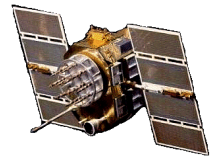




ISO 9001:2008/FAA Approved Facility

L1/L2 GPS Antenna, P/N: 1.9G1215P-6SSMC-2-1.89

1.9" Square, 1.89in Conformal Radius, Flat Front/Back Mount
with 6in SSMC-Male Back Cable Configurations



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SPECIFICATIONS

ELECTRICAL:

		L1: (1575.42 ±12) MHz		L2: (1227.60 ±12) MHz	
RADIATION PATTERN:	HEMISPHERICAL				
POLARIZATION:	RHCP		RHCP		
VSWR:	< 1.5:1				
IMPEDANCE:	50 ohms		50 ohms		
ANTENNA GAIN (dBic):	Free Space	3 in G.P.	4 ft G.P.	Free Space	3 in G.P.
@ 90° (ZENITH):	+3.7	+4.7	+3.1	-1.7	+3.3
@ 10° Elevation:	-2.9	-1.8	-1.9	-7.3	-3.8
@ 20° Elevation:	-1.3	-0.3	+0.6	-6.2	-2.0
@ 30° Elevation:	0.0	+1.4	+1.7	-5.2	-0.5
@ 60 - 90° Elevation:	> 3.0	> 3.9	> 2.4	> -3.2	> 2.2
BEAM WIDTH(3dB):	108 Deg.	114 Deg.	143 Deg.	100 Deg.	106 Deg.
AXIAL RATIO:	2 dB		2 dB		
LIGHTNING PROTECTION:	DC GROUNDING				

LNA OPTION:

LNA GAIN:	20 dB	20 dB
LNA NOISE FIGURE:	1.9 dB	1.8 dB
LNA P1dB Out:	+13 dBm	+13 dBm
LNA DC POWER:	2.5V/10mA, 3V/10mA, 3.3V/12mA, (2.5-24V)/<20mA	
POWER HANDLING:	1 Watt CW, MORE WITH LIMITER OPTION	

MECHANICAL:

SIZE: 1.900in [48.26mm] Square
HEIGHT: 0.631 in. [16.03 mm]
WEIGHT: 3.8 oz. (107g)
FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL
 BASE IRIDITE PER MIL-C-5441
MATERIAL: 6061-T6 ALUMINUM ALLOY BASE
 COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT,
 SKYDROL RESISTANCE, AND FIRE RETARDANT
CONNECTOR: 6in SSMC MALE CABLE
 (OPTION: SMB, SMC, SSMA, SSMA, SSMC, SSMC
 MCX, MMCX, TNC, OR N)

ENVIRONMENTAL:

