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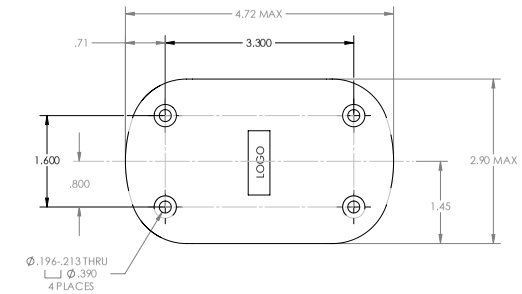
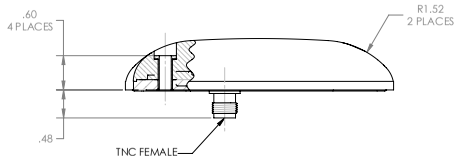
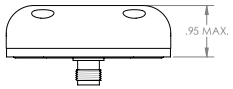
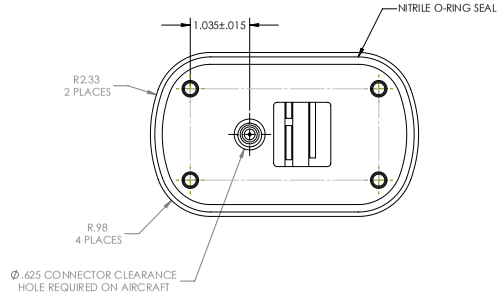
REVISIONS				
LTR	DESCRIPTION		DATE	APPROVAL
A	RELEASED DRAWING	JF	12/09/04	JF 12/09/04
B	REF ECN 06-41	HN	05/03/06	DH 05/03/06
C	REF ECN 09-015	MN	03/26/09	DH 03/26/09
D	REF ECN 19-088	RM	9/9/19	DH 9/9/19









WARNING: THIS PRODUCT IS TO BE INSTALLED EXCLUSIVELY WITH GPS RECEIVER EQUIPMENT REQUIRING 17dB GAIN.

NOTICE: THIS PRODUCT IS TSO C144 COMPLIANT WITH AN FAA APPROVED GAIN DEVIATION TO C144 SPECIFICATIONS AND HAS A NOMINAL GAIN OF 17dB.

ASSY DWG. C401146-1

ANTENNA NOTES & SPECIFICATIONS

1.0 PASSIVE ANTENNA CHARACTERISTICS (T_A= -55° C TO +70° C)

- 1.1 FREQUENCY ____ 1575.42 ± 3MHz
- 1.2 POLARIZATION ____ RIGHT HAND CIRCULAR
- 1.3 AXIAL RATIO ____ 3.0 dB ON BORESIGHT (ZENITH) MAX.
- 1.4 POWER HANDLING ____ 1.0 WATT
- 1.5 RADIATION GAIN PATTERN MINIMUM

  -1.0 dBic θ < or = θ < 75°
  -2.5 dBic 75° < or = θ < 80°
  -4.5 dBic 80° < or = θ < or = 85°
  -7.5 dBic θ = 90° (HORIZON)
  +5.0 dBic nominal at θ = 0° (ZENITH)

- 1.6 AZIMUTH GAIN VARIATION ____ < or = 3.0 dB AT > or = 5° ELEVATION

2.0 PREAMPLIFIER CHARACTERISTICS (T_A= 20° C ± 5° C)

- 2.1 GAIN AT 1575.42 ± 3MHz ____ 17 ± 3 dB.

3.0 PREAMPLIFIER CHARACTERISTICS (T_A= -55° C TO + 70° C)

- 3.1 FREQUENCY ____ 1575.42 ± 3MHz
- 3.2 OUTPUT IMPEDANCE ____ 50 OHMS (NOMINAL)
- 3.3 OUTPUT VSWR ____ 1.5 : 1 MAX.
  R/L ____ -13.98 dB
- 3.4 GAIN AT 1575.42 ± 3MHz ____ 17 ± 3 dB.
- 3.5 NOISE FIGURE ____ 3.8 dB MAX.
- 3.6 SELECTIVITY ____ - 35 dB MIN. SATCOM BAND (1626.5 MHz)
- 3.7 DC VOLTAGE ____ 4 TO 24 VDC
- 3.8 DC CURRENT ____ 40 mA MAX.
- 3.9 STABILITY ____ UNCONDITIONALLY STABLE FOR ANY LOAD IMPEDANCE ON TNC CONNECTOR
- 3.10 BURNOUT PROTECTION ____ 30dBm / 1.0 W CW UNMODULATED

4.0 ANTENNA WEIGHT ____ 6.2 Oz. MAX.

5.0 ANTENNA SPEED RATING ____ 350 KIAS AT SEA LEVEL

6.0 CONNECTOR ____ TNC FEMALE

7.0 TSO ____ C144 (INCOMPLETE SYSTEM) RTCA DO-160D

ENV. CAT.: [F2X]ACB[S(L)T]C.C1,R[]XRFDXS.XXXXX[XX]X[XXXX][1B]CX

8.0 A401135 INSTALLATION INSTRUCTION SUPPLIED WITH ANTENNA.

INSTALLATION DRAWING

UNLESS OTHERWISE SPECIFIED	CONTRACT NO.			Comant Industries, inc.
DIMENSIONS ARE IN INCHES TOLERANCES ON DECIMALS .XX ± .03 .XXX ± .010 FRACTIONS ± 1/16 ANGLES ± 1°	APPROVALS		DATE	17dB GPS ANTENNA
MACHINE FINISH 125√ PER ANSI- B46.1 REMOVE BURRS AND SHARP EDGES .015 MAX	DRAWN	J FRANKS	12/09/04	
MEET DIMENSIONS BEFORE PLATING DIMENSIONS ARE PER ASME Y14.5M	CHECK	R GOMEZ	12/09/04	
MATERIAL : --	ENGR	J FRANKS	12/09/04	
	QC	S ADAMS	12/09/04	DWG SIZE D · CODE IDENT 51351 · DWG. NO. CI 401-221 · REV. D
DO NOT SCALE DRAWING	APPD	J FRANKS	12/09/04	SCALE: 1:1 · CAD FILE: -- · SHEET : 1 OF 1

DWG NO CI 401-221 REV D

Warning: Drawing for reference only and may be outdated, contact support for current revision.

THALES