MST
Product Selection Guide

2020

Magnesensor Technology Ltd

IN THIS GUIDE

Foundation

Spirit

Our Missions

Our Products

Contact

Latch
3-3

Direction
3-3

Fan driver
4-4

Linear Hall Effect
5-5

Omni-polar Switch
6-7

Uni-polar Switch
8-8

MH23X-MH25X-MH26X
9-10

MH48X-MH49X
11-11

Magnetic Angular Sensor
12-12

Magnetic Joy Sticker
12-12

AMR Position Module
12-12

Foundation

MST is a fabless semiconductor technology corporation offering the design and manufacture of integrated circuit Hall Effect sensors. Our company was established in 2003 in the State of New Hampshire, USA.

We supply the most advanced technology, the highest standard quality, and the most competitive price available. We also support our customer's technology requirements with a most advanced and active design and manufacturing team.

Spirit

The name, Magnesensor Technology, represents our rich experience, pragmatic spirit and involvement in the semiconductor industry. We have individuals that have worked with Hall technology for more than 30 years thus making MST one of the most experienced staffed Hall Effect sensor companies in existence. Our company has manufacturing plants and distribution in four areas of the world with product distributors located globally. Our sensors are distributed to all market segments around the world through our powerful global distribution channels.

Our missions

- Provide recognizable value to our customers
- Provide the most reliable and advanced technology products
- Provide products that increase sales and profits of our customers
- Provide our customers with an endless supply of innovative products
- Maintain a positive environment for our partners and customers
- Maintain a "Green" manufacturing environment world wide

*Temperature:E(-20℃~+85℃) ;I (-30℃~+105℃) ;K (-40℃~+125℃) ;L(-40℃~+150℃)

*Package:SO(SOT23-3L);ST(TSOT23-3L);SN(SOT553-5L);SQ(QFN 2020-3L);SP(Micro Sot23-3L);SF(SOT89-5L);
SH(SOT23-5L);SM(DFN1616-6);UA(TO92S-3L);VK(TO94-4L);VF(TO92S-5L);VL(TO94-3L);
SS(DFN1010-4L);SR(SOT23-6L);SD(DFN2020-6)

*OD:Open Drain output	*OC:Open collector output	*TSD:Thermal Shut-Down	*SW:Soft Switching
*AR:Auto Restart	*FG:Frequency Generation	*RD:Revolution Detection	*PWM:Pulse Width Modulation

Latch

Low Operating Voltage Latch(1.8V/3V/5V)

Part Number	Package	Voltage range	Temperature	Bop/ Brp(Typ/Gauss)	Output current(Max)	OD	OC	Pull up	TSD	Micro Power	Reverse Protection	Note
MH178	UA/SO	2.0V~5.5V	E/K	+/- 30	10mA	V				V		Micropower Hall Effect Latch
MH179	UA/SO	2.0V~5.5V	E/K	+/- 30	10mA	V				V		Micropower Hall Effect Latch(2K Hz)

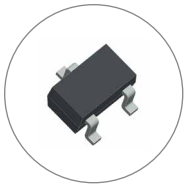
High Operating Voltage Latch(5V/12V/24V)

