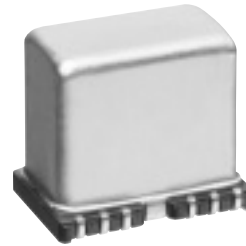


MEMS Angular Rate Sensors for Navigation SMD Type

Type: **EWTS86N**□□□

SMD type angular rate sensor for navigation. This micro-sensor has high precision and reliability due to the full sealing around the bare chip IC and MEMS silicone based tuning fork, formed with piezo-electric thin film directly on the surface.



■ Features

- Compact, Low-height 10 mm, Low-profile 6.1 mm
- SMD type
- 5 V operating voltage (Ratio-metric output)

■ Recommended Applications

- Detects the direction of movement for car-navigation

■ Ratings

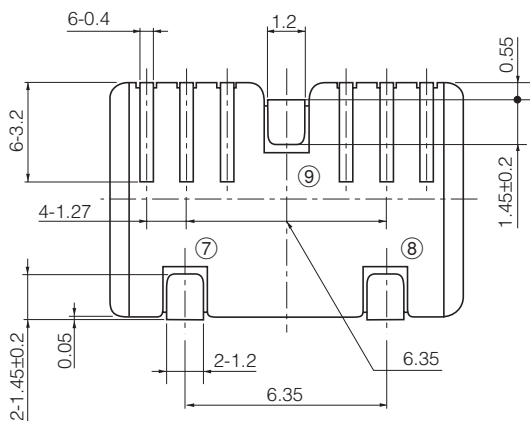
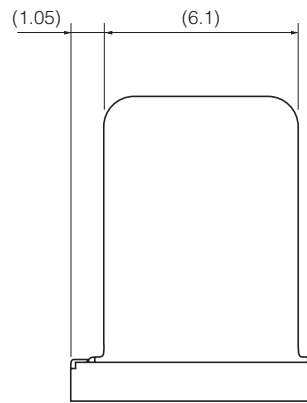
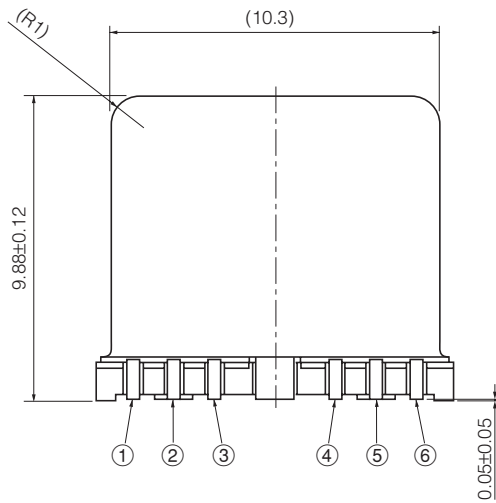
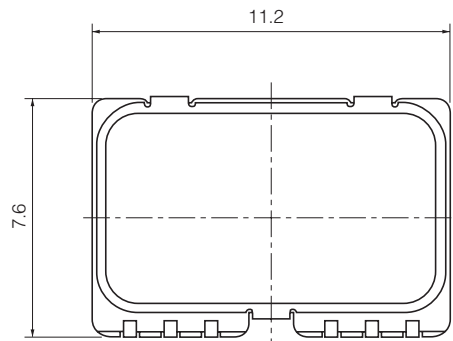
● Electrical Characteristics

Operating Temperature Range	-40 °C to +85 °C
Operating Voltage Range	5±0.25 V
Zero Point Voltage (-40 °C to +85 °C)	2.5±0.4 V
Sensitivity (-40 °C to +85 °C)	25±2.5 mV/ (° ·s ⁻¹)
Dynamic Range	±60 %/s
Frequency Response (7 Hz)	-4 dB to 0 dB
Output Noise	< 10 m Vp-p

● Environmental Characteristics

Low Temperature Operation	-40 °C for 72 h
High Temperature Operation	+85 °C for 120 h
Thermal Shock	-40 °C to +85 °C for 25 cycles
Heat and Damp Cycling Test	-10 °C to +60 °C at 90 % RH for 5 cycles
Life (Operating Durability)	2 Hz, 1×10 ⁷ cycles

■ Dimensions in mm (not to scale)



Terminal

①	Vout
②	GND
③	GND
④	NC
⑤	NC
⑥	Vcc
⑦	GND
⑧	GND
⑨	GND