

# MST Product Selection Guide

2025

Magnesensor Technology Ltd



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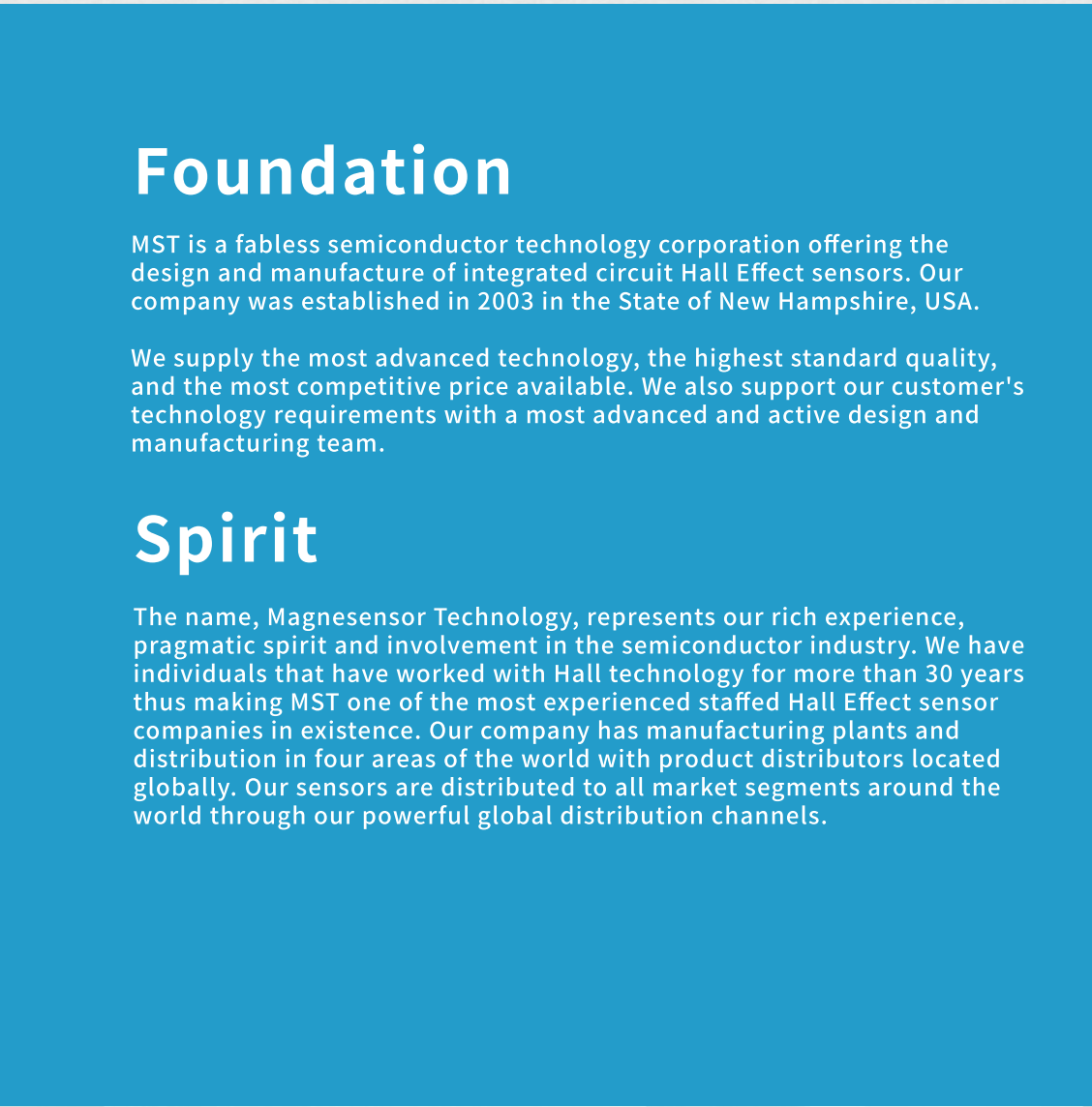
# Foundation

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°C~+85°C) ;I (-30°C~+105°C) ;K (-40°C~+125°C) ;L(-40°C~+150°C)

\*Package:SO(SOT23-3L);ST(TSOT23-3L);SN(SOT553-5L);SQ(QFN 2020-3L);SP(Micro Sot23-3L);SF(SOT89-5L);  
SM(DFN1616-6);UA(TO92S-3L);VK(TO94-4L);VF(TO92S-5L);VL(TO94-3L);  
SS(DFN1010-4L);SR(SOT23-6L);SD(DFN2020-6);  
SL(SOT23L-3L);SV(DFN-2030-6L);VS(SOP8 Straight Lead)

\*OD:Open Drain output

\*OC:Open Collector output

\*TP:Totem Pole output

\*TSD:Thermal Shut-Down

\*OCP:Over Current Protection

\*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)

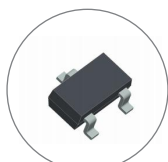
Part Number	Package	Voltage range	Temperature	Bop/ Brp(Typ/Gauss)	Supply Current (Max)	OD	OC	Pull up	TSD	Micro Power	Reverse Protection	Note	
MH176	UA/SO/SD/SM	1.8V~6.0V	E/K	+/- 25	7mA	V							Low Operating Voltage Hall Effect Latch
MH178	UA/SO	2.0V~5.5V	E/K	+/- 30	Avg:15uA	V				v			Micropower Hall Effect Latch
MH179	UA/SO	2.0V~5.5V	E/K	+/- 30	Avg:1000uA	V				V			Micropower Hall Effect Latch(2K Hz)

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

MH163	SO	3.5V~24V	E/K	+/- 30	8mA	V		V		v			General Purpose Hall Effect Latch(S->low)
MH168	UA/SO/SM	2.5V~26V	K	+/- 20	1.6mA(Typ)	V				v			Ultra High Sensitivity Hall Effect Latch
MH173	SO	2.5V~26V	E/K	+/- 30	5mA			V		v			Built-in Pull High Res Hall Effect Latch(S->Low)
MH180	UA/SO/SF	2.5V~26V	E/K	+/- 50	5mA	V				v			General Purpose Hall Effect Latch
MH181	UA	3.5V~20V	E/K	+/- 50	8mA		V			v			General-Purpose Hall Effect Latch Effect Latch
MH182	UA/SO	3.0V~24V	E/K	+/- 40	5mA	V							Multi-Purpose Hall Effect Latch
MH183	UA/SO	2.5V~26V	E/K	+/- 150	5mA	V				v			Ultra Low Sensitivity Hall Effect Latch
MH185	SO	2.5V~26V	E/K	+/- 30	5mA	V				v			High Sensitivity Hall Effect Latch( S->Low)
MH186	UA/SO	3.0V~26V	E/K	+/- 30	5mA	V				v			High Sensitivity Hall Effect Latch
MH188	UA/SO/SD/SM	2.5V~26V	E/K	+/- 15	5mA	V				v			Ultra High Sensitivity Hall Effect Latch
MH189	UA/SO	3.0V~26V	E/K	+/- 15	5mA	V							High Sensitivity Hall Effect Latch(AECQ)
MH190	UA/SO	4.0V~30V	E/K	+/- 60	8mA		V			v			High Voltage, Bipolar Process, Hall Effect Latch
MH191	UA	4.0V~30V	E/K	-/+ 55	25mA		V			v			Inverted Output Hall Effect Latch
MH193	UA/SO	2.5V~26V	E/K	+/- 15	5mA			V		v			Built-in Pull High Res Hall Effect Latch
MH195	UA/SO	4.0V~30V	E/K	+/- 60	7mA		V						High Voltage, Bipolar Process, Hall Effect Latch(AECQ)

# Direction

Part Number	Package	Voltage range	Temperature	Bop/ Brp(Typ/Gauss)	Supply Current(Max)	OD	OC	Pull up	TSD	Micro Power	Reverse Protection	Note	
MH452	VK/SD	2.5V-26V	E/K	+/- 15	5mA	V					V		Dual Hall Speed and Direction Sensors