Part Number	Package	Voltage range	Temperature	Bop/ Brp(Typ/Gauss)	Output current(Max)	OD	OC	Pull up	TSD	Micro Power	Reverse Protection	Note
MH163	SO	3.5V~24V	E/K	+/- 30	100mA	V			V		V	General Purpose Hall Effect Latch(S->low)
MH173	SO	2.5V~26V	E/K	+/- 30	25mA			V			V	Built-in Pull High Res Hall Effect Latch(S->Low)
MH180	UA/SO/SF	2.5V~24V	E/K	+/- 50	25mA	V					V	General Purpose Hall Effect Latch
MH181	UA	3.5V~20V	K	+/- 50	25mA		V				V	General Purpose Hall Effect Latch
MH182	UA/SO	3.0V~24V	E/K	+/- 40	50mA	V						Multi-Purpose Hall Effect Latch
MH185	SO	2.5V~26V	E/K	+/- 30	25mA	V					V	High Sensitivity Hall Effect Latch(S->Low)
MH186	UA/SO	3.0V~26V	E/K	+/- 30	25mA	V					V	High Sensitivity Hall Effect Latch
MH187	UA/SO	3.0V~26V	E/K	+/- 40	50mA	V					V	General Purpose Hall Effect Latch
MH188	UA/SO/SD	2.5V~26V	E/K	+/- 15	50mA	V					V	Ultra High Sensitivity Hall Effect Latch
MH189	UA/SO	3.0V~26V	E/K	+/- 15	50mA	V						High Sensitivity Hall Effect Latch(AECQ)
MH190	UA	4.0V~30V	E/K	+/- 60	25mA		V				V	High Voltage, Bipolar Process, Hall Effect Latch
MH191	UA	4.0V~30V	E/K	-/+ 70	25mA		V				V	Inverted Output Hall Effect Latch
MH193	UA/SO	2.5V~26V	E/K	+/- 15	25mA			V			V	Built-in Pull High Res Hall Effect Latch
MH195	UA SO	4.0V~30V	E/K	+/- 60 -/+60	20mA		V					High Voltage, Bipolar Process, Hall Effect Latch(AECQ)
MH632	UA/SO	3.5V~20V	K	+/- 35	100mA						V	Totem-pole Output, Ultra High Sensitivity Hall Latch

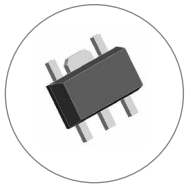
Direction

Part Number	Package	Voltage range	Temperature	Bop/ Brp(Typ/Gauss)	Output current(Max)	OD	OC	Pull up	TSD	Micro Power	Reverse Protection	Note
MH452	VK/SD	2.5V-26V	E/K	+/- 15	50mA	V					V	Dual Hall Speed and Direction Sensors

TO92S-3L(UA)
4.0*3.0*1.52

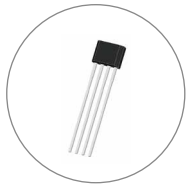


SOT23-3L(SO)
2.9*1.6*1.1



SOT89-5L(SF)
4.5*2.5*1.5

DFN2020-6(SD)
2.0*2.0*0.6



TO94-4L(VK)
5.22*3.65*1.56

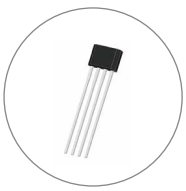
Fan driver

One coil fan driver

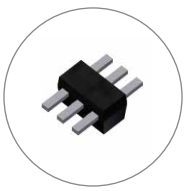
Part Number	Package	Voltage range	Temperature	Bop/Brp(Gauss)	Output current(Max)	Sorting	OD	OC	TP	SW	AR	FG	RD	PWM	TSD	Short Protect	Reverse Protection	Note
MH361	VK	3.5V ~ 20V	E/K	+/- 30(Max)	400mA				V		V	V	V		V			Single Phase Fan Motor Driver with Auto-restart
MH365	SR/SD/SM	1.8V ~ 5.5V	E/K	+/- 30(Max)	1000mA				V	V	V	V	V	V	V		V	Single Phase Fan Motor Driver with Soft-Switch
MH477	VK	3.5V ~ 20V	E	+/- 30(Max)	350mA				V						V			Single Phase Fan Motor Driver IC(CMOS Process)

Two coil fan driver

Part Number	Package	Voltage range	Temperature	Bop/Brp(Gauss)	Output current(Max)	Sorting	OD	OC	TP	SW	AR	FG	RD	PWM	TSD	Short Protect	Reverse Protection	Note
MH276T	VK	3.5V~20V	E	+/-50 (Max)	700mA	A		V							V	V	V	Complementary Output Fan driver (Bipolar Process)
				+/-70 (Max)		B		V							V	V	V	
				+/- 100 (Max)		C		V							V	V	V	
MH277	VK	3.5V~20V	E	+/- 30(Max)	700mA		V								V		V	Complementary Output Fan driver(CMOS Process)
MH284	VK	2.5V ~ 20V	E/K	+/- 30(Max)	1200mA		V				V				V		V	Hall-Effect Smart Fan Motor Controller
MH381	VK/VF/SF	2.5V ~ 20V	E/K	+/- 30(Max)	1200mA		V				V	V	V	V	V		V	High peak current Fan driver + Thermal shut-down + FG/RD
MH382	VK/SF	4.5V ~ 30V	E/K	+/- 30(Max)	700mA		V				V	V	V	V	V		V	24V Fan Driver + Thermal shut-down + FG/RD