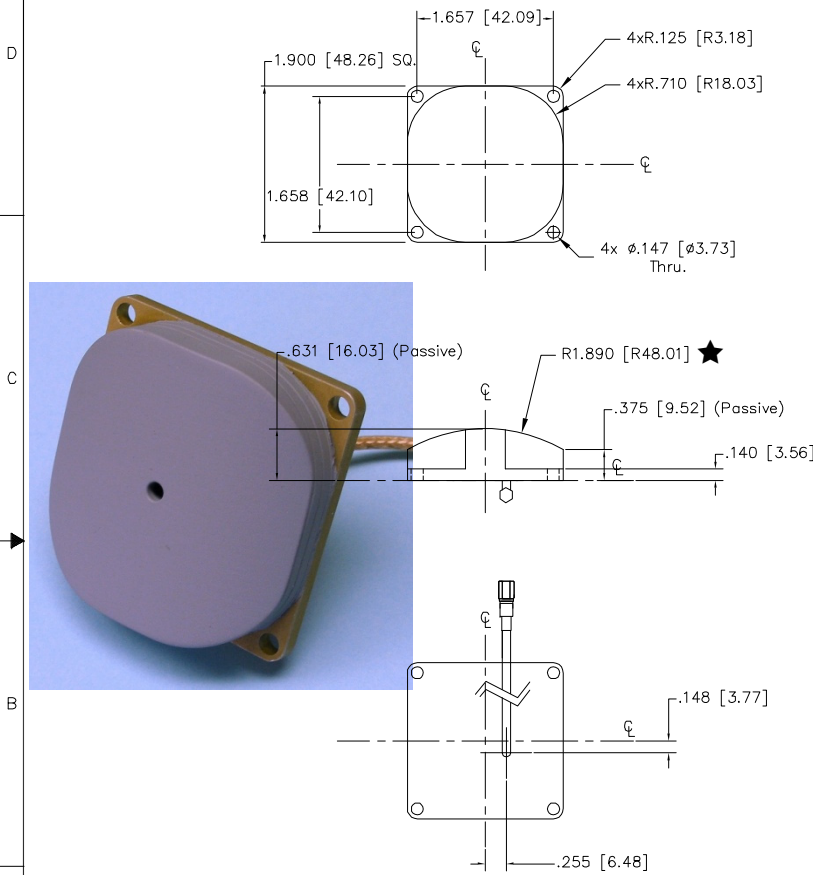
TEMPERATURE: -67 °F TO +185 °F [-55 °C TO +85 °C]
ALTITUDE: 70,000 ft.
VIBRATION: > 30 G's
LEAKAGE: HERMETICALLY SEAL

FEDERAL & MILITARY SPECIFICATIONS:

DESIGN TO: FAA TSO-C144, DO-160D, D0-228, MIL-C-5541,
 MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

ACCEPTANCE TEST PROCEDURE:

QUANTITY REQD	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	ITEM NO
						5
1						3
1						2
1						1



SIZE	FREQ BAND	LNA
1: 2" SQ	1215: L1/L2	A2: WITH 20 dB LNA
1.9: 1.9" SQ	15: L1 ONLY	A4: WITH 40 dB LNA
2: 2.6" DIA		P: WITHOUT LNA
3: 3.5" DIA		PL: WITHOUT LNA WITH LIMITER
4: MINI ARINC		

P/N: 1.9G1215P-6SSMC-2-1.89

CABLE LENGTH	CONNECTOR	COLOR
X: NO CABLE	S: SMA, RS: R-SMA, P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
M: MAG, N: NO MAG	M: MCX, MM: MMCX, SMB	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
#: CABLE LENGTH (IN)	SMA, SSMC, SSMC, SSMP	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
R: RIGHT ANGLE CON.	T, TB: TNC, TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B

CONFORMAL RADIUS OPTION:
-3: 3.000" RADIUS (SDBII)
-3.SN: 3.500" RADIUS (NETFIRE, GMLRS, NLOS)
-4P: 4.000" RADIUS (PAVEWAY)
-6M: 6.000" RADIUS (MAVERICK)
-7.SEM: 7.500" RADIUS (EGBU, MALD)
-14A: 14.000" RADIUS (ACM)
-X: X" RADIUS (0: Flat, No Radius)
-F: FLAT (WITHOUT RADOME)

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS: DECIMALS: ANGLES: ± 1/64 .005 .015 ± 1°

TOLERANCE SURF PER ANSI Y14.5

REWORK ALL SURFACES BREAK EXTERNAL EDGES .005 TO .015 FILE TO .005 TO .015 SMOOTH SURFACES FOR MIL-C-8879 DIM'S ON A COMBINER Q-24-006 MACHINED SURFACES

DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE, CALIFORNIA

Low Profile 1.9" SQ. Conformal L1/L2 GPS ANTENNA

DATE: 06/04/2016
 DRAWN: S. HUYNH
 CHECKED: S. HUYNH
 APPROVED: S. HUYNH
 CAP FILE NO: F02-19-D4

ITEM NO: D13CVE1
 PART NO: 1.9G1215P-6SSMC-2-1.89 A

SCALE: 1/1
 SHEET: 1 OF 1