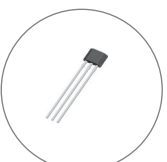
Sot23-3L(SO)  
2.9\*1.6\*1.1



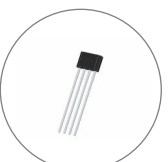
Tso23-3L(ST)  
2.9\*1.6\*0.8



QFN2.0\*2.0-3L(SQ)  
2.0\*2.0\*0.55



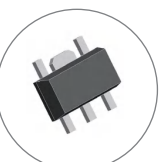
To92s-3L(UA)  
4.0\*3.0\*1.52



To94-4L(VK)  
5.22\*3.65\*1.56



DFN2.0\*2.0-6L(SD)  
2.0\*2.0\*0.6



Sot89-5L(SF)  
4.5\*2.5\*1.5



DFN1.6\*1.6-6L(SM)  
1.6\*1.6\*0.4

## Our Products

### Fan Driver

#### One coil fan driver

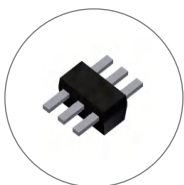
Part Number	Package	Voltage range	Temperature	Bop/Brp(Gauss)	Supply Current(Max)											Reverse Protection	Note
						OD	OC	TP	SW	AR	FG	RD	PWM	TSD			
MH361	VK	3.5V ~ 20V	E/K	+/- 30(Max)	5mA			V		V	V	V		V	V	Single Phase Fan Motor Driver with Soft-Switch	
MH3610	VS	3.5V ~ 16V	K	+/- 25(Max)	6mA			V	V	V			V	V	V	12V Low Noise Single Coil Motor Driver with PWM	
MH365	SR/SD/SM	1.8V ~ 5.5V	E/K	+/- 30(Max)	5mA			V	V	V	V	V	V	V		Single Phase Fan Motor Driver with Auto-restart	

#### Two coil fan driver

Part Number	Package	Voltage range	Temperature	Bop/Brp(Gauss)	Supply Current(Max)											Reverse Protection	Note
						OD	OC	TP	SW	AR	FG	RD	PWM	TSD			
MH284	VK	2.5V ~ 20V	E/K	+/- 30(Max)	5mA	V				V				V	V	Hall-Effect Smart Fan Motor Controller	
MH381	VK/VF/SF	2.5V ~ 20V	E/K	+/- 30(Max)	5mA	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)	5mA	V				V	V	V		V	V	24V Fan Driver + Thermal shut-down FG/RD	



T094-4L(VK)  
5.22\*3.65\*1.56



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



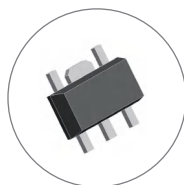
DFN2020-6L(SD)  
2.0\*2.0\*0.6



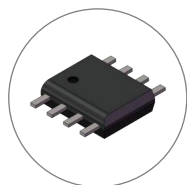
DFN1616-6L(SM)  
1.6\*1.6\*0.4



T092S-5L(VF)  
5.23\*3.51\*1.55



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



SOP8(VS)  
3.9\*4.9\*1.4

## Linear Hall Effect

### Programming Linear

Part Number	Package	Voltage range	Temperature	Sensitivity (Typ)	Supply Current (Max)	TP	Note
MH482	VK/VL	4.5V~5.5V	I	0.9~25mV/G	15mA	V	Programmable High speed Linear Hall
MH485	VL	4.5V~5.5V	I	0.9~25mV/G	18mA	V	High Speed Programming Linear Hall IC
MH486	VK	4.5V~5.5V	I	0.9~25mV/G	18mA	V	High Speed Programming Linear Hall IC+Vref
MH487	VK	4.5V~5.5V	I	0.9~25mV/G	18mA	V	High Speed Programming Linear Hall IC+Micro Power
MH501	UA /VK/ST/SM	1.7V~5.5V	E	0.9~25mV/G	0.9mA	V	Programmable linear Hall Sensor
MH503	UA /SO/ST	1.7V~5.5V	E	0.9~25mV/G	0.9mA	V	Programmable unipolar linear hall

### AEC-Q100

Part Number	Package	Voltage range	Temperature	Sensitivity (Typ)	Supply Current (Max)	TP	Note
MH489	VL	4.5V~5.5V	E	0.9~25mV/G	18mA	V	AEC-Q100 Automotive
MH490	VK	4.5V~5.5V	E	0.9~25mV/G	18mA	V	AEC-Q100 Automotive

### Ratio-Metric Linear

Part Number	Package	Voltage range	Temperature	Sensitivity (Typ)	Supply Current (Max)	Sorting	TP	Note
MH481	UA/SQ/ST	3.0V~ 6.5V	I	2mV/G	5mA		V	Ratio-metric Linear Hall Effect IC
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	
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	
MH49A1	SD/SM	2.8V~ 6.0V	E/K	1.5mV/G, 2mV/G 2.5mV/G, 3mV/G	5mA		V	Multi-Sensitivity Ratio-Metric Linear Hall Sensor
MH49A2	SD/SM	2.8V~ 6.0V	E/K	3mV/G, 5mV/G 7mV/G, 9mV/G	5mA		V	Multi-Sensitivity Ratio-Metric Linear Hall Sensor
MH49A3	SD/SM	2.8V~ 6.0V	E/K	4mV/G, 7mV/G 10mV/G, 13mV/G	5mA		V	Multi-Sensitivity Ratio-Metric Linear Hall Sensor

## Linear Hall Effect

### Ratio-Metric Linear

Part Number	Package	Voltage range	Temperature	Sensitivity (Typ)	Supply Current (Max)	TP	Note
MH4952	SV	1.7V~3.6V	E	2.375~2.625mV/G	Vsleep>Vin: 2mA(Typ) Vsleep<Vin: 50uA(Typ)	V	bi-polarity +sleep mode
MH4963	SV/ST	1.7V~3.6V	E	3.59~4.0mV/G	Vsleep>Vin: 2mA(Typ) Vsleep<Vin: 20uA(Typ) MH4963EST: 2mA(Typ)	V	uni-polarity +sleep mode



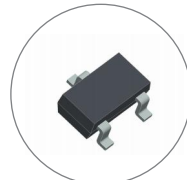
**TO94-4L(VK)**  
5.22\*3.65\*1.56



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



**TSOT-23**  
2.9\*1.6\*0.8



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



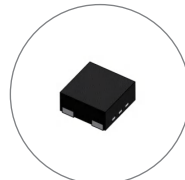
**DFN2.0\*2.0-6L(SD)**  
2.0\*2.0\*0.6



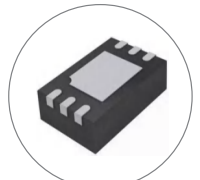
**QFN2.0\*2.0-3L(SQ)**  
2.0\*2.0\*0.55



**TO92s-3L(UA)**  
4.0\*3.0\*1.52



**DFN1.6\*1.6-6L(SM)**  
1.6\*1.6\*0.4



**DFN2.0\*3.0-6L(SV)**  
2.0\*3.0\*0.75



# Omni-polar Switch

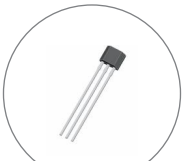
Low Operating Voltage Omni-polar Switch(1.8V/3V/5V)

Part Number	Package	Voltage range	Temperature	Bops/(Typ/Gauss)	BH(Typ/Gauss)	Supply Current(Average)	OD	TP	SPD	Micro Power( $\mu$ A)	Note
MH236	UA/SP/ST/SS/SM	1.65V~5.5V	E	+/- 30	10	0.9uA	V	V	V	V	Nano-power Omnipolar Hall Switch
MH248	UA/SO/ST/SQ	1.8V~5.5V	E	+/- 30	10	10uA	V	V	V	V	Omnipolar-CMOS Micropower Switch
MH248- $\beta$	ST	2.5V~3.5V	E	+/- 40	10	10uA	V	V	V	V	Micro power Hall Effect Switch
MH251	UA/SP/ST/SQ/SN/SO	1.65V~3.5V	E	+/- 30	10	5uA	V	V	V	V	Micropower CMOS Output Hall Effect Switch
MH251- $\beta$	ST/SQ	1.65V~3.5V	E	+/- 40	10	5uA	V	V	V	V	Micropower CMOS Output Hall Effect Switch
MH253	UA/SO	2.5V~6.0V	E/K	+/- 30	10	2.6uA	V	V	V	V	High Sensitivity Omni-Polar Hall Effect Switch
MH255	SP/UA/ST	1.7V~5.5V	E	+/- 30	10	5uA	V	V	V	V	Micro power, General Purpose Hall Effect Switch
MH260	SS	1.7V~5.5V	E	+/- 30	10	5uA	V	V	V	V	Micro power, General Purpose Hall Effect Switch
MH261	SS	1.7V~5.5V	E	+/- 30	10	350uA	V	V	V	V	Micro power, General Purpose Hall Effect Switch
MH262	UA/ST	1.65V~3.5V	E	+/- 20	8	5uA	V	V	V	V	Ultra High Sensitivity Micropower Hall Switch

