



## MRS-133

- Feature**
- MRS-133 is the multi-channel MR sensor of the detection width 34mm.
  - Elements are arranged onto the same straight line to detect safety thread of the bill securely. It can get output steadily from the sensor by the width of 34mm.

### Absolute Maximum Rating (Ta=25C)

Item	Symbol	Standard Value	Unit
Excitation, Maximum	V <sub>a</sub> max	5.5	V
Withstand Voltage	V <sub>I</sub>	100	V
Allowable Loss	P <sub>D</sub>	100	mW
Operation Environmental Temperature	T <sub>opg</sub>	-30 ~ +85	°C
Preserved Environmental Temperature	T <sub>stg</sub>	-30 ~ +85	°C

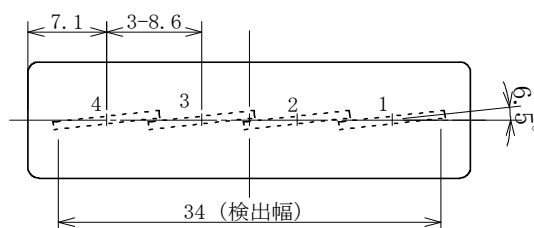
### Electrical Property (Ta=25C)

Item	Symbol	Condition	min.	Typ.	Max.	Unit
Output voltage	V <sub>OUT</sub>	V <sub>a</sub> =5V <sup>*1</sup>	0.16		0.42	mVrms
Resistance balance	V <sub>B</sub>				2	
Input resistance	R	I=1mA	300		1300	Ω
Voltage Noise	V <sub>NW</sub>	V <sub>a</sub> =5V			50	μV <sub>P-P</sub>
Piezo Noise	V <sub>NP</sub>	V <sub>a</sub> =5V, press=10g			300	μV <sub>P-P</sub>
Magnetic Flux Density	B			0.09 (S Pole)		T
Detection Width	W	9mm×4ch		34		mm

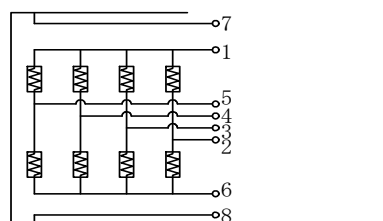
\*1 Input uses the magnetic flux which occurs when it is charged with current of 50Hz, 100mA(rms) in the line of φ 0.1mm.

\*2 max(V<sub>OUT(1-4)</sub>)/min(V<sub>OUT(1-4)</sub>)

### Elements arrangement figure

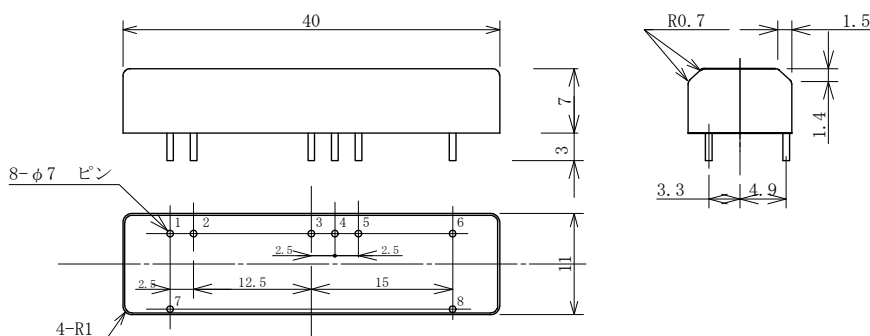


### Internal Circuit Figure



Pin No.	Symbol	Function
1	V <sub>a</sub>	Power input
6	GND	GND
2 / 3 / 4 / 5	V <sub>OUT(a-e)</sub>	Output
7 / 8	FG	CGND

### Contour Measure Figure



# The product specifications and the appearance are possibility of changing without notice.