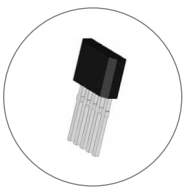
TO94-4L(VK)
5.22*3.65*1.56



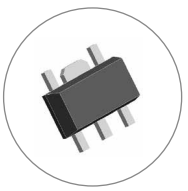
SOT23-6L(SR)
3.0*1.6*1.1

DFN2020-6(SD)
2.0*2.0*0.6

DFN1616-6(SM)
1.6*1.6*0.4



TO92S-5L(VF)
5.23*3.51*1.55



SOT89-5L(SF)
4.5*2.5*1.5

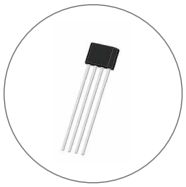
Linear Hall Effect

Programming Linear

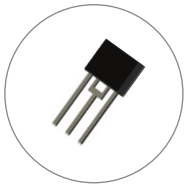
Part Number	Package	Voltage range	Temperature	Sensitivity	Output current(Max)	TP	Note
MH482	VK/VL	4.5V~5.5V	I	0.9~25mV/G	13mA	V	Programmable High speed Linear Hall
MH486	VK/VL	4.5V~5.5V	I	0.9~25mV/G	13mA	V	Programmable Linear Hall , Vref version
MH487	VK/VL	4.5V~5.5V	I	0.9~25mV/G	13mA	V	Programmable Linear Hall , Stand by mode version

Ratio-Metric Linear

Part Number	Package	Voltage range	Temperature	Sensitivity	Output current(Max)	Sorting	TP	Note
MH481	UA/SQ/ST	3.0V~ 6.5V	I	2mV/G	10mA		V	Ratio-metric Linear Hall Effect IC
MH491	UA/SO	2.8V~ 6.0V	I	1.5mV/G	5mA	A	V	Ratio-Metric Linear Hall Effect IC
				2mV/G		B	V	
				2.5mV/G		C	V	
				3mV/G		D	V	
MH491	SD	2.8V~ 6.0V	I	1.5mV/G, 2mV/G, 2.5mV/G, 3mV/G	5mA		V	4 Sensitivity in one chip
MH492	UA/SO	2.8V~ 6.0V	I	5mV/G	5mA	A	V	CMOS Ratio-Metric Linear Hall Effect IC
				9mV/G		B	V	
MH492	SD	2.8V~ 6.0V	I	3mV/G,5mV/G, 7mV/G, 9mV/G	5mA		V	4 Sensitivity in one Chip
MH493	UA/SO	2.8V~ 6.0V	I	4mV/G	5mA	A	V	CMOS Ratio-Metric Linear Hall Effect IC
				7mV/G		B	V	
				10mV/G		C	V	
				13mV/G		D	V	
MH493	SD	2.8V~ 6.0V	I	4mV/G,7mV/G, 10mV/G,13mV/G	5mA		V	4 Sensitivity in one chip



TO94-4L(VK)
5.22*3.65*1.56

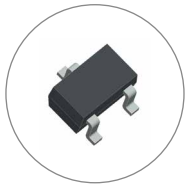


TO94-3L(VL)
5.22*3.65*1.56

TO92S-3L(UA)
4.0*3.0*1.52

QFN 2020-3L(SQ)
2.0*2.0*0.55

TSOT23-3L(ST)
2.9*1.6*0.8



SOT23-3L(SO)
2.9*1.6*1.1

DFN2020-6(SD)
2.0*2.0*0.6

Omni-polar Switch

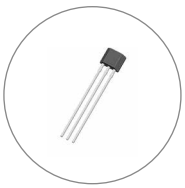
Low Operating Voltage Omni-polar Switch(1.8V/3V/5V)