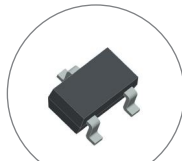
## Omni-polar Switch

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

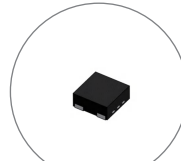
Part Number	Package	Voltage range	Temperature	BopS/N(Typ)(Gauss)	BH(Typ/Gauss)	Supply Current (Max)	OD	TP	Pull up	Note
MH271	UA/SO	2.5V~26V	E/K	+/- 80	20	5mA	V			Low Sensitivity Omni polar Switch
MH272	UA/SO	2.5V~26V	E/K	+/- 30	10	3.5mA	V			High Sensitivity Omni polar Hall Effect Switch
MH273	UA/SO	2.5V~26V	E/K	+/- 80	20	5mA		V		Low Sensitivity Omni polar Switch
MH274	UA/SO	2.5V~26V	E/K	+/- 30	10	3.5mA		V		High Sensitivity Omni polar Hall Effect Switch
MH275	UA/SO	2.5V~26V	E/K	+/- 175	45	5mA	V			Ultra Low Sensitivity Omni polar Switch
MH278	UA/SO	2.5V~26V	E/K	+/- 175	45	5mA		V		Ultra Low Sensitivity Omni polar 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



DFN2020-6L(SD)  
2.0\*2.0\*0.6



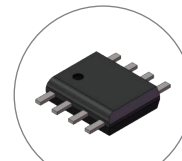
TSOT23-3L(ST)  
2.9\*1.6\*0.8



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



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



SOP8(VS)  
3.9\*4.9\*1.4



DFN1.6\*1.6-6L(SM)  
1.6\*1.6\*0.4

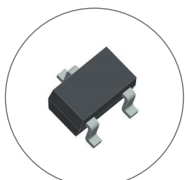
# Uni-polar Switch

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

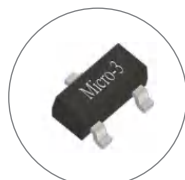
Part Number	Package	Voltage range	Temperature	Bop(Typ/Gauss)	BH(Typ/Gauss)	Supply Current (Average)	OD	TP	SPD	Micro Power (µA)	Note
MH232	SS/SD	1.65V-5.5V	E	±30	10		V	V	V		
MH232N	UA/ST	1.65V~5.5V	E	-30	10	0.9µA	V		V		Ultra-Low power Dual Output Hall Switch
MH232S	UA/ST	1.65V~5.5V	E	+30	10		V		V		
MH254	SQ/ST/UA/SS/SP SN	1.7V~5.5V	E	-30 +30	10	5µA	V		V		Unipolar Hall Effect Switch, SQ/ST/UA/SS/SP N polar active LO, SN S polar active LO
MH257	ST/SQ/SP/UA SN	1.7V~5.5V	E	+30 -30	10	5µA	V		V		Unipolar Hall Effect Switch,ST/UA S polar active LO, SN N polar active LO

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

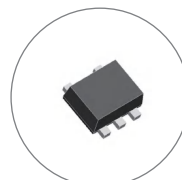
Part Number	Package	Voltage range	Temperature	Bop(Typ/Gauss)	BH(Typ/Gauss)	Supply Current (Max)	OD	TP	Reverse Protection	Note
MH281	UA/SO	3.0V~24V	E/K	175	45	5mA	V		V	Ultra Low Sensitivity Unipolar Hall Effect Switch
MH282	UA/SO	3.0V~24V	E/K	90	20	5mA	V		V	General Sensitivity Unipolar Hall Effect Switch
MH283	UA/SO	2.5V~24V	E/K	120	50	5mA	V		V	Low Sensitivity Unipolar Hall Effect Switch
MH285	UA/SO/SL	2.5V~24V	E/K	25	8	5mA	V		V	High sensitivity Unipolar Hall Effect Switch



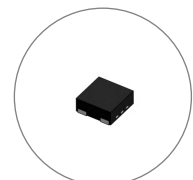
Sot23-3L(SO)  
2.9\*1.6\*1.1



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



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



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



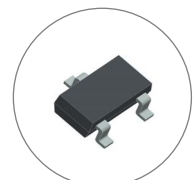
DFN2020-6L(SD)  
2.0\*2.0\*0.6



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



T092S-3L(UA)  
4.0\*3.0\*1.52



Sot23L-3L(SL)  
4.1\*1.6\*1.1

## MH48X-MH49X

### MH48X

Part Number	Package	Voltage range	Temperature	Sensitivity	Supply Current (Max)	TP	Note
MH481	UA/SQ/ST	3.0V~ 6.5V	I	2mV/G (Typ)	5mA	V	Ratio-metric Linear Hall Effect Sensor
MH482	VK/VL	4.5V~5.5V	I	0.9~25mV/G	15mA	V	Programming High speed Linear Hall Sensor
MH485	VL	4.5V~5.5V	I	0.9~25mV/G	18mA	V	High Speed Programming Linear Hall IC
MH486	VK	4.5V~5.5V	I	0.9~25mV/G	18mA	V	High Speed Programming Linear Hall+Vref
MH487	VK	4.5V~5.5V	I	0.9~26mV/G	18mA	V	High Speed Programming Linear Hall + Micro Power
MH489	VL	4.5V~5.5V	E	0.9~25mV/G	18mA	V	AEC-Q100 Automotive
MH490	VK	4.5V~5.5V	E	0.9~25mV/G	18mA	V	AEC-Q100 Automotive

### MH49X

Part Number	Package	Voltage range	Temperature	Sensitivity (Typ)	Supply 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	
MH49A1	SD/SM	2.8V~ 6.0V	E/K	1.5mV/G, 2mV/G 2.5mV/G, 3mV/G	5mA		V	Multi-Sensitivity Ratio-Metric Linear Hall Sensor
MH49A2	SD/SM	2.8V~ 6.0V	E/K	3mV/G, 5mV/G 7mV/G, 9mV/G	5mA		V	Multi-Sensitivity Ratio-Metric Linear Hall Sensor
				4mV/G		A	V	
MH493	UA/SO	2.8V~ 6.0V	I	7mV/G	5mA	B	V	CMOS Ratio-Metric Linear Hall Effect IC
				10mV/G		C	V	
				13mV/G		D	V	
				4mV/G, 7mV/G 10mV/G, 13mV/G			V	
MH49A3	SD/SM	2.8V~ 6.0V	E/K	4mV/G, 7mV/G 10mV/G, 13mV/G	5mA		V	Multi-Sensitivity Ratio-Metric Linear Hall Sensor
MH4952	SV	1.7V~3.6V	E	2.375~2.625mV/G	Vsleep>Vin: 2mA(Typ) Vsleep<Vin: 50uA(Typ)		V	bi-polarity +sleep mode
MH4963	SV/ST	1.7V~3.6V	E	3.59~4.0mV/G	Vsleep>Vin: 2mA(Typ) Vsleep<Vin: 20uA(Typ) MH4963EST: 2mA(Typ)		V	uni-polarity +sleep mode



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



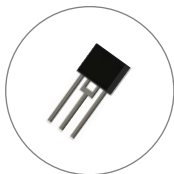
QFN 2020-3L(SQ)  
2.0\*2.0\*0.55



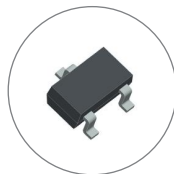
TSOT23-3L(ST)  
2.9\*1.6\*0.8



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



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



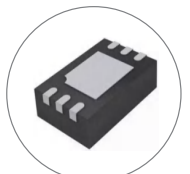
SOT23-3L(SO)  
2.9\*1.6\*1.1



DFN2020-6L(SD)  
2.0\*2.0\*0.6



DFN1.6\*1.6-6L(SM)  
1.6\*1.6\*0.4



DFN2.0\*3.0-6L(SV)  
2.0\*3.0\*0.75

# Magnetic Angular Sensor

AG3

Voltage range(Min)	Operating Current(Max)	Power(Max)	Power On Output Response(Max)	Operating Temperature	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
3.3V	20mA	0.06W	1 ms	E/K	I	360° Linear	±2°	20 ± 10 gf.cm	0V	12mV	8.3 KHz	3600 RPM	V	V	360° Contactless Angle Sensor

