

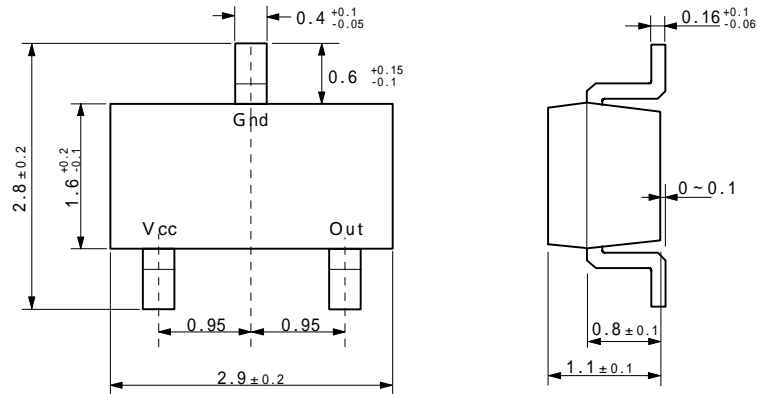
**MRSS22L-E**

**Micro power Built-in IC ultra-minimum MR sensor**

**FEATURES**

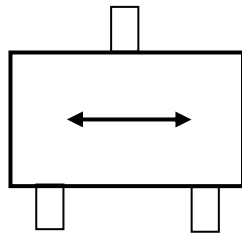
- \*Micro power (15μW(typ):Vcc=3V) and High-sensitivity(2mT(typ)) (suited for battery-operation)
- \*Ultra-small size MR(Magneto-resistance)sensor
- \*Operating in one way magnetic field
- \*Operating with independent pole (easily manufacture)
- \*Superior Temperature stability
- \*Lead free goods**

1.Dimension (Unit : mm)

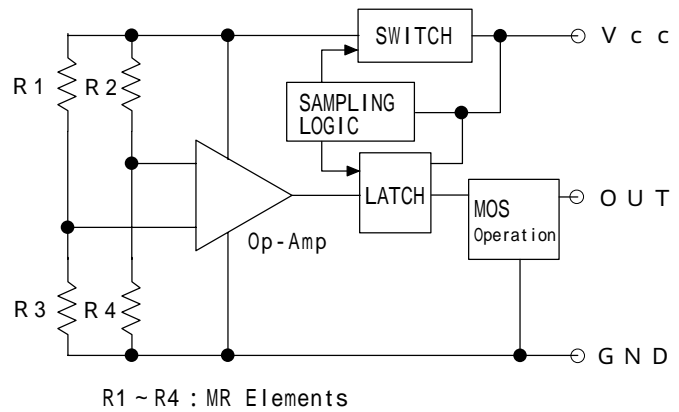


2.Fundamental Operation

2-1.Direction of Magnetic Field



2-2.Circuit Block



2-3.Performance Characteristics (25±3°C)

	Operating require Condition	Output Voltage
When power switch is ON	H = 0 mT (Magnetic Flux Density) [0 A/m (Magnetic Field Strength) ]	Hi-level
When magnetic field is applied	H ≥ 2.0(Typ)mT (Magnetic Flux Density) [1.6kA/m (Magnetic Field Strength) ]	Lo-level
When magnetic field is applied	H ≤ 0.5 mT (Magnetic Flux Density) [0.4kA/m (Magnetic Field Strength)]	Hi-level

**MRSS22L-E**

3.Performance

3-1.Operating Conditions Recommended

(Ta = 25± 3°C unless otherwise specified)

Item	Output	Condition	Min	Std	Max	Unit
Supply Voltage	-	-	2.5	3.0	3.7	V
Supply Current	-	Vcc=3V	-	5	-	μA
Ambient Temperature	-	-	-20	25	80	°C
Output Voltage	VOH	Vcc=3V Iout=2mA	2.7	-	-	V
	VOL	VCC=3V Iout=-2mA	-	-	0.3	V
Operating Magnetic Field	Hi-level output Hon		-	2.0 (1.6)	2.5 (2.0)	mT <sup>(*1)</sup>
	Lo-level output Hoff		0.5 (0.4)			(kA/m) <sup>(*2)</sup>

\*1) 1 [mT] (SI) = 10 [G] (CGS)

\*2) ( ) = [kA/m](SI)

3-2.Absolute Maximum Ratings

(Ta = 25±3°C unless otherwise specified)

Item	Condition	Specifications	Unit
Supply Voltage	-	5.0	V
Storage Temperature	-	-40 ~ 125	°C

The products and product specifications described in this material are subject to change without notice for reasons of modification or improvement.

**MRSS22L-E**

## 4. Recommended Mount Pad

