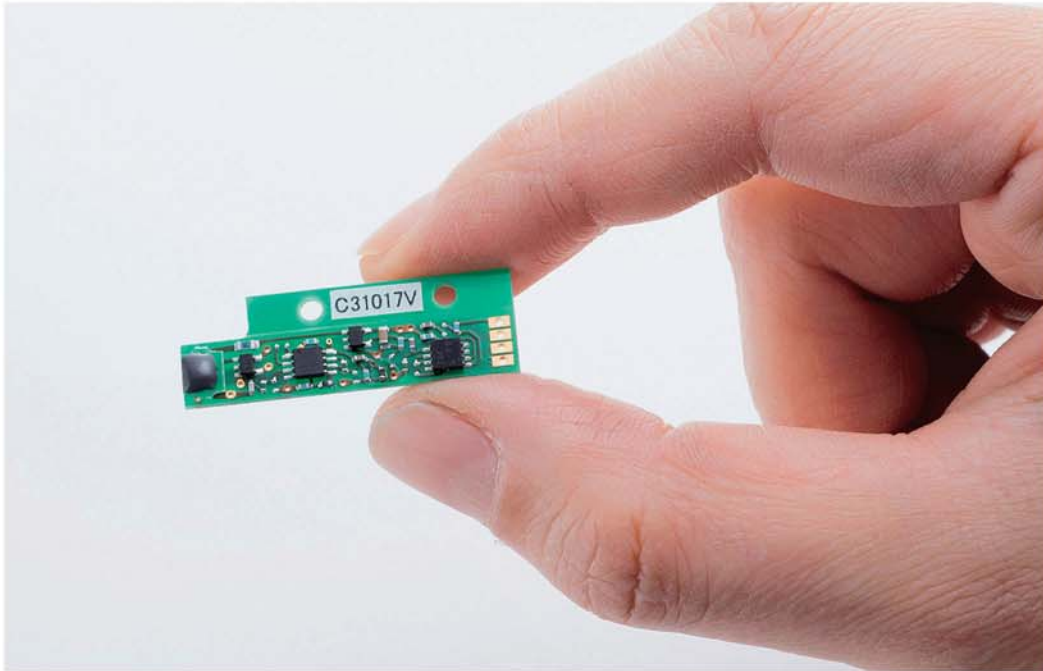


Microtesla

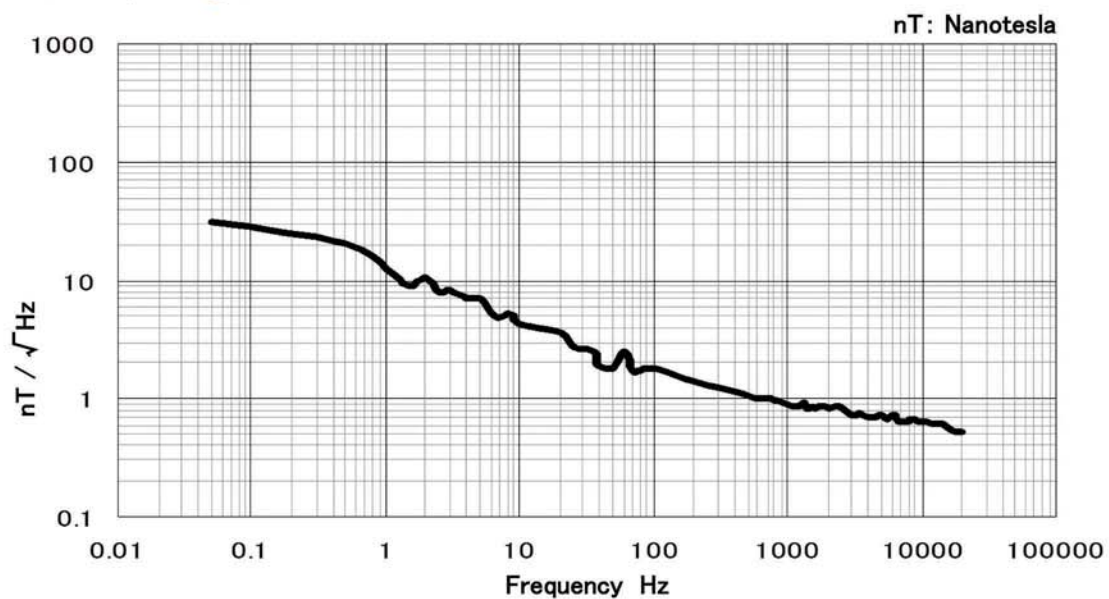
# $\mu$ T Sensor

MI-CB-1DM

The  $\mu$  T (Microtesla) Sensor is a single axis linear output magnetometer. The measurement range is  $\pm 300 \mu$  T and is responsive from DC to 10kHz. The sensing directions are parallel (A type) or perpendicular (B type) to the short edge of the PCB (A type).



