

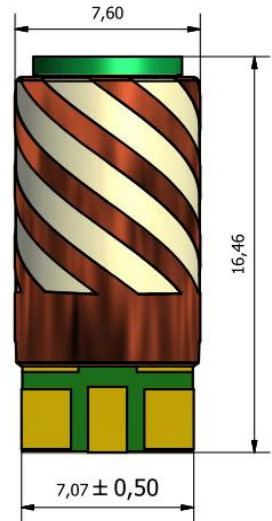
MWSL-1350

"The dielectric-loaded helical antenna solution"

L1 GPS miniature dielectric loaded antenna: PCB feed

APPLICATIONS

- Asset Tracking
- Hand Held Devices
- UAV/AUV
- Traffic Enforcement
- Emergency Location
- Seismic Monitors/Measuring
- Wildlife Tracking
- Marine Tracking



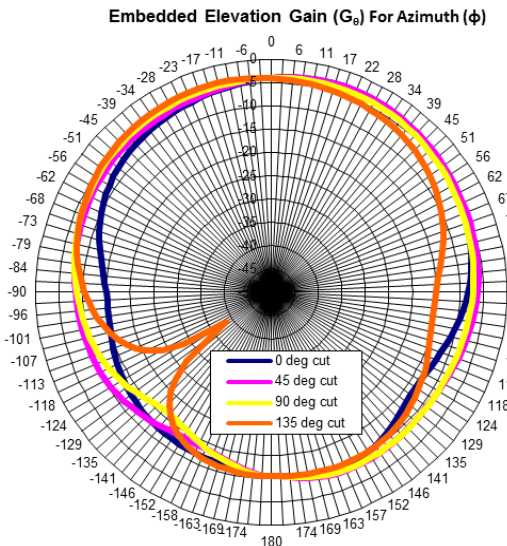
Product Description

The MWSL1350 is a breakthrough GPS L1 dielectric-loaded antenna which uses MARUWA's distinctive materials technology to provide unrivalled circularly-polarized gain from a uniquely small volume. The dielectric core together with the fly-wheeling effect of the advanced hexafilar design provides excellent performance in the most tightly integrated applications. The MWSL1350 acts as its own filter, attenuating signals from common cellular and ISM frequencies by as much as 30dB. This product is designed for solder or spring connection to the host PCB.



Key Features

- Designed for installation with 1.5mm gap from antenna side to host PCB ground-plane
- Filters against interference from cellular and ISM bands
- Balanced design rejects common mode noise from ground plane
- Solder-pad installation to device PCB



Design Specifications	Typical	Units
Type	Hexafilar-Helix	-
Free Space Frequency	1582.5	MHz
Embedded Frequency	1575.42	MHz
Efficiency (Embedded)	27%	Total spherical
Embedded Gain (RHCP)	-3.5	dBic at zenith
Beamwidth	>135	Degrees
Bandwidth	15	MHz
Axial Ratio	<1.5	at zenith
VSWR	<2.0:1	-
Impedance	50	Ohms
Operating Temp	-40→+85	dB
Overall dimensions	Refer to drawings	mm
Weight (excl radome/sleeve)	3	grams