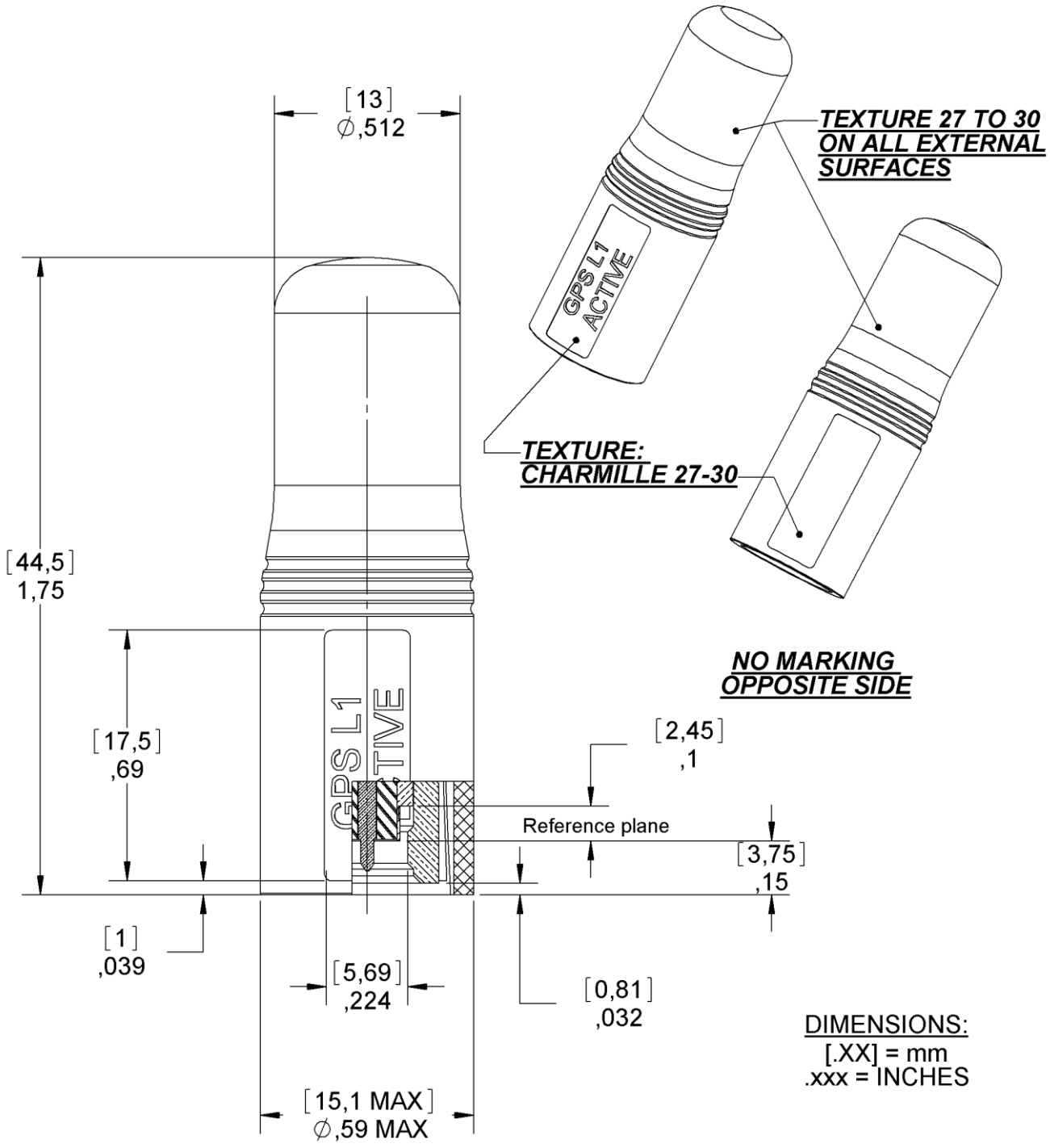
PAGE 1/3	ISSUE 251114A	SERIES ANTENNA	PART NUMBER R380.300.013



All dimensions are in [mm] / inches

ELECTRICAL CHARACTERISTICS

Frequency :	**GPS L1 (1575.42)**	MHz
Nominal Impedance :	**50**	Ω
VSWR :	**2.0:1**	Typ
	2.5:1	Max
Gain :		
Radiating Element only :	**-3**	dBic ±1dB
Active Gain (LNA) :	**16**	dB typ
Polarization :	**RHCP**	
Radiation Pattern:	**Hemi-spherical**	
3 dB Beamwidth (both planes) :	**120° x 120°**	typ
P1 dB compression :	**-14**	dBm
Noise Figure (LNA alone) :	**1.5**	dB max
Supply Voltage :	**3.3**	V typ.
	3.0	V min
	3.5	V max
Current consumption :	**8**	mA typ
Connector type :	**Male SMA**	

MECHANICAL CHARACTERISTICS

Plastic radome :	**PEI**	
Color :	**BLACK**	
Texture :	**Charmille 30**	
Weight :	**30**	g
Overall length :	**<1.77**	in
	<45	mm
Max Diameter	**0.59**	in
	15.1	mm
RoHS Compliant:	**Yes**	