KSA1036-P

Voltage range(Min)	Operating Current(Max)	Power(Max)	Power On Output Response(Max)	Operating Temperature	Storage Temperature	Effective Electrical Angle	Shaft Rotation Wobble(Max)	Rotational Torque	Output Voltage Offset	Noise(Max)	Refresh Frequency(Max)	Max Revolution	High Temp/Low Temp/Humid	ESD	Note
3.3V	10mA	0.02W	1 ms	E/K	I	360° Linear	±1°	20 ± 10 gf.cm	30mV	0V	150 μs	5000 RPM	V	V	360° Angular Sensor

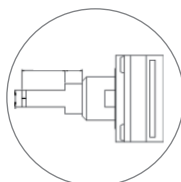
# Magnetic Joy Stick

HJ-08N

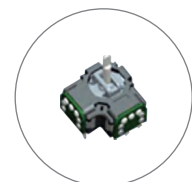
Operating Voltage	Operating Current(Max)	Output Current(Max)	Power	Output Response Time	Operation temperature	Storage temperature	Joystick Rotation type	Joystick operating angle(Max)	Rotational torque	Shaft Rotation Wobble(Max)	Contact Noise	Output Bandwidth	High Temp/Low Temp/Humid	ESD	Note
2.5~5 V	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



AG3



KSA1036-P



HJ-08N

## Our Products

### AMR Position Module

MF98 MA93

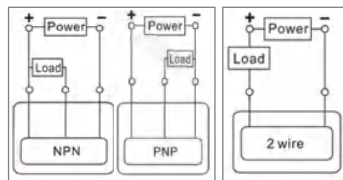
Wiring type	Output type (Auto)	Load voltage	Maximum load current	Internal voltage drop	Switch frequency	Leakage current	Operation temperature	Over current protect	Over temperature protect	Indicator light	Note
3-Wire	NPN , PNP	5V~ 30V	200mA	0.5V	1 KHz	50 uA	I V	V	V		
2-Wire	-	5V~ 30V	100mA	3V	1 KHz	60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

## Our Products

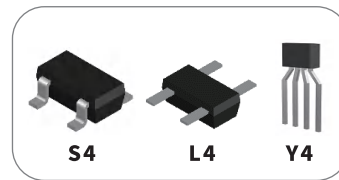
### Hall Element

ME101

Grade	Package	Supply Voltage, (Vc)	Temperature	Output Hall Voltage, (VH) (E Rank)	Output Hall Voltage, (VH) (F Rank)	Output Hall Voltage, (VH) (G Rank)
E/F/G	S4/L4/Y4	1.0~2.0V	K	228~274mV	226~320mV	310~370mV



MF8B, MA93



ME101

## Pressure Sensor

### MM0106\_10bar\_MEMS

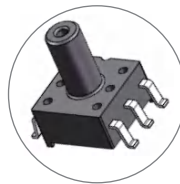
<i>Operation Voltage (Typ.)</i>	<i>Operation Current (Typ.)</i>	<i>Bridge Impedance</i>	<i>Operating Pressure</i>	<i>Full Scale Span (Vin=5V)</i>	<i>Offset (Vin=5V)</i>	<i>Linearity</i>	<i>TC Span (Constan voltage)</i>	<i>TC Span (Constant current)</i>	<i>TC Offset (Typ.)</i>	<i>Temperature Range</i>
5V	1mA	4.5~5.5kΩ	-1~10bar	40~70mV	-15~15mV	0.3~+0.3%F	0.17~-0.27 %FS/°C	-0.08~+0.08 %FS/°C	-0.08~+0.08 %FS/°C	-40~+85°C

### MM0105\_1bar\_MEMS

<i>Operation Voltage (Typ.)</i>	<i>Operation Current (Typ.)</i>	<i>Bridge Impedance</i>	<i>Operating Pressure</i>	<i>Full Scale Span (Vin=5V)</i>	<i>Offset (Vin=5V)</i>	<i>Linearity</i>	<i>TC Span (Constan voltage)</i>	<i>TC Span (Constant current)</i>	<i>TC Offset (Typ.)</i>	<i>Temperature Range</i>
5V	1mA	4.5~5.5kΩ	-1~1bar	140~185mV	-15~15mV	0.3~+0.3%F	0.17~-0.27 %FS/°C	-0.08~+0.08 %FS/°C	-0.08~+0.08 %FS/°C	-40~+85°C

### MM0102\_0.48bar\_MEMS

<i>Operation Voltage (Typ.)</i>	<i>Operation Current (Typ.)</i>	<i>Bridge Impedance</i>	<i>Operating Pressure</i>	<i>Full Scale Span (Vin=5V)</i>	<i>Offset (Vin=5V)</i>	<i>Linearity</i>	<i>TC Span (Constan voltage)</i>	<i>TC Span (Constant current)</i>	<i>TC Offset (Typ.)</i>	<i>Temperature Range</i>
5V	1mA	4.5~5.5kΩ	-0.8~0.48bar	60~90mV	-15~15mV	0.3~+0.3%F	0.17~-0.27 %FS/°C	-0.08~+0.08 %FS/°C	-0.08~+0.08 %FS/°C	-40~+85°C



Pressure Sensor

## Magnetic Encoder

### KEM2500D-8-OT

Operating Type	Resolution	B channel leading A channel	Rated Power	Operating Current	Output Frequency	Output Digital Voltage	Product Description
Motor Shaft Operating	2500 PPR	CCW, Viewed to the encoder from its mounting side	0.1W @Vdd=5V	Max: <20mA Typical: <10mA	≤12K recommended	HIGH:VOH ≥ 4.9V LOW:VLO ≤ 0.1V	ABZ+UVW DIFFERENTIAL INCREMENTAL ENCODER

### KEM500D-OC

Operating Type	Resolution	B channel leading A channel	Rated Power	Operating Current	Output Frequency	Output Digital Voltage	Product Description
Motor Shaft Operating	500 PPR	CCW, Viewed to the encoder from its mounting side	2.4W @Vdd=24V	Max: <100mA	≤3K recommended	HIGH:VOH ≥ 20.0V LOW:VLO ≤ 6V	ABZ+UVW DIFFERENTIAL INCREMENTAL ENCODER

### KEM1010B-9AD

Operating Type	Resolution	B channel leading A channel	Rated Power	Operating Current	Output Frequency	Output Digital Voltage	Product Description
Motor Shaft Operating	1024PPR	CCW, Viewed to the encoder from its mounting side	0.1W @ Vdd=24V	Max: <20mA Typical: <10mA	≤20K recommended	HIGH:VOH ≥ 4.9V LOW:VLO ≤ 0.1V	ABZ+DIFF+PWM INCREMENTAL ENCODER



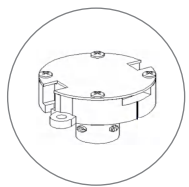
# Magnetic Encoder

## KEM17S-35-D

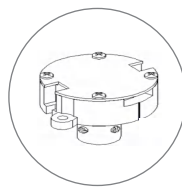
Operating Type	Resolution	Output Signals	Rated Power	Power-up Time	Consumption Current	Rotation Speed	Output Delay	Output Digital Voltage	Data Memory	Serial Communication	Product Description
Motor Shaft Operating	131,072 positions	Pure Binary	0.1W @ Vdd=5V	20ms max.	50mA typ.	≤7K Recommended	5μs	HIGH: V <sub>OH</sub> ≥ 4.9V LOW: V <sub>LO</sub> ≤ 0.1V	762 bytes	Communication rate 2.5Mbps	17 BIT ABSOLUTE ENCODER, SINGLE-TURN

## KEM17M-OT-35mm

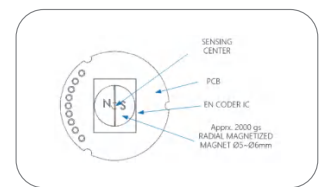
Operating Type	Resolution	Output Signals	Rated Power	Power-up Time	Consumption Current	Rotation Speed	Output Delay	Output Digital Voltage	Data Memory	Serial Communication	Product Description
Motor Shaft Operating	16 bit Multi-Turn, 17-bit one turn 131,072 absolute positions	Pure Binary	0.1W @ Vdd=5V for normal model.	3ms max.	500mA max.	≤6K Recommended	5μs	High: V <sub>OH</sub> ≥ 4.9V LOW: V <sub>LO</sub> ≤ 0.1V	762 bytes	Communication rate 2.5Mbps	16 BIT MULTI TURN 17 BIT SINGLE TURN ABSOLUTE ENCODER