Part Number	Package	Voltage range	Temperature	BopS/N(Typ/Gauss)	BH(Tpy/Gauss)	Output current(Max)	OD	TP	SPD	Micro Power	Note
MH235	UA/ST	2.7V~5.5V	E	+/- 30	10	5mA		V		V	All-polarity (NS) output "action is LO"
	SS				10			V		V	All polarity (NS) output Hi+ Inverted-output high
	SD				10			V	V	V	All polarity (NS) output Hi+ Inverted-output high+ containing SPD acceleration PIN
MH236	UA/ST	2.7V~5.5V	E	+/- 30	10	5mA		V		V	All polarity (NS) inverse output "action is High"
MH238	UA/ST	2.7V~5.5V	E	+/- 30	10	5mA	V			V	All-polarity (NS) output "action is LO"
	SS				10		V			V	All polarity (NS) output Hi+ Inverted -output Hi
	SD				10		V		V	V	All polarity (NS) output Hi+ Inverted-output high+ containing SPD acceleration PIN
MH239	UA/ST	2.7V~5.5V	E	+/- 30	10	5mA		V		V	All polarity (NS) inverse output "action is Hi"
MH248	UA/SO/ST/SQ	2.5V~3.5V	E	+/- 30	10	5mA	V			V	Omnipolar-CMOS Micropower Switch
MH248-β	ST	2.5V~3.5V	E	+/- 40	10	5mA	V			V	Micro power Hall Effect Switch
MH251	UA/SP/ST/SQ/SN/SO	1.65V~3.5V	E	+/- 30	10	1mA		V		V	Micropower CMOS Output Hall Effect Switch
MH251-β	ST/SQ	1.65V~3.5V	E	+/- 40	10	1mA		V		V	Micropower CMOS Output Hall Effect Switch
MH253	UA/SO	2.5V~6.0V	E/K	+/- 30	10	25mA	V				High Sensitivity Omni-Polar Hall Effect Switch
MH253C	UA/SO	2.5V~6.0V	E/K	+/- 30	10	25mA		V			High Sensitivity Omni-Polar Hall Effect Switch
MH255	SP/UA/ST	1.7V~5.5V	E	+/- 30	10	5mA		V		V	Micro power, General Purpose Hall Effect Switch
MH255-β	ST	1.7V~5.5V	E	+/- 40	10	5mA		V		V	Micro power, General Purpose Hall Effect Switch
MH256	UA/SO	2.5V~6.0V	E	+/- 30	10	5mA		V	V	V	Micropower CMOS Output Hall Effect Switch
MH258	ST/UA/SO	1.7V~5.5V	E	+/- 30	10	10mA	V			V	Micropower Hall Effect Switch
MH258-β	ST	1.7V~5.5V	E	+/- 40	10	10mA	V			V	Micropower Hall Effect Switch
MH259	UA/SO	2.5V~6.0V	E	+/- 30	10	10mA	V		V	V	Micropower Open Drain Output Hall Effect Switch
MH260	SS	1.7V~5.5V	E	+/- 30	10	5mA		V	V	V	Micro power, General Purpose Hall Effect Switch
MH261	SS	1.7V~5.5V	E	+/- 30	10	10mA	V		V	V	Micro power, General Purpose Hall Effect Switch
MH262	UA/ST	1.65V~3.5V	E	+/- 20	8	5mA		V		V	Ultra High Sensitivity Micropower Hall Switch

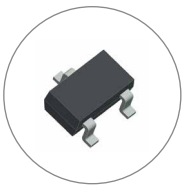
Omni-polar Switch

High Operating Voltage Omni-polar Switch(5V/12V/24V)

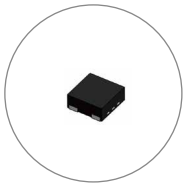
Part Number	Package	Voltage range	Temperature	BopS/N(Typ/Gauss)	BH(Tpy/Gauss)	Output current(Max)	OD	TP	Pull up	Note
MH271	UA/SO	2.5V~26V	E/K	+/- 80	20	25mA	V			High Sensitivity Omni polar Switch
MH272	UA/SO	2.5V~26V	E/K	+/- 30	10	25mA	V			High Voltage Omni polar Hall Effect Switch
MH273	UA/SO	2.5V~26V	E/K	+/- 80	20	25mA			V	High Sensitivity Omni polar Switch
MH274	UA/SO	2.5V~26V	E/K	+/- 30	10	25mA			V	Pull High Res Omni polar Hall Effect Switch
MH275	UA/SO	2.5V~26V	E/K	+/- 175	45	25mA	V			High Sensitivity Omni polar Switch
MH278	UA/SO	2.5V~26V	E/K	+/- 175	45	25mA			V	Pull High Res Omni polar Hall Effect Switch



