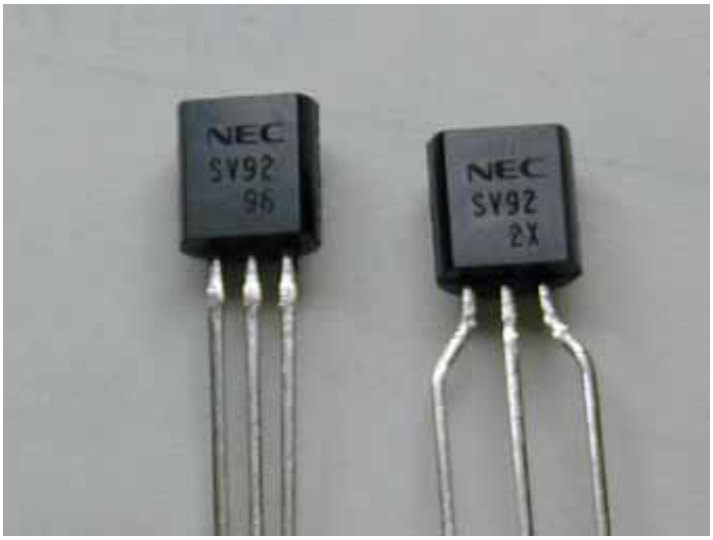
Empowered by Innovation

MRSC92A/B

Rotation detection MR sensor

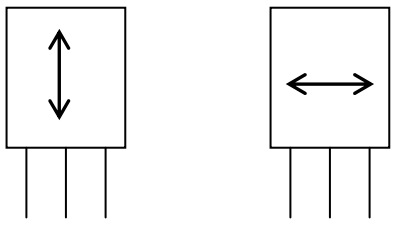
FEATURES

- Rotation Detection sensor
  -various usage for rotation detection
- Operating with independent pole
- Superior Temperature stability
- Wide operating source voltage
- No contact detection sensor
  - dependable for various use



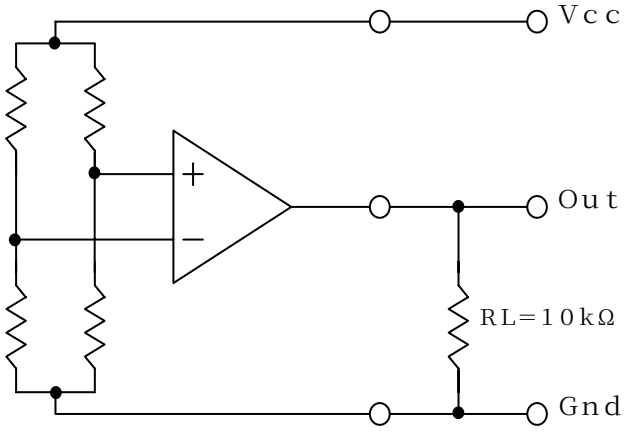
FUNDEMENTAL OPERATION

Direction of Magnetic Field



A Direction **B Direction**

Circuit Block



PERFORMANCE

Performance Characteristics (Ta = 25±3ºC unless otherwise specified)

	Operating require Condition	Output Voltage
When power switch is ON	H = 0 mT(Magnetic Flux Density) {0 A/m (Magnetic Field Strength)}	Unfixed
When magnetic field is applied To A direction	H ≧ 3.5(Typ)mT(Magnetic Flux Density) {2.8kA/m (Magnetic Field Strength)}	Hi-level
When magnetic field is applied To B direction	H ≧ 3.5 mT(Magnetic Flux Density) {2.8kA/m (Magnetic Field Strength)}	Lo-level

Operating Conditions Recommended (Ta = 25±3ºC unless otherwise specified)

Item	Symbol	Condition	Min	Std	Max	Unit
Source Voltage	Vcc	-	3	12	30	V
Load Resistance	RL	Vcc=12V	10	-	-	kΩ
Ambient Temperature	Ta	-	-20	25	80	ºC
Applied magnetic Field	H	-	3.5	-	-	mT(*1 (kA/m)(*2

*1) 1 [mT](SI) = 10 [G] (CGS) *2) ( ) = [kA/m](SI)