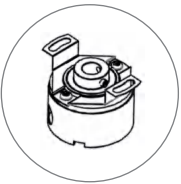
KEM2500D-8-OT



KEM500D-OC



KEM1010B-9AD



KEM17S-35-D



KEM17M-OT-35mm

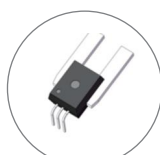
## Current Sensor

### MCT series

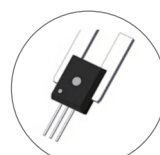
Part Number	VCC (V)	VO <sub>UT</sub> (Q)(V)	IP (A)	Sens Typ. (mV/A)	BW (Khz)	Response(μs)	AECQ	Package type
MCT050BR-3	3.3	V <sub>cc</sub> /2	±50	26.4	170	3		PFF,PSF,PSS,SMT
MCT050BF-3	3.3	1.65	±50	26.4	170	3		PFF,PSF,PSS,SMT
MCT050UF-3	3.3	0.5	50	49.4	170	3		PFF,PSF,PSS,SMT
MCT100BR-3	3.3	V <sub>cc</sub> /2	±100	13.2	170	3		PFF,PSF,PSS,SMT
MCT100BF-3	3.3	1.65	±100	13.2	170	3		PFF,PSF,PSS,SMT
MCT100UF-3	3.3	0.5	100	24.7	170	3		PFF,PSF,PSS,SMT
MCT150BR-3	3.3	V <sub>cc</sub> /2	±150	8.8	170	3		PFF,PSF,PSS,SMT
MCT150BF-3	3.3	1.65	±150	8.8	170	3		PFF,PSF,PSS,SMT
MCT150UF-3	3.3	0.5	150	16.5	170	3		PFF,PSF,PSS,SMT
MCT200BR-3	3.3	V <sub>cc</sub> /2	±200	6.6	170	3		PFF,PSF,PSS,SMT
MCT200BF-3	3.3	1.65	±200	6.6	170	3		PFF,PSF,PSS,SMT
MCT200UF-3	3.3	0.5	200	12.4	170	3		PFF,PSF,PSS,SMT
MCT250BR-3	3.3	V <sub>cc</sub> /2	±250	5.3	170	3		PFF,PSF,PSS,SMT
MCT250BF-3	3.3	1.65	±250	5.3	170	3		PFF,PSF,PSS,SMT
MCT250UF-3	3.3	0.5	250	9.9	170	3		PFF,PSF,PSS,SMT
MCT050BR	5	V <sub>cc</sub> /2	±50	40	170	3		PFF,PSF,PSS,SMT
MCT050BF	5	2.5	±50	40	170	3		PFF,PSF,PSS,SMT
MCT050UR	5	V <sub>cc</sub> /10	50	80	170	3		PFF,PSF,PSS,SMT
MCT050UF	5	0.5	50	80	170	3		PFF,PSF,PSS,SMT
MCT100BR	5	V <sub>cc</sub> /2	±100	20	170	3		PFF,PSF,PSS,SMT
MCT100BF	5	2.5	±100	20	170	3		PFF,PSF,PSS,SMT
MCT100UR	5	V <sub>cc</sub> /10	100	40	170	3		PFF,PSF,PSS,SMT
MCT100UF	5	0.5	100	40	170	3		PFF,PSF,PSS,SMT
MCT150BR	5	V <sub>cc</sub> /2	±150	13.33	170	3		PFF,PSF,PSS,SMT
MCT150BF	5	2.5	±150	13.33	170	3		PFF,PSF,PSS,SMT
MCT150UR	5	V <sub>cc</sub> /10	150	26.67	170	3		PFF,PSF,PSS,SMT
MCT150UF	5	0.5	150	26.67	170	3		PFF,PSF,PSS,SMT
MCT200BR	5	V <sub>cc</sub> /2	±200	10	170	3		PFF,PSF,PSS,SMT
MCT200BF	5	2.5	±200	10	170	3		PFF,PSF,PSS,SMT



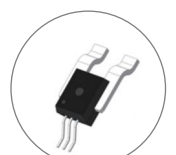
Standard PFF



PSF Leadform



PSS Leadform



SMT Leadform

## Current Sensor

## MCT series

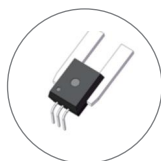
Part Number	VCC (V)	VOUT(Q)(V)	IP (A)	Sens Typ. (mV/A)	BW (KHz)	Response (uS)	AECQ	Package type
MCT200UR	5	Vcc/10	200	20	170	3		PFF,PSF,PSS,SMT
MCT200UF	5	0.5	200	20	170	3		PFF,PSF,PSS,SMT
MCT250BR	5	Vcc/2	±250	8	170	3		PFF,PSF,PSS,SMT
MCT250BF	5	2.5	±250	8	170	3		PFF,PSF,PSS,SMT
MCT250UR	5	Vcc/10	250	16	170	3		PFF,PSF,PSS,SMT
MCT250UF	5	0.5	250	16	170	3		PFF,PSF,PSS,SMT

## MCA series

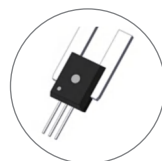
Part Number	VCC (V)	VOUT(Q)(V)	IP (A)	Sens Typ. (mV/A)	BW (KHz)	Response (uS)	AECQ	Package type
MCA050BR	5	Vcc/2	±50	40	240	2	V	PFF,PSF,PSS,SMT
MCA050BF	5	2.5	±50	40	240	2	V	PFF,PSF,PSS,SMT
MCA050UR	5	Vcc/10	50	80	240	2	V	PFF,PSF,PSS,SMT
MCA050UF	5	0.5	50	80	240	2	V	PFF,PSF,PSS,SMT
MCA100BR	5	Vcc/2	±100	20	240	2	V	PFF,PSF,PSS,SMT
MCA100BF	5	2.5	±100	20	240	2	V	PFF,PSF,PSS,SMT
MCA100UR	5	Vcc/10	100	40	240	2	V	PFF,PSF,PSS,SMT
MCA100UF	5	0.5	100	40	240	2	V	PFF,PSF,PSS,SMT
MCA150BR	5	Vcc/2	±150	13.33	240	2	V	PFF,PSF,PSS,SMT
MCA150BF	5	2.5	±150	13.33	240	2	V	PFF,PSF,PSS,SMT
MCA150UR	5	Vcc/10	150	26.67	240	2	V	PFF,PSF,PSS,SMT
MCA150UF	5	0.5	150	26.67	240	2	V	PFF,PSF,PSS,SMT
MCA200BR	5	Vcc/2	±200	10	240	2	V	PFF,PSF,PSS,SMT
MCA200BF	5	2.5	±200	10	240	2	V	PFF,PSF,PSS,SMT
MCA200UR	5	Vcc/10	200	20	240	2	V	PFF,PSF,PSS,SMT
MCA200UF	5	0.5	200	20	240	2	V	PFF,PSF,PSS,SMT
MCA250BR	5	Vcc/2	±250	8	240	2	V	PFF,PSF,PSS,SMT
MCA250BF	5	2.5	±250	8	240	2	V	PFF,PSF,PSS,SMT
MCA250UR	5	Vcc/10	250	16	240	2	V	PFF,PSF,PSS,SMT
MCA250UF	5	0.5	250	16	240	2	V	PFF,PSF,PSS,SMT



