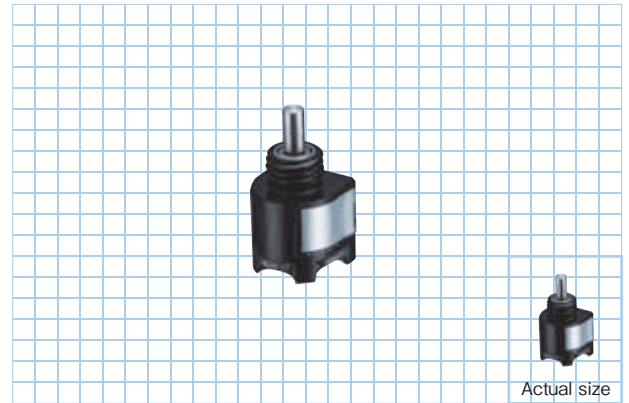


# MAS-3 series

[Absolute]

- Outside dimensions  $\phi 6 \times 8.6\text{mm}$  12bit Absolute encoder
- Resolution 4096, SSI interface



## Encoder Specifications

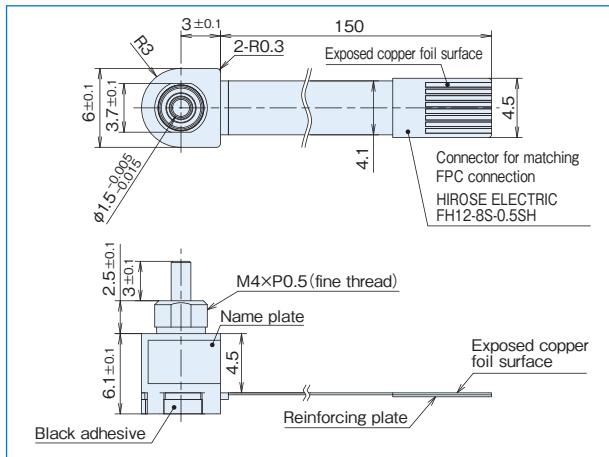
| Item                                 | Type name | MAS-3-4096N1   |
|--------------------------------------|-----------|--|
| Supply voltage                       |           | DC5V $\pm 5\%$   |
| Current consumption                  |           | 40mA or less (under no load)   |
| Resolution                           |           | 4096, 2048, 1024   |
| Allowable revolutions                |           | 6000r/min  |
| Allowable load of shaft (electrical) | Radial    | 0.98N (100g)   |
|                                      | Thrust    | 0.98N (100g)   |
| Working temperature/humidity         |           | 0°C ~ +60°C / RH35% ~ 90%  |
| Storage temperature                  |           | -20°C ~ +100°C   |
| Vibration resistance                 |           | Durability 55Hz, double amplitude 1.5mm<br>2 hours each in X, Y, and Z directions    |
| Impact resistance                    |           | Durability 500m/s <sup>2</sup> (about 50G)<br>3 times each in X, Y, and Z directions |
| Cable                                |           | Flexible cable (length 150mm)  |
| Mass                                 |           | 5g (not including I/F box)   |

## Receiver specifications (37x37 PCB)

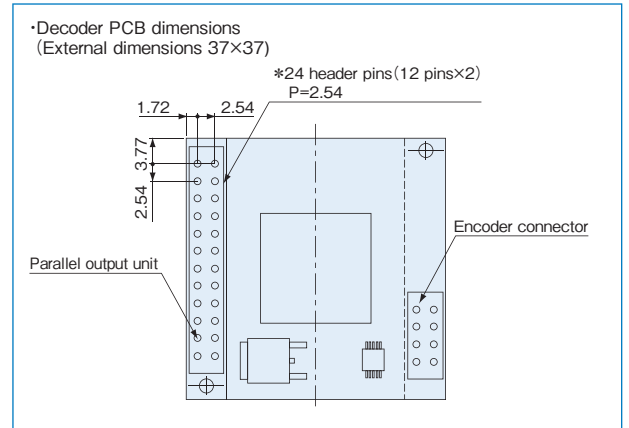
| Item                       | Type name | DECODER- $\triangle\triangle$ bit  |
|----------------------------|-----------|--|
| Supply voltage             |           | DC5V $\pm 5\%$   |
| Current consumption        |           | 60mA or less (110mA or less including encoder)   |
| Parallel data update cycle |           | 60 $\mu$ s (16.7kHz)   |
| Output circuit             |           | NPN open collector output (when using parallel output)                                   |
| Output capacity            |           | Sink current 20mA or less.<br>Load voltage 35V or less.<br>Residual voltage 0.4V or less |
| Logic                      |           | Negative logic (H=0, L=1)  |
| Connection                 |           | Power supply and parallel signal output by P=2.54 header pins (see diagram below)        |

$\triangle\triangle$ ...10, 11, 12 (corresponding to the encoder resolution)

## Encoder Outside dimensions



## Receiver Outside dimensions (Option)



## Outside dimensions of the I/F box