ENVIRONMENTAL CHARACTERISTICS

Operating temperature :	**-32/+55** **IAW MIL-STD-810G** **meth 501.5 & 502.5, proc II**	° C
Storage temperature :	**-55/+85** **IAW MIL-STD-810G** **meth 501.5 & 502.5, proc I**	° C
Temperature Shocks	**3 cycles -40/+70°C** **IAW MIL-STD-810G** **meth 503.5 , proc I**	
Altitude :	**40,000** **IAW MIL-STD-810G** **meth 500.5, proc I**	ft
Humidity :	**Induced Hot Humid** **IAW MIL-STD-810G** **meth 507.5, proc II**	
Immersion (mated to radio)	**20m, for 2h** **IAW MIL-STD-810G** **meth 512.5, proc I**	
Salt Fog :	**96h** **(4x24h alterning wet & dry)** **IAW MIL-STD-810G** **meth 509.5**	
Solar Radiation:	**10 cycles, 20/4h sun/dark** **IAW MIL-STD-810G** **meth 505.5, proc II**	
Transit Shocks :	**26 drops from 1.2m high** **IAW MIL-STD-810G** **meth 516.6, proc IV**	
Fluid Contamination	**Table 504.1-II** **MIL-STD-810G** **Meth 504.1, proc II**	

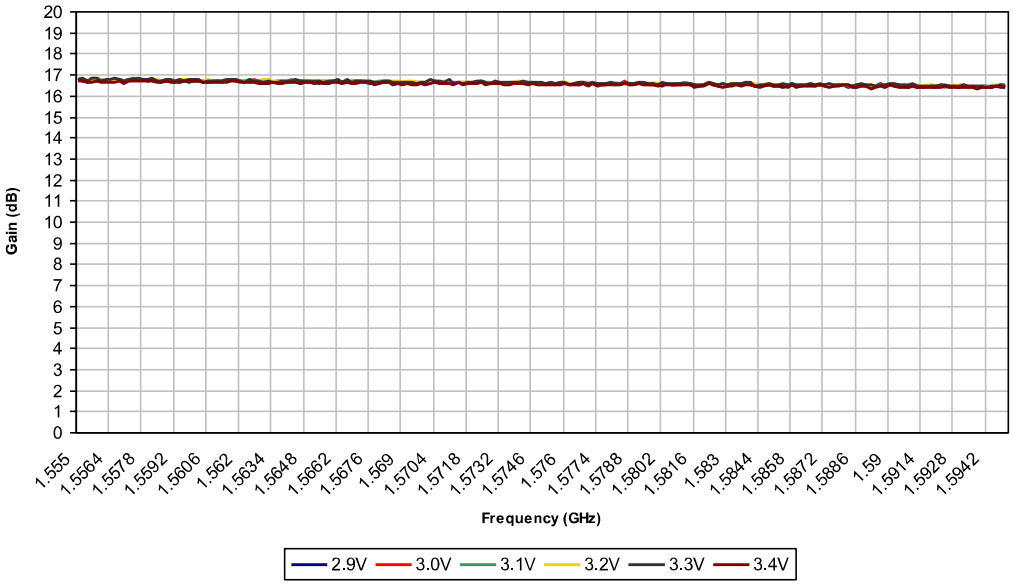


Figure 1: LNA Gain vs DC input voltage

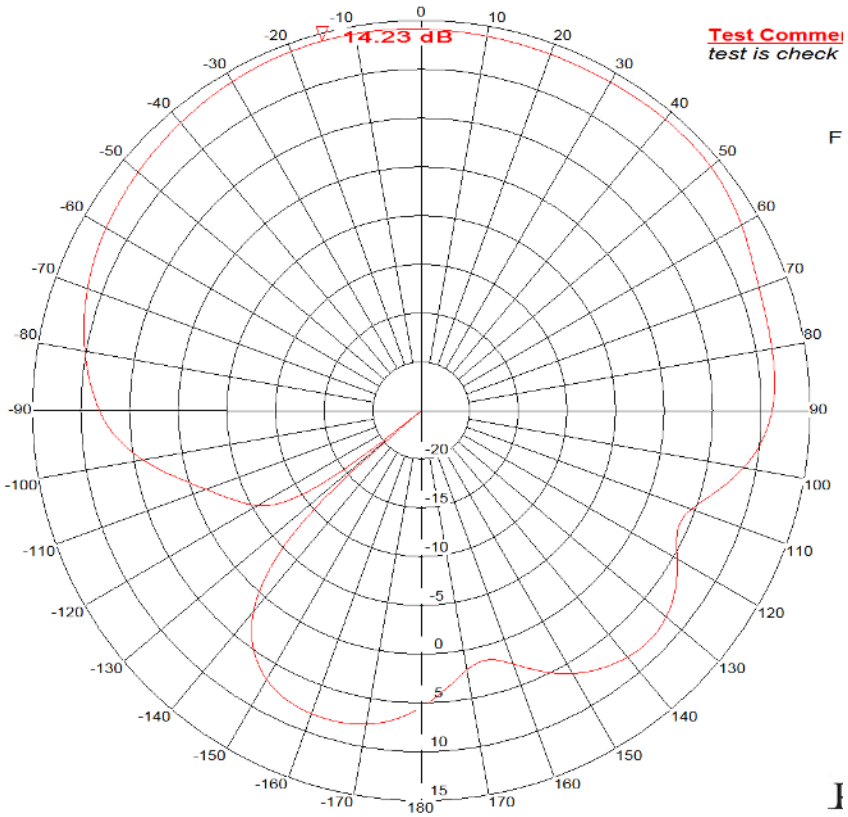


Figure 3: Typical elevation pattern in free space (RHCP)