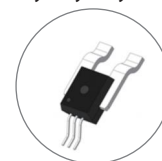
Standard PFF



PSF Leadform



PSS Leadform

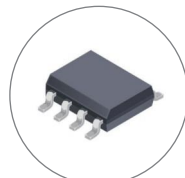


SMT Leadform

## Current Sensor

### MCS108K series

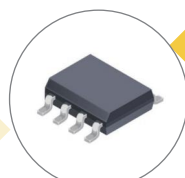
Part Number	VCC (V)	VOUT(Q)/V	IP (A)	Sens Typ. (mV/A)	BW (KHz)	Response(μS)	AECQ	Package type
MCS108K-010BR	5	Vcc/2	±10	200	600	0.8	V	SOP8
MCS108K-020BR	5	Vcc/2	±20	100	600	0.8	V	SOP8
MCS108K-020UR	5	Vcc/10	20	200	600	0.8	V	SOP8
MCS108K-030BR	5	Vcc/2	±30	66.7	600	0.8	V	SOP8
MCS108K-030UR	5	Vcc/10	30	133.3	600	0.8	V	SOP8
MCS108K-050BR	5	Vcc/2	±50	40	600	0.8	V	SOP8
MCS108K-050UR	5	Vcc/10	50	80	600	0.8	V	SOP8
MCS108K-010BR-3	3.3	Vcc/2	±10	132	600	0.8	V	SOP8
MCS108K-020BR-3	3.3	Vcc/2	±20	66	600	0.8	V	SOP8
MCS108K-020UR-3	3.3	Vcc/10	20	132	600	0.8	V	SOP8
MCS108K-030BR-3	3.3	Vcc/2	±30	44	600	0.8	V	SOP8
MCS108K-030UR-3	3.3	Vcc/10	30	88	600	0.8	V	SOP8
MCS108K-050BR-3	3.3	Vcc/2	±50	26.4	600	0.8	V	SOP8
MCS108K-050UR-3	3.3	Vcc/10	50	52.8	600	0.8	V	SOP8



SOP8

### MCS109K series

Part Number	VCC (V)	VOUT(Q)/V	IP (A)	Sens Typ. (mV/A)	BW (KHz)	Response(μS)	AECQ	Package type
MCS109K-010BR-3	3.3	Vcc/2	±10	132	400	1	V	SOP8
MCS109K-020BR-3	3.3	Vcc/2	±20	66	400	1	V	SOP8
MCS109K-020UR-3	3.3	Vcc/10	20	132	400	1	V	SOP8
MCS109K-030BR-3	3.3	Vcc/2	±30	44	400	1	V	SOP8
MCS109K-030UR-3	3.3	Vcc/10	30	88	400	1	V	SOP8
MCS109K-050BR-3	3.3	Vcc/2	±50	26.4	400	1	V	SOP8
MCS109K-050UR-3	3.3	Vcc/10	50	52.8	400	1	V	SOP8
MCS109K-010BR	5	Vcc/2	±10	200	400	1	V	SOP8
MCS109K-020BR	5	Vcc/2	±20	100	400	1	V	SOP8
MCS109K-020UR	5	Vcc/10	20	200	400	1	V	SOP8
MCS109K-030BR	5	Vcc/2	±30	66.7	400	1	V	SOP8
MCS109K-030UR	5	Vcc/10	30	133.3	400	1	V	SOP8
MCS109K-050BR	5	Vcc/2	±50	40	400	1	V	SOP8
MCS109K-050UR	5	Vcc/10	50	80	400	1	V	SOP8

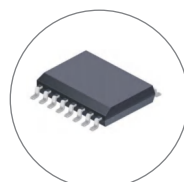


SOP8

## Current Sensor

### MCS233K series

Part Number	VCC (V)	VOUT(Q)/V	IP (A)	Sens Typ. (mV/A)	BW (KHz)	Response (μs)	AECQ	Package type
MCS233K-020BR	5	Vcc/2	±20	100	700	0.8	V	SOP16
MCS233K-020UR	5	Vcc/10	20	200	700	0.8	V	SOP16
MCS233K-040BR	5	Vcc/2	±40	50	700	0.8	V	SOP16
MCS233K-040UR	5	Vcc/10	40	100	700	0.8	V	SOP16
MCS233K-065BR	5	Vcc/2	±65	30.8	700	0.8	V	SOP16
MCS233K-065UR	5	Vcc/10	65	61.5	700	0.8	V	SOP16
MCS233K-075BR	5	Vcc/2	±75	26.7	700	0.8	V	SOP16
MCS233K-075UR	5	Vcc/10	75	53.3	700	0.8	V	SOP16
MCS233K-020BR-3	3.3	Vcc/2	±20	66	700	0.8	V	SOP16
MCS233K-020UR-3	3.3	Vcc/10	20	132	700	0.8	V	SOP16
MCS233K-040BR-3	3.3	Vcc/2	±40	33	700	0.8	V	SOP16
MCS233K-040UR-3	3.3	Vcc/10	40	66	700	0.8	V	SOP16
MCS233K-065BR-3	3.3	Vcc/2	±65	20.3	700	0.8	V	SOP16
MCS233K-065UR-3	3.3	Vcc/10	65	40.6	700	0.8	V	SOP16
MCS233K-075BR-3	3.3	Vcc/2	±75	17.6	700	0.8	V	SOP16
MCS233K-075UR-3	3.3	Vcc/10	75	35.2	700	0.8	V	SOP16

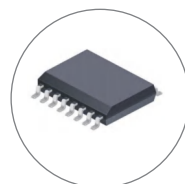


SOP16

## Current Sensor

### MCS235K series

Part Number	VCC (V)	VOUT(Q)(V)	IP (A)	Sens Typ. (mV/A)	BW (KHz)	Response(μS)	AECQ	Package type
MCS235K-020BR	5	Vcc/2	±20	100	1000	0.5		SOP16
MCS235K-020UR	5	Vcc/10	20	200	1000	0.5		SOP16
MCS235K-040BR	5	Vcc/2	±40	50	1000	0.5		SOP16
MCS235K-040UR	5	Vcc/10	40	100	1000	0.5		SOP16
MCS235K-065BR	5	Vcc/2	±65	30.8	1000	0.5		SOP16
MCS235K-065UR	5	Vcc/10	65	61.5	1000	0.5		SOP16
MCS235K-075BR	5	Vcc/2	±75	26.7	1000	0.5		SOP16
MCS235K-075UR	5	Vcc/10	75	53.4	1000	0.5		SOP16
MCS235K-020BR-3	3.3	Vcc/2	±20	66	1000	0.5		SOP16
MCS235K-020UR-3	3.3	Vcc/10	20	132	1000	0.5		SOP16
MCS235K-040BR-3	3.3	Vcc/2	±40	33	1000	0.5		SOP16
MCS235K-040UR-3	3.3	Vcc/10	40	66	1000	0.5		SOP16
MCS235K-065BR-3	3.3	Vcc/2	±65	20.3	1000	0.5		SOP16
MCS235K-065UR-3	3.3	Vcc/10	65	40.6	1000	0.5		SOP16
MCS235K-075BR-3	3.3	Vcc/2	±75	17.6	1000	0.5		SOP16
MCS235K-075UR-3	3.3	Vcc/10	75	35.2	1000	0.5		SOP16

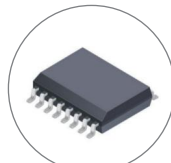


SOP16

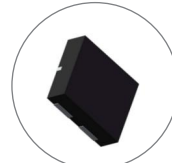
## Current Sensor

## MCS238K series

Part Number	VCC (V)	VOUT(Q)(V)	IP (A)	Sens Typ. (mV/A)	BW (kHz)	Response(μs)	AECQ	Package type
MCS238K-010BR	5	Vcc/2	±10	200	1500	0.3	V	SOP16
MCS238K-020BR	5	Vcc/2	±20	100	1500	0.3	V	SOP16
MCS238K-020UR	5	Vcc/10	20	200	1500	0.3	V	SOP16
MCS238K-040BR	5	Vcc/2	±40	50	1500	0.3	V	SOP16
MCS238K-040UR	5	Vcc/10	40	100	1500	0.3	V	SOP16
MCS238K-050BR	5	Vcc/2	±50	40	1500	0.3	V	SOP16
MCS238K-050UR	5	Vcc/10	50	80	1500	0.3	V	SOP16
MCS238K-010BR-3	3.3	Vcc/2	±10	132	1500	0.3	V	SOP16
MCS238K-020BR-3	3.3	Vcc/2	±20	66	1500	0.3	V	SOP16
MCS238K-020UR-3	3.3	Vcc/10	20	132	1500	0.3	V	SOP16
MCS238K-040BR-3	3.3	Vcc/2	±40	33	1500	0.3	V	SOP16
MCS238K-040UR-3	3.3	Vcc/10	40	66	1500	0.3	V	SOP16
MCS238K-050BR-3	3.3	Vcc/2	±50	26.4	1500	0.3	V	SOP16
MCS238K-050UR-3	3.3	Vcc/10	50	52.8	1500	0.3	V	SOP16



