

# PICO HF-1.2 Sensor

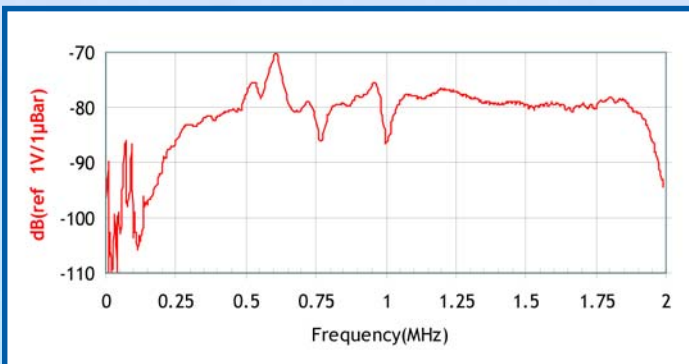
## 600 kHz Frequency, Micro-Miniature Acoustic Emission Sensor

### Description and Features

The PICO HF-1.2 is a micro-miniature sensor with a wide-band and relatively flat frequency response over the range of 500 - 1850 kHz. Its small size makes the sensor an ideal candidate for computer hard disk examination and other applications requiring very small size, low weight and wideband AE sensor response. A small diameter, integral coax cable exits from the side of the sensor with a BNC connector on the other end.

### Applications

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. Additionally, the PICO HF-1.2 can be used in research applications or other applications where a small aperture, high fidelity AE response is required. The sensor is useful in research applications, 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 suitable lower cost, general purpose AE sensors.



Frequency response of the PICO HF-1.2. Calibration based on ASTM E976.

### Operating Specifications

#### Dynamic

Peak Sensitivity, Ref V/ $\mu$ bar .....	-70 dB
Operating Frequency Range .....	500 - 1850 kHz
Resonant Frequency .....	600 kHz
Directionality .....	+/-1.5

#### Environmental

Temperature Range .....	-65 to 177°C
Shock Limit .....	10,000 g
Completely enclosed for RFI/EMI immunity	

#### Physical

Dimensions .....	.0.2" diameter x .15" h (5 x 4 mm)
Weight .....	.1 gram (7 grams with cable and connector)
Case Material .....	Stainless Steel
Face Material .....	Ceramic
Connector .....	Integral cable with BNC Connector
Connector Locations .....	Integral Side Cable
Seal .....	Epoxy
Sensor to Preamp Cable .....	Integral, 0.033" diameter x 24" length

### Ordering Information and Accessories

PICO HF-1.2.....	PICO HF-1.2
Preamplifier .....	0/2/4, 2/4/6
Preamp to System Cable (specify length in meters) .....	1234 - X
Amplifier Subsystems .....	AE2A / AE5A

#### Sensors include

NIST Calibration Certificate & Warranty



195 Clarksville Road, Princeton Junction, NJ 08550 • Phone: 609-716-4000  
 Fax: 609-716-0706 • Email: sales@pacndt.com • Internet: www.pacndt.com

