DATA SHEET

LINX TECHNOLOGIES

HE SERIES

COMPACT HELICAL ANTENNAS

ANT-315-HE, ANT-418-HE****
ANT-433-HE, ANT-916-HE****

**** = SM (SURFACE-MOUNT)**
TH (THROUGH-HOLE)

DESCRIPTION

In low-cost RF applications a whip antenna generally provides the best overall performance. In many cases, however, the use of a whip is not practical for cost or cosmetic reasons. In instances where a designer is looking for a blend of easy concealment, low cost and good performance, a helical antenna is usually the optimum choice. The HE series from Linx delivers exceptional performance and ease of use, while maintaining a cost factor appropriate for high-volume applications. Linx helical antennas are precisely wound and matched to provide the lowest possible SWR at the operational frequency. In addition, the antenna diameter and inter-coil spacing are optimized to provide a wider than typical bandwidth.

FEATURES

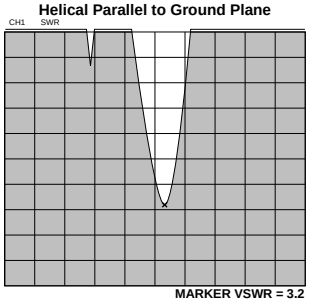
- **Compact design for easy concealment**
- **High-grade phosphoric bronze construction**
- **Precision wound for consistent performance**
- **Surface-mount or through-hole styles**
- **Low physical impedance**
- **Rugged construction**
- **Very low cost in volume**

ORDERING INFORMATION

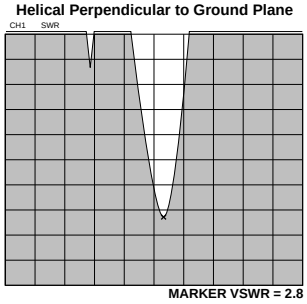
PART #	DESCRIPTION	PART #	DESCRIPTION
ANT-315-HESM	SURFACE-MOUNT 315 MHZ	ANT-315-HETH	THROUGH-HOLE 315 MHz
ANT-418-HESM	SURFACE-MOUNT 418 MHZ	ANT-418-HETH	THROUGH-HOLE 418 MHz
ANT-433-HESM	SURFACE-MOUNT 433 MHZ	ANT-433-HETH	THROUGH-HOLE 433 MHz
ANT-916-HESM	SURFACE-MOUNT 916 MHZ	ANT-916-HETH	THROUGH-HOLE 916 MHz

PERFORMANCE CHARACTERISTICS

Helical Parallel to Ground Plane



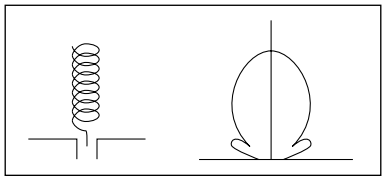
Helical Perpendicular to Ground Plane



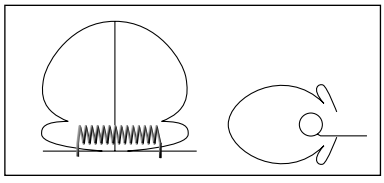
RADIATION PATTERN

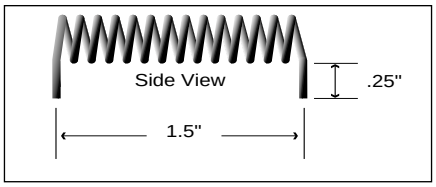
HE Series antenna patterns have not been fully characterized as of this time. The patterns below illustrate typical patterns for antennas of this type.

Perpendicular to Groundplane

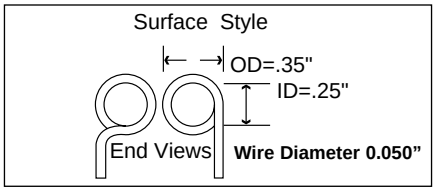


Parallel to Groundplane

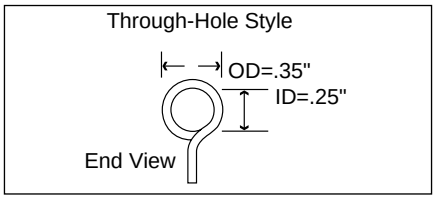




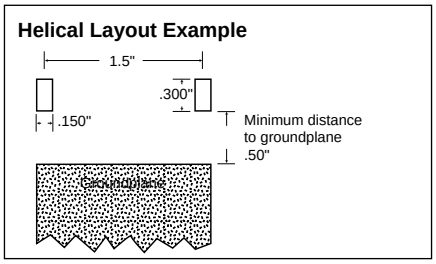
Surface-Mount Style



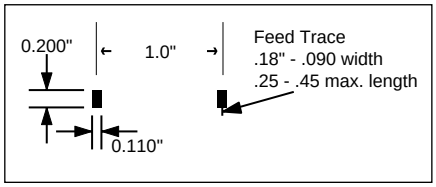
Through-Hole Style



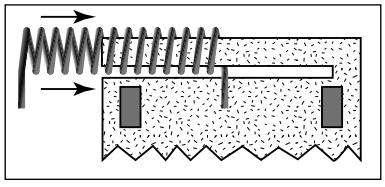
Suggested Board Layout



(916MHz)



For Applications Subject to Vibration or Shock



Recipient understands any or all of the above specifications are subject to change without notice and proceeds with integration at own risk.