TO92S-3L(UA)
4.0*3.0*1.52

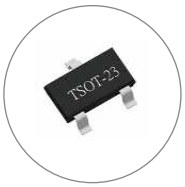


SOT23-3L(SO)
2.9*1.6*1.1



DFN1010-4L(SS)
1.0*1.0*0.4

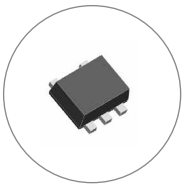
DFN2020-6(SD)
2.0*2.0*0.6



TSOT23-3L(ST)
2.9*1.6*0.8

QFN 2020-3L(SQ)
2.0*2.0*0.55

Micro
Sot23-3L(SP)
2.92*1.3*1.0



SOT553-5L(SN)
1.6*1.2*0.6

Uni-polar Switch

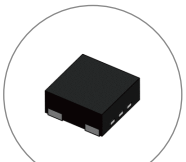
Low Voltage Uni-polar Switch(1.8V/3V/5V)

Part Number	Package	Voltage range	Temperature	Bop(Typ/Gauss)	BH(Tpy/Gauss)	Output current(Max)	OD	TP	SPD	Micro Power	Note
MH232	SS/ST/UA	2.7V~5.5V	E	30	10	5mA		V		V	Ultra-Low power Dual Output Hall Switch
	SD							V	V	V	Ultra-Low power Dual Output Hall Switch+SPD
MH234	UA/ST	2.7V~5.5V	E	30	10	5mA		V		V	Unipolar (N) output
MH237	UA/ST	2.7V~5.5V	E	30	10	5mA		V		V	Unipolar (S) output
MH252	VK/SN/SH	1.65V~3.5V	E	30	10	5mA		V		V	Daul Output Hall Switch
MH254	SQ/ST/UA/SS/SP	1.7V~5.5V	E	30	10	5mA		V		V	Unipolar Hall Effect Switch, SQ/ST/UA/SS/SP N polar active LO, SN S polar active LO
	SN										
MH257	ST/UA	1.7V~5.5V	E	30	10	5mA		V		V	Unipolar Hall Effect Switch,ST/UA S polar active LO, SN N polar active LO
	SN										

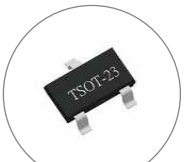
High Voltage Uni-polar Switch(5V/12V/24V)

Part Number	Package	Voltage range	Temperature	Bop(Typ/Gauss)	BH(Tpy/Gauss)	Output current(Max)	OD	TP	Reverse Protection	Note
MH281	UA/SO	3.0V~24V	E/K	175	45	50mA	V		V	Ultra Low Sensitivity Unipolar Hall Effect Switch
MH282	UA/SO	3.0V~24V	E/K	90	20	50mA	V		V	General Sensitivity Unipolar Hall Effect Switch
MH283	UA/SO	2.5V~24V	E/K	120	50	50mA	V		V	Low Sensitivity Unipolar Hall Effect Switch
MH285	UA/SO	2.5V~24V	E/K	25	8	50mA	V		V	High sensitivity Unipolar Hall Effect Switch

