

MRSM76A/B

MR Sensor for Position Detection

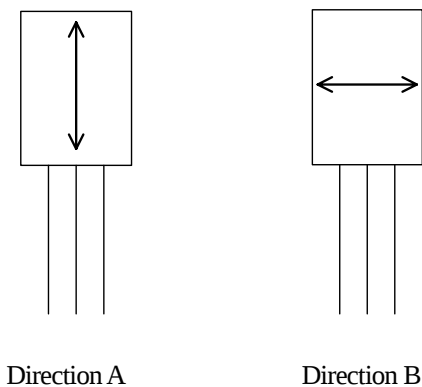
FEATURES

- MR sensor for position detection
 - Optimal sensor for applications which require hi-speed position detection.
- Operating with independent pole
- Wide operating supply voltage range
- Non-contact detection
 - Reliable performance under various operating environment.

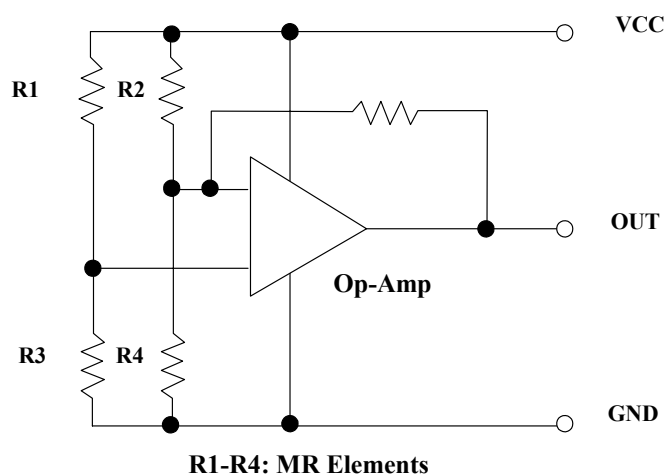


FUNDEMENTAL OPERATION

Direction of Magnetic Field



Circuit Block Diagram



PERFORMANCE

Performance Characteristics (Ta = 25±3°C)

	Operating Conditions	Output Voltage
When power switch is ON	H = 0mT^(*1) (0 kA/m)^(*2)	Lo-level
When magnetic field is applied to Direction A	H = 5.0mT (4.0kA/m)	Hi-level
When magnetic field is applied to Direction A When magnetic field is applied to Direction B	H = 0 mT (0 kA/m) H = 0 mT (0 kA/m)	Lo-level

^{*1)} 1 [mT](SI) = 10 [G] (CGS)

^{*2)} () = [kA/m](SI)

Recommended Operating Conditions (Ta = 25±3°C, V_{CC}=12V unless otherwise specified)

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage	V _{CC}	-	3	12	30	V
Operating Temperature	Ta	-	-20	+25	+80	°C

Electrical Characteristics (Ta = 25 ± 3 unless otherwise specified)

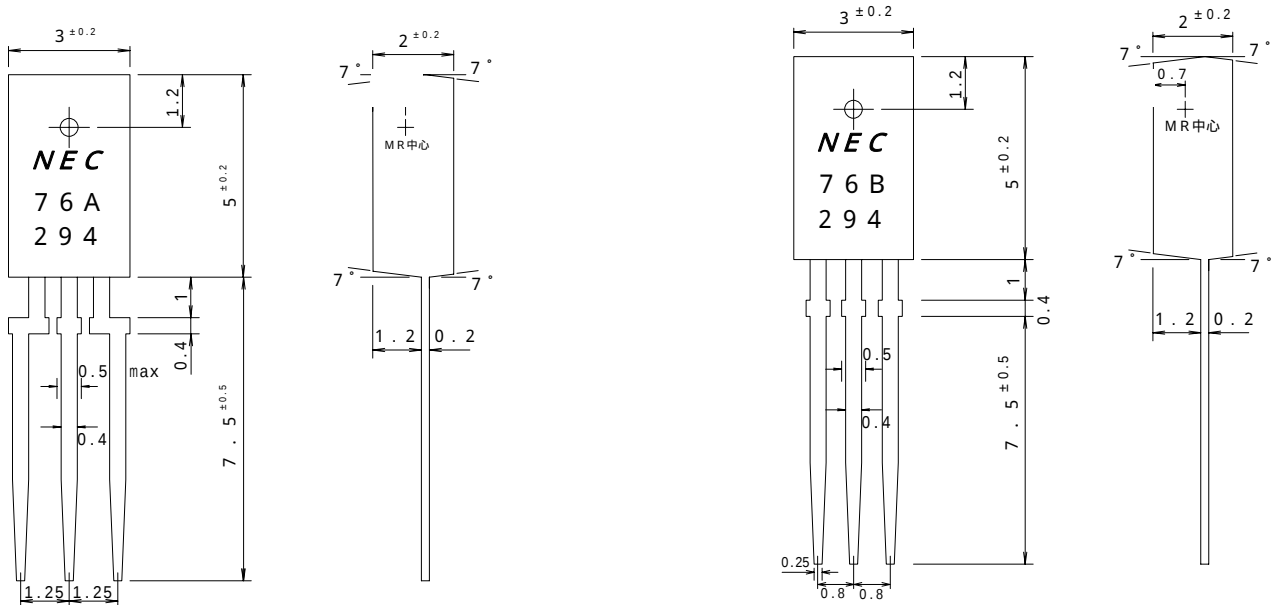
Item	Symbol	Condition	Min	Typ	Max	Unit
Circuit Current	I _{CC}	V _{CC} =12V Output open	-	-	5.0	mA
Output Voltage 1	V _{OH}	R _L =10kΩ V _{CC} =12V	10	-	-	V
Output Voltage 2	V _{OL}	R _L =10 kΩ V _{CC} =12V	-	-	1	V
Max. Response Frequency	f(max)	V _{CC} =12V	2.0	-	-	kHz

ABSOLUTE MAXIMUM RATINGS

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

Item	Condition	Specifications	Unit
Supply Voltage	-	36	V
Operating Temperature	-	-20 to +80	°C
Storage Temperature	-	-40 to +125	°C

DIMENSIONS (Unit: mm)



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