Output Ratings

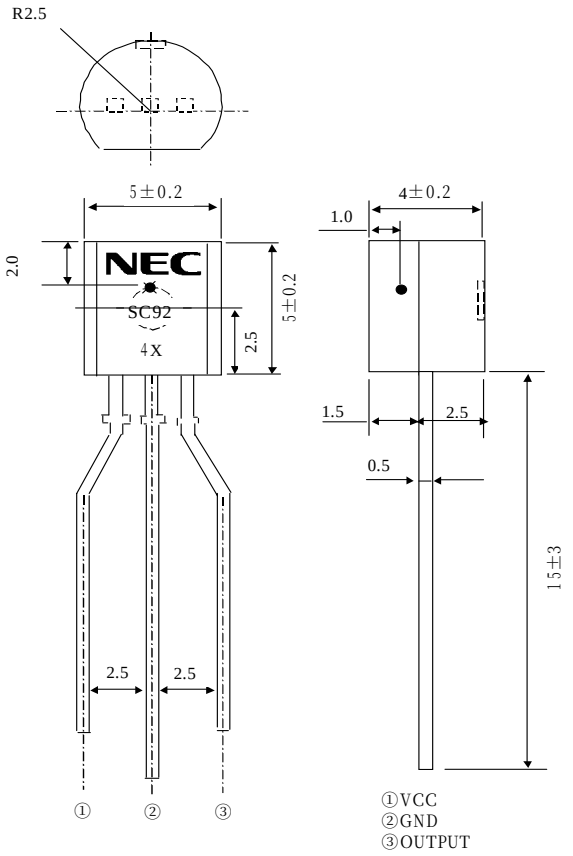
Item	Condition	Min	Std	Max	Unit
Output Volatge1 Hi	Vcc=12V,RL=10KΩ	10	-	-	V
Output Volatge1 Lo	Vcc=12V,RL=10KΩ	-	-	1	V
Output Volatge2 Hi	Vcc=5V,RL=10KΩ	3.5	-	-	V
Output Volatge2 Lo	Vcc=5V,RL=10KΩ	-	-	1	V
Slew Rate	Vcc=12V,RL=10KΩ	-	0.5	-	V/us
Output response frequency	Vcc=12V,	-	3.0	-	KHz

ABSOLUTE MAXIMUM RATINGS

(Ta=25±3ºC unless otherwise specified)

Item	Condition	Specifications	Unit
Source Voltage	-	36	V
Operating Temperature	-	-20 ~ +80	ºC
Storage Temperature		-40 ~ +125	ºC

DIMENTIONS (Unit:mm)



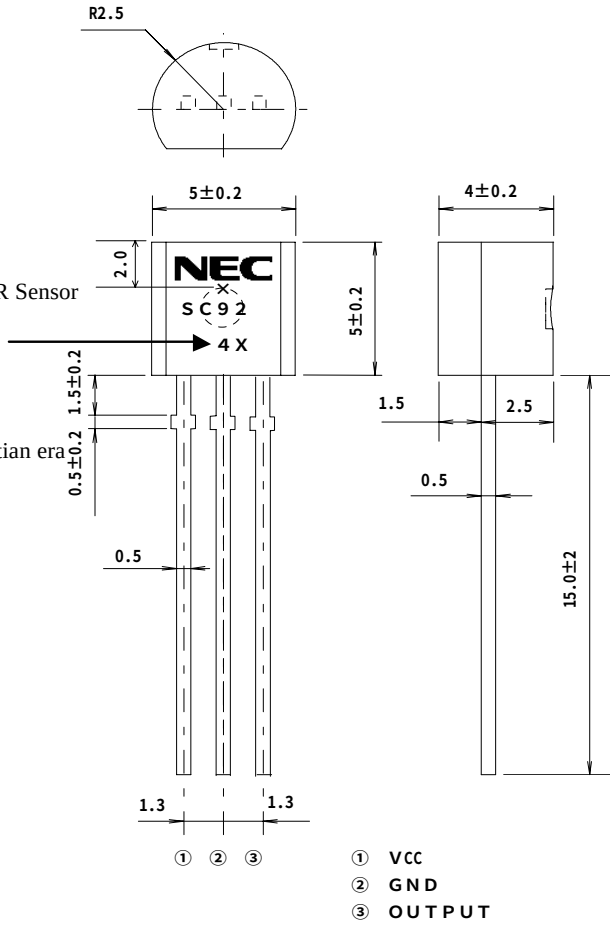
Center of MR Sensor

4X‥Month

:　1～9

Year　X~Z

One digit in the under Christian era



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