SOP16



QFN

## MCS382K series

Part Number	VCC (V)	VOUT(Q)(V)	IP (A)	Sens Typ. (mV/A)	BW (kHz)	Response (μs)	AECQ	Package type
MCS382K-30B5QFRG	5	VCCx0.5	±30	66	400	1	V	QFN
MCS382K-40B5QFRG	5	VCCx0.5	±40	50	400	1	V	QFN
MCS382K-50B5QFRG	5	VCCx0.5	±40	40	400	1	V	QFN
MCS382K-100B5QFRG	5	VCCx0.5	±100	20	400	1	V	QFN
MCS382K-150B5QFRG	5	VCCx0.5	±150	13.3	400	1	V	QFN
MCS382K-30U5QFRG	5	VCCx0.1	30	133	400	1	V	QFN
MCS382K-40U5QFRG	5	VCCx0.1	40	100	400	1	V	QFN
MCS382K-50U5QFRG	5	VCCx0.1	50	80	400	1	V	QFN
MCS382K-100U5QFRG	5	VCCx0.1	100	40	400	1	V	QFN
MCS382K-150U5QFRG	5	VCCx0.1	150	26.7	400	1	V	QFN
MCS382K-30B3QFRG	3.3	VCCx0.5	±30	44	400	1	V	QFN
MCS382K-40B3QFRG	3.3	VCCx0.5	±40	33	400	1	V	QFN
MCS382K-50B3QFRG	3.3	VCCx0.5	±50	26.4	400	1	V	QFN
MCS382K-100B3QFRG	3.3	VCCx0.5	±100	13.2	400	1	V	QFN
MCS382K-150B3QFRG	3.3	VCCx0.5	±150	8.8	400	1	V	QFN
MCS382K-30U3QFRG	3.3	VCCx0.1	30	88	400	1	V	QFN
MCS382K-40U3QFRG	3.3	VCCx0.1	40	66	400	1	V	QFN
MCS382K-50U3QFRG	3.3	VCCx0.1	50	52.8	400	1	V	QFN
MCS382K-100U3QFRG	3.3	VCCx0.1	100	26.4	400	1	V	QFN
MCS382K-150U3QFRG	3.3	VCCx0.1	150	17.6	400	1	V	QFN

## Current Sensor

### MCS383K series

Part Number	VCC (V)	VOUT(Q)/V	IP (A)	Sens Typ. (mV/A)	BW (KHz)	Response(μs)	AECQ	Package type
MCS383K-30B5QFRG	5	VCCx0.5	±30	66	600	0.8	V	QFN
MCS383K-40B5QFRG	5	VCCx0.5	±40	50	600	0.8	V	QFN
MCS383K-50B5QFRG	5	VCCx0.5	±40	40	600	0.8	V	QFN
MCS383K-100B5QFRG	5	VCCx0.5	±100	20	600	0.8	V	QFN
MCS383K-150B5QFRG	5	VCCx0.5	±150	13.3	600	0.8	V	QFN
MCS383K-30U5QFRG	5	VCCx0.1	30	133	600	0.8	V	QFN
MCS383K-40U5QFRG	5	VCCx0.1	40	100	600	0.8	V	QFN
MCS383K-50U5QFRG	5	VCCx0.1	50	80	600	0.8	V	QFN
MCS383K-100U5QFRG	5	VCCx0.1	100	40	600	0.8	V	QFN
MCS383K-150U5QFRG	5	VCCx0.1	150	26.7	600	0.8	V	QFN
MCS383K-30B3QFRG	3.3	VCCx0.5	±30	44	600	0.8	V	QFN
MCS383K-40B3QFRG	3.3	VCCx0.5	±40	33	600	0.8	V	QFN
MCS383K-50B3QFRG	3.3	VCCx0.5	±50	26.4	600	0.8	V	QFN
MCS383K-100B3QFRG	3.3	VCCx0.5	±100	13.2	600	0.8	V	QFN
MCS383K-150B3QFRG	3.3	VCCx0.5	±150	8.8	600	0.8	V	QFN
MCS383K-30U3QFRG	3.3	VCCx0.1	30	88	600	0.8	V	QFN
MCS383K-40U3QFRG	3.3	VCCx0.1	40	66	600	0.8	V	QFN
MCS383K-50U3QFRG	3.3	VCCx0.1	50	52.8	600	0.8	V	QFN
MCS383K-100U3QFRG	3.3	VCCx0.1	100	26.4	600	0.8	V	QFN
MCS383K-150U3QFRG	3.3	VCCx0.1	150	17.6	600	0.8	V	QFN

### MCS385K series

Part Number	VCC (V)	VOUT(Q)/V	IP (A)	Sens Typ. (mV/A)	BW (KHz)	Response (μs)	AECQ	Package type
MCS385K-30B5QFRG	5	VCCx0.5	±30	66	1000	0.5	V	QFN
MCS385K-40B5QFRG	5	VCCx0.5	±40	50	1000	0.5	V	QFN
MCS385K-50B5QFRG	5	VCCx0.5	±50	40	1000	0.5	V	QFN
MCS385K-100B5QFRG	5	VCCx0.5	±100	20	1000	0.5	V	QFN
MCS385K-150B5QFRG	5	VCCx0.5	±150	13.3	1000	0.5	V	QFN
MCS385K-30U5QFRG	5	VCCx0.1	30	133	1000	0.5	V	QFN
MCS385K-40U5QFRG	5	VCCx0.1	40	100	1000	0.5	V	QFN
MCS385K-50U5QFRG	5	VCCx0.1	50	80	1000	0.5	V	QFN
MCS385K-100U5QFRG	5	VCCx0.1	100	40	1000	0.5	V	QFN
MCS385K-150U5QFRG	5	VCCx0.1	150	26.7	1000	0.5	V	QFN
MCS385K-30B3QFRG	3.3	VCCx0.5	±30	44	1000	0.5	V	QFN
MCS385K-40B3QFRG	3.3	VCCx0.5	±40	33	1000	0.5	V	QFN
MCS385K-50B3QFRG	3.3	VCCx0.5	±50	26.4	1000	0.5	V	QFN
MCS385K-100B3QFRG	3.3	VCCx0.5	±100	13.2	1000	0.5	V	QFN
MCS385K-150B3QFRG	3.3	VCCx0.5	±150	8.8	1000	0.5	V	QFN
MCS385K-30U3QFRG	3.3	VCCx0.1	30	88	1000	0.5	V	QFN
MCS385K-40U3QFRG	3.3	VCCx0.1	40	66	1000	0.5	V	QFN
MCS385K-50U3QFRG	3.3	VCCx0.1	50	52.8	1000	0.5	V	QFN
MCS385K-100U3QFRG	3.3	VCCx0.1	100	26.4	1000	0.5	V	QFN
MCS385K-150U3QFRG	3.3	VCCx0.1	150	17.6	1000	0.5	V	QFN



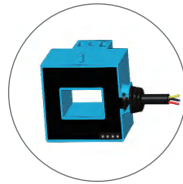
QFN



# Current Sensor Module

## MCK-BKT5-R Series

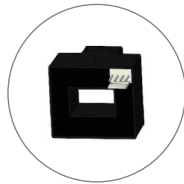
Part Number	Mode	VCC (V)	Rated Output Voltage (V)	Current Consumption (mA)	Rated Input Current ( $I_{PM}$ ) (A)	Measuring Current Range ( $I_{PM}$ ) (A)	Response Time ( $\mu$ S)	Bandwidth(KHz)
MCK-50BKT5-R	Open Loop	$\pm 5$	$2.5 \pm 0.625V, \pm 1\%$	13	50	100	1.3	250
MCK-100BKT5-R	Open Loop	$\pm 5$	$2.5 \pm 0.625V, \pm 1\%$	13	100	200	2.3	250
MCK-200BKT5-R	Open Loop	$\pm 5$	$2.5 \pm 0.625V, \pm 1\%$	13	200	400	3.3	250
MCK-300BKT5-R	Open Loop	$\pm 5$	$2.5 \pm 0.625V, \pm 1\%$	13	300	600	4.3	250
MCK-400BKT5-R	Open Loop	$\pm 5$	$2.5 \pm 0.625V, \pm 1\%$	13	400	800	5.3	250
MCK-600BKT5-R	Open Loop	$\pm 5$	$2.5 \pm 0.625V, \pm 1\%$	13	600	900	6.3	250