DFN1010-4L(SS)
1.0*1.0*0.4

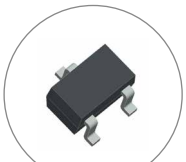


DFN2020-6(SD)
2.0*2.0*0.6



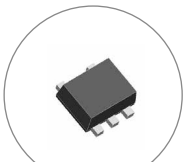
TSOT23-3L(ST)
2.9*1.6*0.8

TO92S-3L(UA)
4.0*3.0*1.52

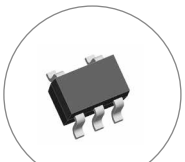


SOT23-3L(SO)
2.9*1.6*1.1

TO94-4L(VK)
5.22*3.65*1.56



SOT553-5L(SN)
1.6*1.2*0.6



SOT23-5L(SH)
2.9*1.6*1.1

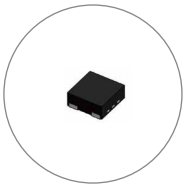
QFN 2020-3L(SQ)
2.0*2.0*0.55

Micro
Sot23-3L(SP)
2.92*1.3*1.0

MH23X-MH25X-MH26X

MH23X

Part Number	Package	Voltage range	Temperature	BopS/N(Typ/Gauss)	BH	Output current(Max)	OD	TP	SPD	Micro Power	Note
MH232	SS/ST/UA	2.7V~5.5V	E	30	10	5mA		V		V	Ultra-Low power Dual Output Hall Switch
	SD							V	V	V	Ultra-Low power Dual Output Hall Switch+SPD
MH234	UA/ST	2.7V~5.5V	E	30	10	5mA		V		V	Unipolar (N) output
MH235	UA/ST	2.7V~5.5V	E	+/- 30	10	5mA		V		V	All-polarity (NS) output "action is LO"
	SS							V		V	All polarity (NS) output Hi+ Inverted - output high
	SD							V	V	V	All polarity (NS) output Hi+ Inverted output+ containing SPD acceleration PIN
MH236	UA/ST	2.7V~5.5V	E	+/- 30	10	5mA		V		V	All polarity (NS) inverted output "action is High"
MH237	UA/ST	2.7V~5.5V	E	30	10	5mA		V		V	Unipolar (S) output
MH238	UA/ST	2.7V~5.5V	E	+/- 30	10	5mA	V			V	All-polarity (NS) output "action is LO"
	SS						V			V	All polarity (NS) output Hi+ Inverted- output high
	SD						V		V	V	All polarity (NS) output Hi+ Inverted output high+ containing SPD acceleration PIN
MH239	UA/ST	2.7V~5.5V	E	+/- 30	10	5mA	V			V	All polarity (NS) inverted output "action is Hi"



DFN1010-4L(SS)
1.0*1.0*0.4

TSOT23-3L(ST)
2.9*1.6*0.8

TO92S-3L(UA)
4.0*3.0*1.52

DFN2020-6(SD)
2.0*2.0*0.6

MH23X-MH25X-MH26X

MH25X

Part Number	Package	Voltage range	Temperature	BopS/N(Typ/Gauss)	BH(Gauss)	Output current	OD	TP	SPD	Micro Power	Note
MH251	UA/SP/ST/SQ/SN/SO	1.65V~3.5V	E	+/- 30	10	1mA		V		V	Micropower CMOS Output Hall Effect Switch
MH251-β	ST/SQ	1.65V~3.5V	E	+/- 40	10	1mA		V		V	Micropower CMOS Output Hall Effect Switch
MH252	VK/SN/SH	1.65V~3.5V	E	30	10	5mA		V		V	Daul Output Hall Switch
MH253	UA/SO	2.5V~6.0V	E/K	+/- 30	10	25mA	V				High Sensitivity Omni-Polar Hall Effect Switch
MH253C	UA/SO	2.5V~6.0V	E/K	+/- 30	10	25mA		V			High Sensitivity Omni-Polar Hall Effect Switch
MH254	SQ/ST/UA/SS/SP SN	1.7V~5.5V	E	30 30	10 10	5mA		V		V	Unipolar Hall Effect Switch, SQ/ST/UA/SS/SP N polar active LO, SN S polar active LO
MH257	ST/UA SN	1.7V~5.5V	E	30 30	10 10	5mA		V		V	Unipolar Hall Effect Switch, ST/UA S polar active LO, SN N polar active LO
MH255	SP/UA/ST	1.7V~5.5V	E	+/- 30	10	5mA		V		V	Micro power, General Purpose Hall Effect Switch
MH255-β	ST	1.7V~5.5V	E	+/- 40	10	5mA		V		V	Micro power, General Purpose Hall Effect Switch
MH256	UA/SO	2.5V~6.0V	E	+/- 30	10	5mA		V	V	V	Micropower CMOS Output Hall Effect Switch
MH258	ST/UA/SO	1.7V~5.5V	E	+/- 30	10	10mA	V			V	Micropower Hall Effect Switch
MH258-β	ST	1.7V~5.5V	E	+/- 40	10	10mA	V			V	Micropower Hall Effect Switch
MH259	UA/SO	2.5V~6.0V	E	+/- 30	10	10mA	V		V	V	Micropower Output Hall Effect Switch

