

MFOG091

Technical manual

Technical manual of MFOG091

1. Brief introduction

MFOG091 fiber optic gyro is mainly composed of optical circuit components, circuit components and structural components. It is characterized by simple structure, no moving parts, no wear parts, fast startup, small volume and light weight. It can be applied to carrier attitude body control and measurement.

2. Product Performance

2.1 Dimension

$\varnothing 24\text{mm} \times 40\text{mm}$ 。



Pic.1 MFOG091

2.2 Weight

$\leq 30\text{g}$ 。

2.3 Operation temperature

$-40^{\circ}\text{C} \sim +65^{\circ}\text{C}$ 。

2.4 Storage temperature

$-55^{\circ}\text{C} \sim +85^{\circ}\text{C}$ 。

2.5 Vibration

Random vibration: 20g, 20Hz~ 2000Hz.

2.6 Specification

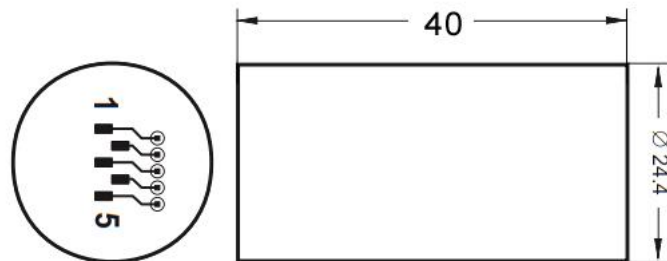
Table 1 Main parameters

1	Input range (°/s)	±60
2	Scale factor	7±0.7mv/°/s
3	Bias stability (10s, 1σ, °/h)	≤2
4	Bias repeatability (1σ, °/h)	≤2
5	Random walk (°/h ^{1/2})	≤0.02
6	Bias offset (10s,1σ)	≤0.05
7	3dB Band Width (Hz)	≥1KHz
8	Supply voltage (V)	5±0.15
9	Power consumption (W)	≤0.7

3. Dimension and Interface

Dimension is shown as below:

Housing material - aluminum alloy



The micro-nano fiber optic gyro is electrically connected to the exterior using solder pins.

Definition is shown as below.

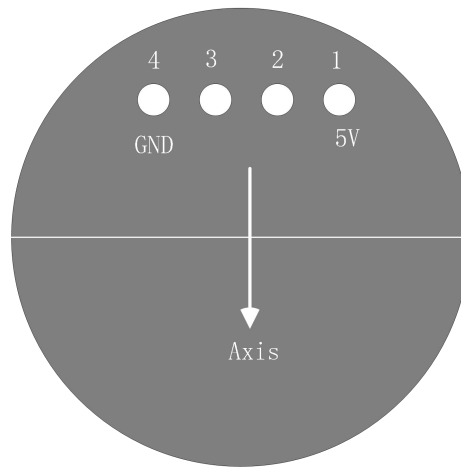
表 2 Pin definition

Num.	Definition
1	5V
2	Out-
3	Out+

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4	GND
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Output impedance is 1k Ω , output level is 1V and differential analog voltage output is used.



Pic.2 Pin definition

4. Storage

- a) Products placed in boxes should be stored in air-conditioned warehouses at an ambient temperature of 15° C to 35° C under standard atmospheric pressure,
- b) The storage period of the product is 15 years.

5. Documents

- a) Certificate of Conformity;
- b)MFOG091 Acceptance Report;
- c) MFOG091 Technical manual (One cope per lot)。