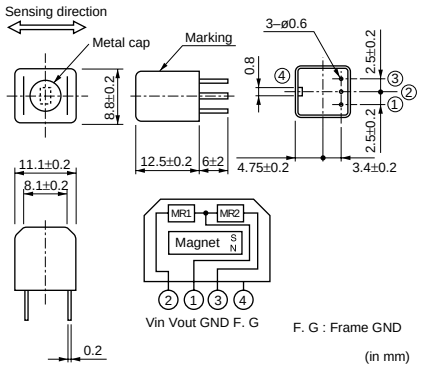
Magnetic Pattern Recognition Sensors

Standard Compact Type

■ Features (BS05C Series)

1. High sensitivity and excellent gap characteristics.
2. Output voltage is independent of scanning speed.
3. Compact size and light weight make them ideal for downsizing.
4. Longer product life is given to BS05C series with a specially hard metal cover.
5. BS05C1HGCA has superior noise immunity against induced noise originated from motors and transformers.

BS05C Series



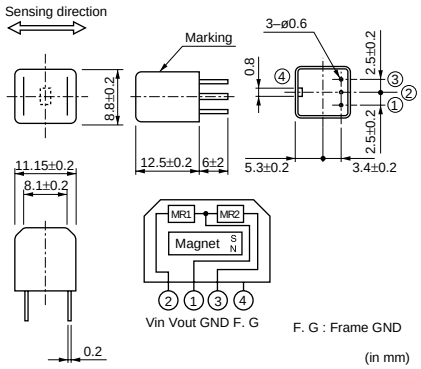
■ Applications

1. Bank note validator
2. Magnetic ink document reader
3. Magnetic card reader
4. Magnetic gear detector

■ Features (BS05N Series)

1. High sensitivity and excellent gap characteristics.
2. Output voltage is independent of scanning speed.
3. Compact size and light weight make them ideal for downsizing.
4. Low cost is achieved by BS05N1 series due to its simple structure.
5. BS05N1HGAA has superior noise immunity against induced noise originated from motors and transformers.
6. BS05N1NFAA can decrease the influences when a detection body has a location deviation because detection width is wide with 6 mm.

BS05N Series



■ Applications

1. Bank note validator
2. Magnetic ink document reader
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4. Magnetic gear detector

Part Number	Supply Voltage (V)	Total Resistance (k ohm)	Output Voltage (mVrms)	Test Method	Detection Width (mm)	Resolution (mm)	Operating Temperature Range (°C)
BS05C1HFAA	5	0.5 to 6	400 min.	Test Method A	3	0.75	-20 to 60
BS05C1HGCA	5	0.5 to 6	235 to 405	Test Method A	3	0.75	-20 to 60
BS05N1HFAA	5	0.5 to 6	400 min.	Test Method A	3	0.75	-20 to 60
BS05N1HGAA	5	0.5 to 6	235 to 405	Test Method A	3	0.75	-20 to 60
BS05N1NFAA	5	0.6 to 6	330 min.	Test Method B	6	0.87	-20 to 60

■ Test Method A

1. Amplifier's gain is set to 1,100 at the frequency of 60 Hz. Fig. 1 shows the detail of amplifier.
2. DUT is set in the test fixture as shown in Fig. 2.
3. AC current of 100mArms is applied to the copper wire.
4. Amplifier's output voltage is read with DMM while DUT is slowly moved along the guide rail.

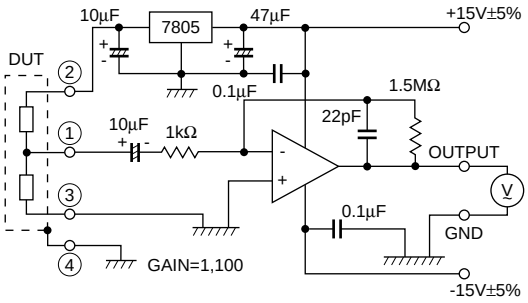

Fig. 1 Amplifier for Output Voltage Measurement

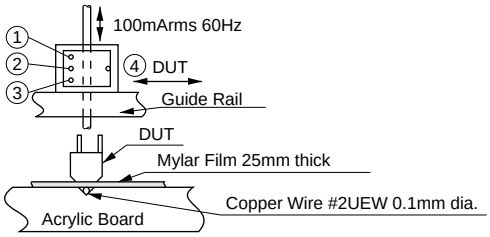

Fig. 2 Test Fixture for Output Voltage Measurement

■ Test Method B

1. Amplifier's gain is set to 1,100 at the frequency of 60 Hz. Fig. 1 shows the detail of amplifier.
2. DUT is set in the test fixture as shown in Fig. 2.
3. AC current of 100mArms is applied to the copper wire.
4. Amplifier's output voltage is read with DMM while DUT is slowly moved along the guide rail.

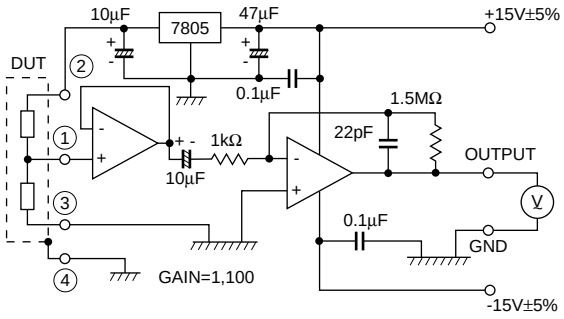

Fig. 1 Amplifier for Output Voltage Measurement

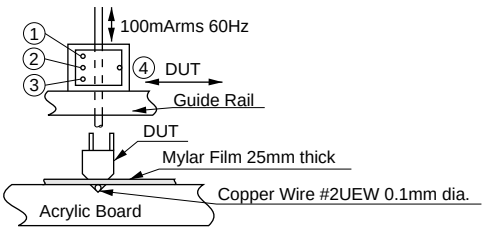

Fig. 2 Test Fixture for Output Voltage Measurement