

▶ strictly confidential

Attracting Tomorrow



# **MEMS Microphone T4078**

Product Brief and EVAL PCB Information

**TDK Electronics AG**  
MEMS Business Group • Microphone BU  
Munich, Germany  
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# T4078

Wide Dynamic Range, High SNR, Small Package Analog Microphone

Attracting Tomorrow



In Production

## Specifications

- |                                     |                                     |
|-------------------------------------|-------------------------------------|
| ▪ Port Location:                    | Bottom                              |
| ▪ Output:                           | Analog                              |
| ▪ SNR:                              | 66dB (A) in high performance mode   |
| ▪ Frequency Response:               | 80 Hz to 20 kHz                     |
| ▪ Acoustic Overload Point (dB SPL): | 136 dB SPL in high performance mode |
| ▪ 1% THD point (dB SPL)             | 130 dB SPL in high performance mode |
| ▪ Sensitivity (dB FS):              | -38 ±1 dB                           |
| ▪ Package Size (mm)                 | 3.35 x 2.5 x 0.98mm                 |
| ▪ Voltage range                     | 1.52 to 3.6V                        |
| ▪ Polarity                          | Positive                            |

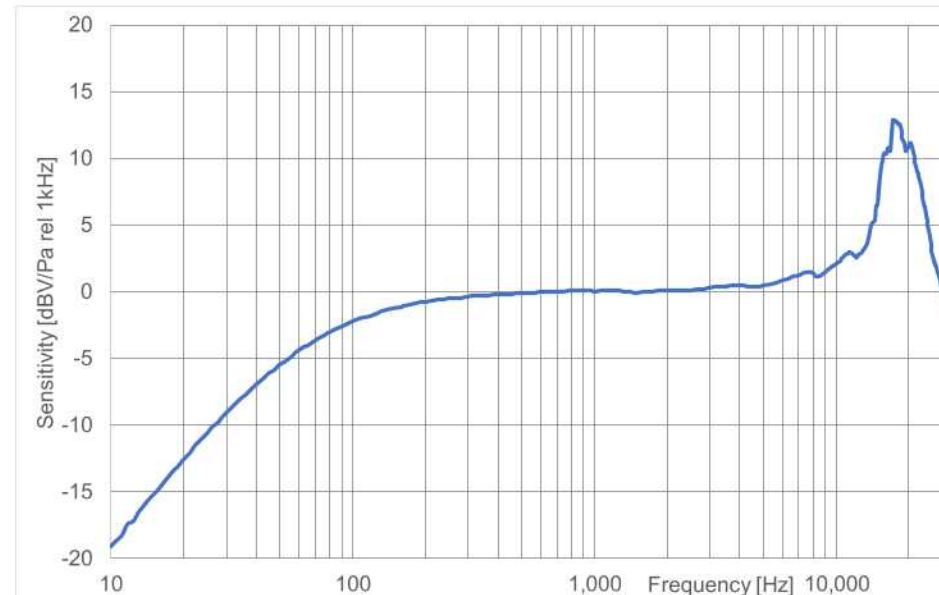
Datasheet: Contact your sales representative for preliminary datasheet

## Applications

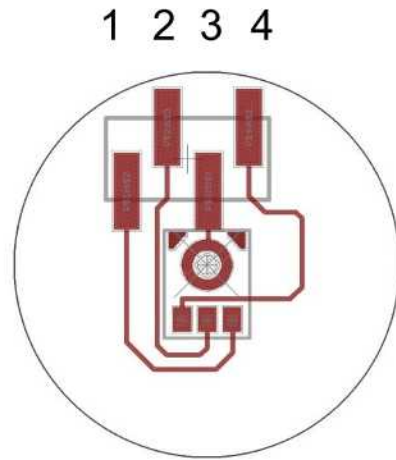
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|------------------------|-------------------|
| • Wearable Devices     | • Mobile Phones   |
| • IoT sensors          | • Headsets        |
| • Conferencing Systems | • Remote Controls |

## Solution Benefits

- Provides High performance in a small, industry standard size package
- Low power (85µA) and high performance (66dB SNR) modes
- Differential interface improves EMI susceptibility
- Ideal for wearables and mobile applications

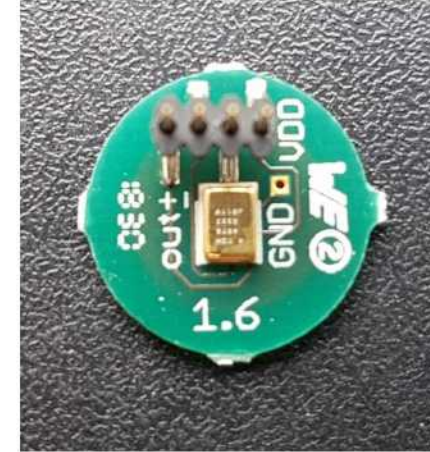


# Evaluation PCB



board layout (top metal layer)

Pin#	Pin name
1	OUT+
2	OUT-
3	GND
4	VDD



T4078 PCB top view

This is a round PCB to measure the T4078 microphone in differential mode. The microphone is routed to a 4-pin plug to supply VDD (pin 4) and to measured the output signal (pin 1 and 2).

The PCB has a diameter of 12mm and a thickness of 1mm.



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