MH26X

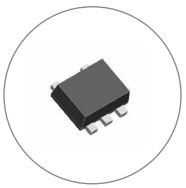
MH260	SS	1.7V~5.5V	E	+/- 30	10	5mA		V	V	V	Micro power, General Purpose Hall Effect Switch
MH261	SS	1.7V~5.5V	E	+/- 30	10	10mA	V		V	V	Micro power, General Purpose Hall Effect Switch
MH262	UA/ST	1.65V~3.5V	E	+/- 20	8	5mA		V		V	Ultra High Sensitivity Micropower Hall Switch

TO92S-3L(UA)
4.0*3.0*1.52

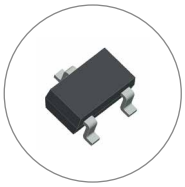
Micro
Sot23-3L(SP)
2.92*1.3*1.0

TSOT23-3L(ST)
2.9*1.6*0.8

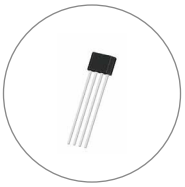
QFN 2020-3L(SQ)
2.0*2.0*0.55



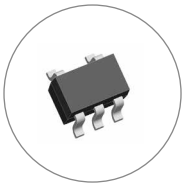
SOT553-5L(SN)
1.6*1.2*0.6



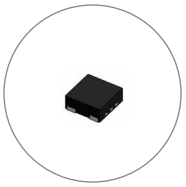
SOT23-3L(SO)
2.9*1.6*1.1



TO94-4L(VK)
5.22*3.65*1.56



SOT23-5L(SH)
2.9*1.6*1.1



DFN1010-4L(SS)
1.0*1.0*0.4

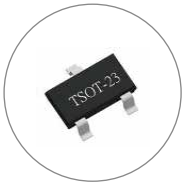
MH48X-MH49X

MH48X

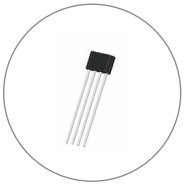
Part Number	Package	Voltage range	Temperature	Sensitivity	Output current(Max)	TP	Note
MH481	UA/SQ/ST	3.0V~ 6.5V	I	2mV/G (Typ)	10mA	V	Ratio-metric Linear Hall Effect Sensor
MH482	VK/VL	4.5V~5.5V	I	0.9~25mV/G	13mA	V	Programming High speed Linear Hall Sensor
MH486	VK/VL	4.5V~5.5V	I	0.9~25mV/G	13mA	V	Programmable Linear Hall , Vref version
MH487	VK/VL	4.5V~5.5V	I	0.9~26mV/G	13mA	V	Programmable Linear Hall , Stand by mode version

