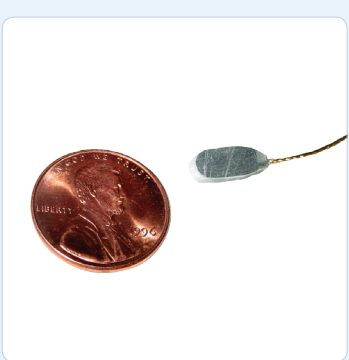


**PRODUCT DATA SHEET**

**HD2WD Sensor**

Very Wideband Frequency Miniature Sensor

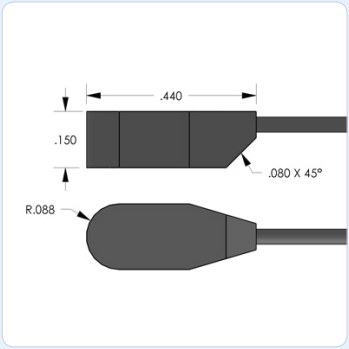


**DESCRIPTION AND FEATURES**

The HD2WD miniature sensor has a very wideband and flat frequency response over the range of 250 – 1600 kHz. Its small size makes the sensor an ideal candidate for computer hard disk examination and other applications requiring a small, wideband AE sensor response. A small diameter, integral coax cable exits from the side of the sensor with a BNC connector on the end.

**APPLICATIONS**

Wideband sensors are typically used in research applications or other applications where a high fidelity AE response is required. In research applications, wideband AE sensors are useful where frequency analysis of the AE signal is needed and in helping determine the predominant frequency band of AE sources for noise discrimination and selection of a suitable lower cost, general purpose AE sensor. Due to its extremely small size, this sensor is ideal for applications such as hard disk monitoring, where small size and low mass sensors are required.



**OPERATING SPECIFICATIONS**

*Dynamic*

Peak Sensitivity, Ref V/ $\mu$ bar ..... -70 dB  
 Operating Frequency Range ..... 330-1850 kHz  
 Resonant Frequency ..... N/A  
 Directionality ..... N/A

*Environmental*

Temperature Range ..... -65 to 125°C  
 Shock Limit ..... 500 g  
 Completely enclosed crystal for RFI/EMI immunity

*Physical*

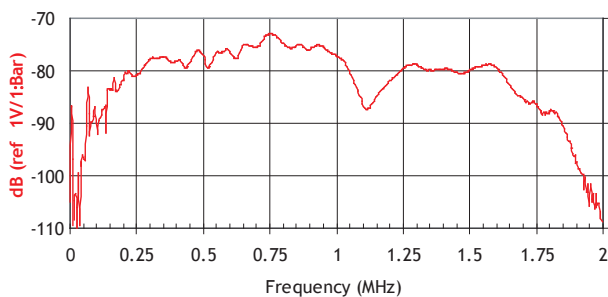
Dimensions ..... 0.175" OD X 0.14" H X 0.44" L  
 4.44 mm OD X 2.4 mm H X 11.17 mm L  
 Weight ..... 2.5 grams (5.5 grams with cable & connector)  
 Case Material ..... Aluminum Alloy  
 Face Material ..... Aluminum Alloy  
 Connector ..... BNC on integral cable  
 Seal ..... Epoxy  
 Sensor to Preamp Cable ..... Integral 24"

**ORDERING INFORMATION AND ACCESSORIES**

HD2WD ..... HD2WD  
 Cable (specify length in 'XX' m at end of PN) ..... 1 m  
 Pre-amplifier ..... 0/2/4, 2/4/6  
 Preamp to System Cable (specify length in 'm') ..... 1234 - X  
 Amplifier Subsystems ..... AE2A, AE5A

*Sensors include*

NIST Calibration Certificate & Warranty



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