## ■ Noise spectrogram



Sales

Aichi Steel Corporation

<http://www.aichi-steel.co.jp/>

1 Wano-wari, Arao-machi, Tokai-shi, Aichi-ken  
476-8666 Japan  
TEL: 052-603-9948

Production

Aichi Micro Intelligent Corporation

<http://www.aichi-mi.com/>

Aichi Steel Technology Campus, 1 Wano-wari, Arao-machi, Tokai-shi, Aichi-ken  
476-8666 Japan  
TEL: 052-603-9957

Conditions: Power Supply Voltage +5.0V  
1MHz Operation +25°C

## Specification

Item	Condition	Min.	Typ.	Max.	Unit
Operating Range	—	—	±300	—	μT
Linearity	FS=±300mT	—	0.2	2.0	%·FS
Origin Voltage	0mT	2.0	2.5	3.0	V
Magnetic Sensitivity	—	3.0	4.0	5.0	mV/μT
Frequency Response	—	DC~10k			Hz
Noise	0.1~10Hz	—	200	—	nT <sub>p-p</sub>
	@1Hz	—	15	—	nT/√Hz

μT: Microtesla = 10miligauss

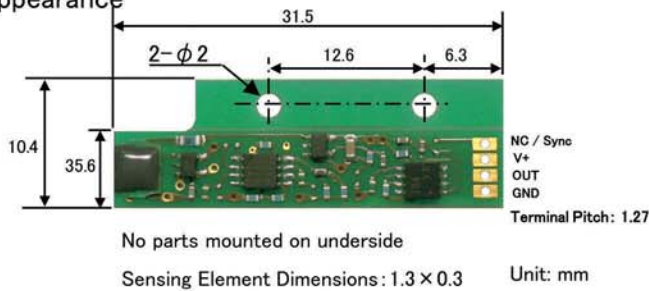
## Absolute Maximum Rating

Item	Rated Value	Unit
Power Supply	-0.3 to +6.0	V

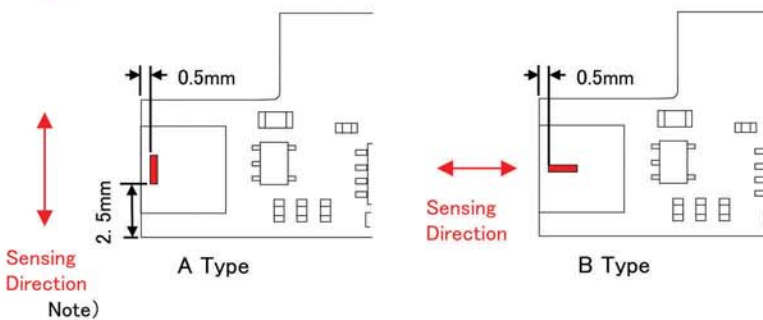
## Recommended Operating Conditions

Item	Min.	Typ.	Max.	Unit
Power Supply	—	5.0	—	V
Operating Temperature	-20	—	+85	°C

## Appearance



## MI Element Position



- Note)  
When ordering, please indicate sensing direction (A/B) and single or multi type.
- Single type: For use as single sensor (uses internal oscillator)
  - Multi type: For use with multiple sensors (use external oscillator)

## Representative Characteristics

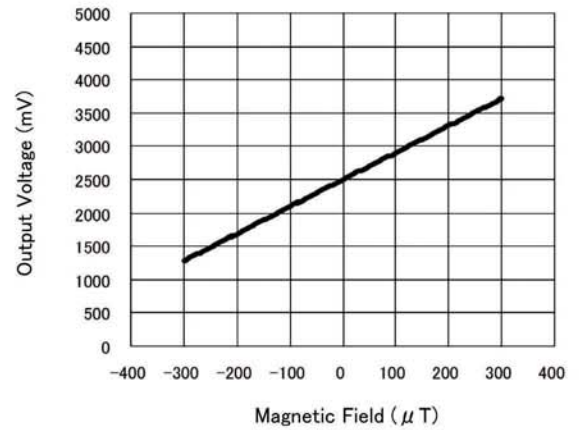


Fig.1 Magnetic Sensitivity

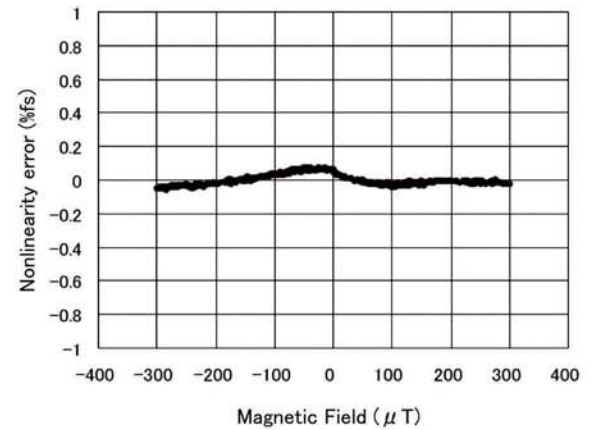


Fig.2 Linearity

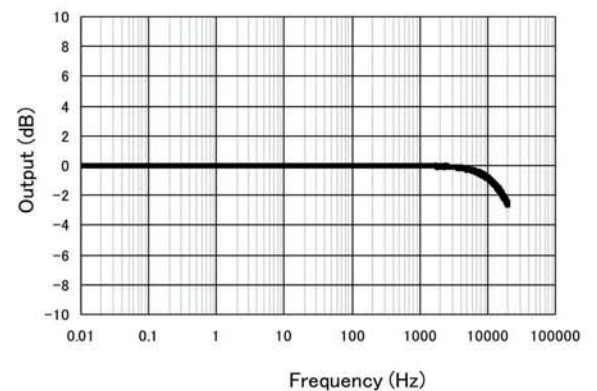


Fig.3 Frequency Characteristics