TO92S-3L(UA)
4.0*3.0*1.52

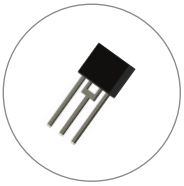
QFN 2020-3L(SQ)
2.0*2.0*0.55



TSOT23-3L(ST)
2.9*1.6*0.8



TO94-4L(VK)
5.22*3.65*1.56

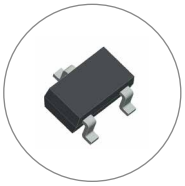


TO94-3L(VL)
5.22*3.65*1.56

MH49X

Part Number	Package	Voltage range	Temperature	Sensitivity	Output current(Max)	Sorting	TP	Note
MH491	UA/SO	2.8V~ 6.0V	I	1.5mV/G	5mA	A	V	CMOS Ratio-Metric Linear Hall Effect IC
				2mV/G		B	V	
				2.5mV/G		C	V	
				3mV/G		D	V	
MH491	SD	2.8V~ 6.0V	I	1.5mV/G, 2mV/G, 2.5mV/G, 3mV/G			V	4 Sensitivity in one chip
MH492	UA/SO	2.8V~ 6.0V	I	5mV/G	5mA	A	V	CMOS Ratio-Metric Linear Hall Effect IC
				9mV/G		B	V	
MH492	SD	2.8V~ 6.0V	I	3mV/G,5mV/G, 7mV/G, 9mV/G			V	4 Sensitivity in one Chip
MH493	UA/SO	2.8V~ 6.0V	I	4mV/G	5mA	A	V	CMOS Ratio-Metric Linear Hall Effect IC
				7mV/G		B	V	
				10mV/G		C	V	
				13mV/G		D	V	
MH493	SD	2.8V~ 6.0V	I	4mV/G,7mV/G, 10mV/G,13mV/G			V	4 Sensitivity in one chip

TO92S-3L(UA)
4.0*3.0*1.52



SOT23-3L(SO)
2.9*1.6*1.1

DFN2020-6(SD)
2.0*2.0*0.6

Magnetic Angular Sensor

AX3

MODEL	Voltage range(Min)	Operating Current(Max)	Power(Max)	Power On Output Response(Max)	OperatingTemperature	Storage Temperature	Effective Electrical Angle	Shaft Rotation Wobble(Max)	Rotational Torque	Output Electric Angle Error	Noise(Max)	Refresh Frequency(Max)	Max Revolution	High Temp/Low Temp/Humid	ESD	Note
AG3	3.3V	10mA	0.05 W	1 ms	E/K	I	360° Linear	±2°	20 ± 10 gf.cm	±1°	12mV	8.3 KHz	3600 RPM	V	V	360° Contactless Angle Sensor
AN3	2.5V									±3°	30mV	3.9 KHz	600 RPM	V	V	

Magnetic Joy Sticker

HJ-08N

Operating Voltage	Operating Current(Max)	Output Current(Max)	Power	Output Response Time	Operation temperture	Storage temperture	Joystick Rotation type	Joystick operating angle(Max)	Rotational torque	Shaft Rotation Wobble(Max)	Contact Noise	Output Bandwidth	High Temp/Low Temp/Humid	ESD	Note
2.5~ 5 V	5mA	2.0 mA	0.008W~ 0.025W	3 μS	K	E	2D Rotating	55°	120 ± 50 gf.cm	±2°	<3mV	<20 KHz	V	V	Contactless Mini 3D Joystick

AMR Position Module

MF8B

Wiring type	Output type (Auto)	Load voltage	Maximum load current	Internal voltage drop	Switch frequency	Leakage current	Operation temperture	Over current protect	Over temperture protect	Indicator light	Note
3-Wire	NPN , PNP	5V~ 30V	200mA	0.5V	1 KHz	50 uA	I	V	V	Red LED	Non Contact Switch PCBA
2-Wire	-	5V~ 30V	100mA	3V	1 KHz	60 uA	I	V	V		

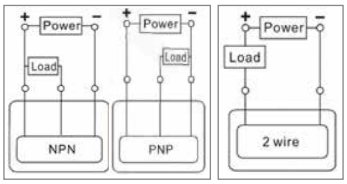
MA93

3-Wire	NPN , PNP	5V~ 30V	200mA	0.5V	1 KHz	50 uA	I	V	V	Red LED	Non Contact Switch PCBA
2-Wire	-	5V~ 30V	100mA	3V	1 KHz	60 uA	I	V	V		

AX3

HJ-08N

MF8B、MA93



Contact

US MST Service Window:
Office phone:+1 603-565-0265
25 commerce drive, Franklin, NH. 03235
Contact Person: Trent Wood
Own Testing Factory：GuangZhou/DongGuan/China
FAE: Guang zhou/Taipei
Warehouse: Hong Kong
Fin/Adm: Kaohsiung, Taiwan / Taipei, Taiwan
Sales office: Taipei, Taiwan / Guangzhou, China
Marketing office: Taipei, Taiwan
Asia Service Window:
Taiwan mobile:+886 911801119
E-mail: service@magnesensor.com
Contact Person: Paul Lin
Wechat public account:Magnesensor

MST
Magnesensor Technology

Product Selection Guide

www.magnesensor.com

Copyright©Magnesensor Technology