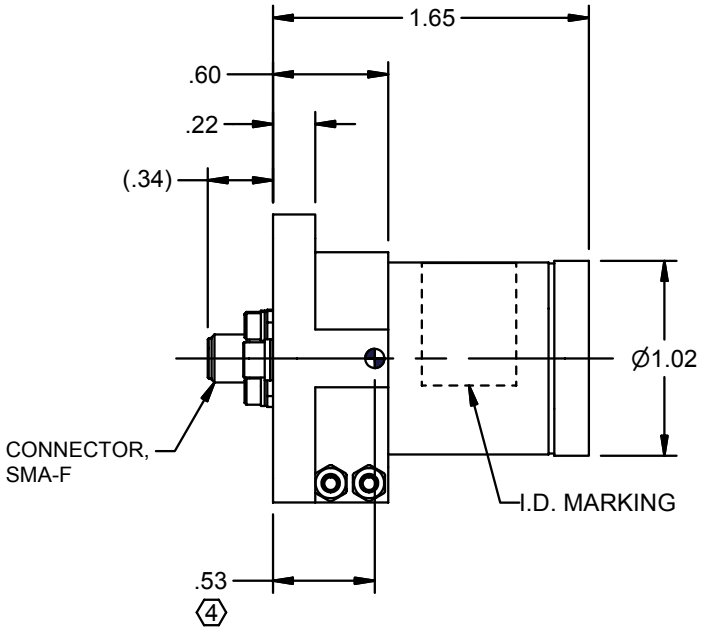
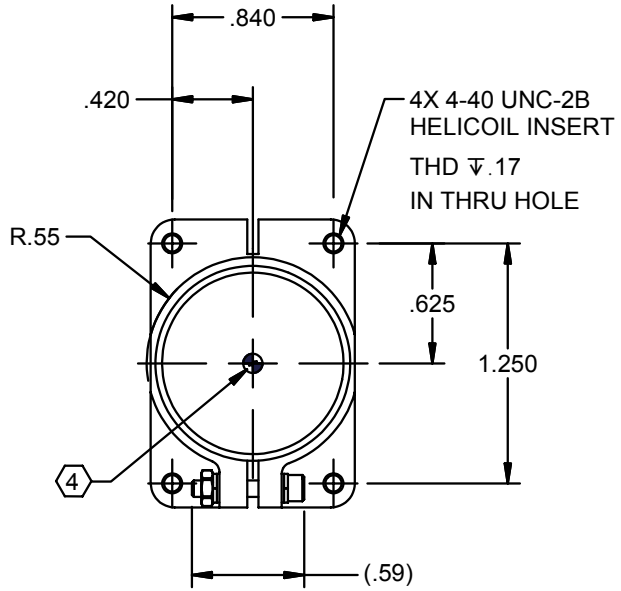
AMT PROPRIETARY INFORMATION

| REVISION HISTORY | | | |
|---|---|---|---|
| REV | DESCRIPTION | DATE | APPROVED |
| A | DESIGN RELEASE | 22JUN2006 | S.H. |






1. POLARIZATION: LHC
2. WEIGHT: 70 GRAMS MAXIMUM.
3. FINISH: ALUMINUM PARTS: CHEMICAL CONVERSION PER MIL-C-55451.

4. ⌖ INDICATES CENTER OF GRAVITY. TOLERENCE: ± .13.
5. ORIENTATION OF CONNECTOR FLANGE FOR REF ONLY.

NOTES: UNLESS OTHERWISE SPECIFIED.

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|---|---|
| PREPARED BY: SONBJ | DATE: 6/13/2006 |
| APPROVED BY: SH | DATE: 6/16/2006 |

UNLESS OTHERWISE NOTED
DIM AND TOL PER ANSI Y14.5
MACH 125 √ PER ANSI B461
REMOVE BURRS AND SHARP EDGES .010 MAX
TOL: .XX±.030 .XXX±.005
ANGLE±1°

MATERIALS: PLEASE SEE NOTES

AMT MICROWAVE CORPORATION
CAMARILLO CA 93012

TITLE
SPIRAL ANTENNA ASSY,
6-18 GHz

| SIZE | CAGE CODE | DWG NO | REV |
|---|---|---|---|
| A | 6AB36 | 42340-01 | A |

SCALE: NTS | SHEET 1 OF 1