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2.756 [70.00] SQ.
(GROUND PLANE SIZE/SHAPE/
LOCATION CAN BE CUSTOMIZED)

4X R.236 [R5.99]
4X R.405 [R10.29]

1.562 [39.67] SQ.

.512 [13.00]

.232 [5.89]
.030 [0.76]

.250 [6.35] RG316 BLACK CABLE/SMB FAKRA H CONNECTOR
(OPTION: SMA, SMB, QMA, SSMC, SSMB, MMCX)

2.300 [58.42] SQ.

1.562 [39.67] SQ.

4X ϕ .118 [ϕ 3.00] THRU
FOR NO. 4 OR M3 SCREWS
(DIA. AND LOCATIONS
CAN BE CUSTOMIZED)

4X 2-56 UNF
.12 DEEP

1.186 [30.12] SQ.

SPECIFICATIONS	REVISIONS					
	ZONE	REV	DESCRIPTION	DATE	APPROVED	
ELECTRICAL:						
	L5 GPS E5, E5a, E5b Galileo L5 IRNSS	L2 GPS B2 Compass	L2 GLONASS E6 Galileo B3 Compass	OmniSTAR / L-Band L6 Galileo B1 Compass	L1 GPS E1, E2 Galileo L1 IRNSS	L1 GLONASS (1598 - 1606) MHz
FREQUENCY:	1176.45 ± 12 MHz 1164.45 - 1219.14 MHz 1176.45 ± 15 MHz	1227.60 ± 12 MHz 1207.14 ± 10 MHz	1252.50 ± 7.5 MHz 1266.75 - 1290.75 MHz 1268.52 ± 10 MHz	1542.50 ± 14.0 MHz 1542.50 ± 5.0 MHz 1561.098 ± 10 MHz	1575.42 ± 15.0 MHz 1575.42 ± 17.0 MHz 1575.42 ± 12.0 MHz	
RADIATION PATTERN:	HEMISPHERICAL					
POLARIZATION:	RHCP	RHCP	RHCP	RHCP	RHCP	RHCP
VSWR:	< 2.0:1	< 2.0:1	< 2.0:1	< 2.0:1	< 2.0:1	< 2.0:1
IMPEDANCE:	50 ohms	50 ohms	50 ohms	50 ohms	50 ohms	50 ohms
ANTENNA GAIN (dBi):						
@ 90° (ZENITH):	- 4	+ 3.2	+ 2.1	+ 1.2	+ 4.1	+ 3.0
@ 10° Elevation:	- 10	- 3.3	- 4.5	- 7.4	- 4.5	- 5.8
@ 20° Elevation:	- 9	- 1.7	- 3.2	- 5.8	- 2.9	- 4.1
@ 30° Elevation:	- 8	- 0.8	- 2.4	- 4.1	- 1.2	- 2.4
@ 60 - 90° Elevation:	> - 5	> 2.3	> 0.9	> - 0.3	> + 2.6	> + 1.6
BEAM WIDTH (3dB):	90 Deg.	95 Deg.	90 Deg.	75 Deg.	80 Deg.	80 Deg.
AXIAL RATIO:	3 dB	1 dB		1 dB	1 dB	1 dB
LIGHTNING PROTECTION:	DC GROUNDING					
LNA GAIN:	27 dB	27 dB	27 dB	27 dB	27 dB	27 dB
LNA NOISE FIGURE:	2.8 dB	2.8 dB	2.8 dB	2.8 dB	2.8 dB	2.8 dB
LNA P1dB OUT:	+13 dBm	+13 dBm	+13 dBm	+13 dBm	+13 dBm	+13 dBm
LNA DC POWER:	(2.5 - 24)V @ <12mA					
POWER HANDLING:	1 Watt CW, Optional 10 Watts 1 Microsec Pulse (-AL-)					

MECHANICAL:

SIZE: 2.756 in [70.00 mm] SQ.
HEIGHT: 0.512 in [13.00 mm]

WEIGHT: < 3.2 oz. (90 g)

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL
BASE IRIDITE PER MIL-C-5541F CLASS 1A

MATERIAL: 6061-T6 ALUMINUM ALLOY BASE
COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT,
SKYDROL RESISTANCE, AND FIRE RETARDANT

CONNECTOR: CABLE/SMB-M FAKRA H CONNECTOR
(OPTION: SMA, SMB, QMA, SSMC, SSMB, MMCX)

ENVIRONMENTAL:

TEMPERATURE: -67 °F TO +221 °F [-55 °C TO +105 °C]
70,000 ft.

VIBRATION: > 30 G's
HERMETICALLY SEAL

FEDERAL & MILITARY SPECIFICATIONS:

SAE J1455 (AUTOMOTIVE), DO-160D (ENV/EMI), DO-228 (ENV/EMI),
MIL-C-5541F, MIL-PRF-39012 (CONN), MIL-STD-810G (ENV/EMI),
MIL-HDBK-5400 (ELEC), MIL-STD-464C (ELEC MAG), MIL-STD-130N-1 (ID),
MIL-STD-889B (METAL), RCC-319-14 (TERMINATION) , RCC-324-01(SAFETY),
FAA TSO-C144, MIL-STD-1472 (DOD), MIL-I-45208A, AND NAS411-1 (HAZ)

ACCEPTANCE TEST PROCEDURE: ATP-GPS-L1L2-100

P/N: G5Ant-2.75X2.75A2-XSMB-X-OEM

SIZE:	LNA:	CABLE'S LENGTH:	CONNECTOR:	COLOR:
1: 2" SQ.	42: ARINC 743	X: NO CABLE	UR: J.U.F.	-1: GLOSS WHITE #17925 PER FED-STD-595B
1.8: 1.9" SQ.	A2: WITH 27dB LNA		SM: SMC/M: SMB: BNC	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
2: 2.5X2.75" SQ.	A4: WITH 43 dB LNA		M: MMCX: MIM: MMCX/ MMCX/ MMCX/ MMCX	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
2: 2.6" DIA.	P: WITHOUT LNA		QMA: QMA	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
3: 3.5" DIA.				-5: TAN #33446 PER FED-STD-595B

QUANTITY REQD	DESCRIPTION	PARTS LIST	PART NO	FINISH	HTG
-	-	-	-	-	2
-	-	-	-	-	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

FRACTIONS TO BE DECIMALS

± 1/64 .0015 ± 1"

TOLERANCE SHOWN PER ANSI Y14.5

RELIEVE ALL BURRS

PREPARE EXTERNAL SURFACES TO .010

SOBFIN # 002 15 000

DATE ON A COMMON 8/27/2008

MACHINED SURFACES

DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE, CALIFORNIA

OEM Version on 2.75in SQ. Ground Plane
L1L2Glonass/L1L2GPS/OmniStar
G5 ANTENNA (ROHS)

DATE: 03/31/16
DRAWN BY: S. HUYNH
CHECKED BY: P. TRAM
DATE: 03/23/16
APPROVED BY: S. HUYNH
DATE: 03/23/16

SCALE: 1/1

SHEET 1 OF 1