MCK-BKT5-R Series

## MCK-BKT5-S Series

Part Number	Mode	VCC (V)	Rated Output Voltage (V)	Current Consumption (mA)	Rated Input Current ( $I_{PM}$ ) (A)	Measuring Current Range ( $I_{PM}$ ) (A)	Response Time ( $\mu$ S)	Bandwidth(KHz)
MCK-50BKT5-S	Open Loop	$\pm 5$	$2.5 \pm 0.625V, \pm 1\%$	13	50	100	7.3	250
MCK-100BKT5-S	Open Loop	$\pm 5$	$2.5 \pm 0.625V, \pm 1\%$	13	100	200	8.3	250
MCK-200BKT5-S	Open Loop	$\pm 5$	$2.5 \pm 0.625V, \pm 1\%$	13	200	400	9.3	250
MCK-300BKT5-S	Open Loop	$\pm 5$	$2.5 \pm 0.625V, \pm 1\%$	13	300	600	10.3	250
MCK-400BKT5-S	Open Loop	$\pm 5$	$2.5 \pm 0.625V, \pm 1\%$	13	400	800	11.3	250
MCK-600BKT5-S	Open Loop	$\pm 5$	$2.5 \pm 0.625V, \pm 1\%$	13	600	900	12.3	250



MCK-BKT5-S Series

## Current Sensor Module

### MCK-EKA Series

Part Number	Mode	VCC (V)	Rated Output Voltage (V)	Current Consumption (mA)	Rated Input Current ( $I_{PM}$ ) (A)	Measuring Current Range ( $I_{RM}$ ) (A)	Response Time ( $\mu$ s)	Bandwidth (KHz)
MCK-50EKA	Open Loop	$\pm 12 \sim \pm 15$	4	25	50	100	5	50
MCK-100EKA	Open Loop	$\pm 12 \sim \pm 15$	4	25	100	200	5	50
MCK-200EKA	Open Loop	$\pm 12 \sim \pm 15$	4	25	200	400	5	50
MCK-300EKA	Open Loop	$\pm 12 \sim \pm 15$	4	25	300	600	5	50
MCK-400EKA	Open Loop	$\pm 12 \sim \pm 15$	4	25	400	800	5	50
MCK-500EKA	Open Loop	$\pm 12 \sim \pm 15$	4	25	500	1000	5	50



MCK-EKA Series

### MCK-EKB Series

Part Number	Mode	VCC (V)	Rated Output Voltage (V)	Current Consumption (mA)	Rated Input Current ( $I_{PM}$ ) (A)	Measuring Current Range ( $I_{RM}$ ) (A)	Response Time ( $\mu$ s)	Bandwidth (KHz)
MCK-100EKB	Open Loop	$\pm 15$	4	18	100	300	5	20
MCK-200EKB	Open Loop	$\pm 15$	4	18	200	600	5	20
MCK-300EKB	Open Loop	$\pm 15$	4	18	300	900	5	20
MCK-500EKB	Open Loop	$\pm 15$	4	18	500	1500	5	20
MCK-1000EKB	Open Loop	$\pm 15$	4	18	1000	2000	5	20
MCK-2000EKB	Open Loop	$\pm 15$	4	18	2000	3000	5	20

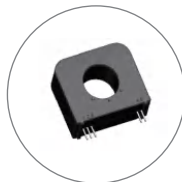


MCK-EKB Series

# Current Sensor Module

## MED Series

Part Number	Mode	VCC (V)	Rated Output Voltage (V)	Current Consumption (mA)	Rated Input Current (I <sub>RM</sub> ) (A)	Measuring Current Range (I <sub>RM</sub> ) (A)	Response Time (μs)	Bandwidth (KHz)
MED-0.3LCM	Leakage Current	±5	2.5+2*I <sub>p</sub> n/I <sub>p</sub>	25	0.3	0~±0.6		0.7
MED-0.6LCM	Leakage Current	±5	2.5+2*I <sub>p</sub> n/I <sub>p</sub>	25	0.6	0~±0.85		0.7
MED-1LCM	Leakage Current	±5	2.5+2*I <sub>p</sub> n/I <sub>p</sub>	25	1	0~±1.5		0.7



MED Series

## MDHC20-118 Series

Part Number	Mode	VCC (V)	Rated Output Voltage (V)	Current Consumption (mA)	Rated Input Current (I <sub>RM</sub> ) (A)	Sensor Sen. (mV/A)	Measuring Current Range (I <sub>RM</sub> ) (A)	Response Time (μs)	Bandwidth (KHz)
MDHC20-118	Open Loop	5	VCC/2	14	Channel 1: ±30 Channel 2: ±350	Channel 1: 66.7 Channel 2: 5.7	10	20	



MDHC20-118 Series

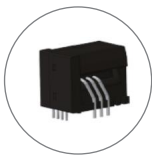
## Current Sensor Module

### MCB-CAS-CASR-CKSR Series

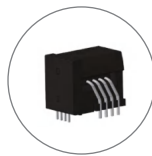
Part Number	Mode	VCC (V)	Rated Output Voltage (V)	Current Consumption (mA)	Rated Input Current (I <sub>PN</sub> ) (A)	Measuring Current Range (I <sub>PN</sub> ) (A)	Sensor Sen. (mV/A)	Response Time (μs)	Bandwidth(KHz)
MCB-15CAS	Closed Loop	5	2.5	15+IP*NP/NS*1000	15	±51	41.67 (0.625@I-pn)	1	400
MCB-25CAS	Closed Loop	5	2.5	15+IP*NP/NS*1000	25	±85	25 (0.625@I-pn)	1	400
MCB-50CAS	Closed Loop	5	2.5	15+IP*NP/NS*1000	50	±150	12.5 (0.625@I-pn)	1	400
MCB-15CASR	Closed Loop	5	2.5	15+IP*NP/NS*1000	15	±51	41.67 (0.625@I-pn)	1	400
MCB-25CASR	Closed Loop	5	2.5	15+IP*NP/NS*1000	25	±85	25 (0.625@I-pn)	1	400
MCB-50CASR	Closed Loop	5	2.5	15+IP*NP/NS*1000	50	±150	12.5 (0.625@I-pn)	1	400
MCB-15CKSR	Closed Loop	5	2.5	15+IP*NP/NS*1000	15	±51	41.67 (0.625@I-pn)	1	400
MCB-25CKSR	Closed Loop	5	2.5	15+IP*NP/NS*1000	25	±85	25 (0.625@I-pn)	1	400
MCB-50CKSR	Closed Loop	5	2.5	15+IP*NP/NS*1000	50	±150	12.5 (0.625@I-pn)	1	400

### MCK-LY Series

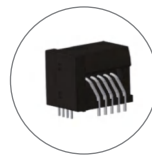
Part Number	Mode	VCC (V)	Rated Output Voltage (V)	Current Consumption (mA)	Rated Input Current (I <sub>PN</sub> ) (A)	Measuring Current Range (I <sub>PN</sub> ) (A)	Response Time (μs)	Bandwidth(KHz)
MCK-05LY	Closed Loop	±15	0	5	±15	800(4@I_pn)	<3	50
MCK-10LY	Closed Loop	±15	0	10	±30	400(4@I_pn)	<3	50
MCK-20LY	Closed Loop	±15	0	20	±60	200(4@I_pn)	<3	50
MCK-30LY	Closed Loop	±15	0	30	±90	133.3(4@I_pn)	<3	50
MCK-40LY	Closed Loop	±15	0	40	±120	100(4@I_pn)	<3	50
MCK-50LY	Closed Loop	±15	0	50	±150	80(4@I_pn)	<3	50



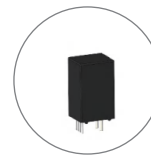
MCB-CAS Series



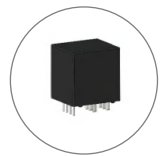
MCB-CASR Series



MCB-CKSR Series



MCK-LY Series



MCK-LY Series

## Product Quality

**AECQ-100**

**Automotive Line  
Qualified by AECQ-100**

**JEDEC STD**

**Commercial Line  
Qualified by JEDEC**

**<1.0PPM**

**Product Quality Level  
<1.0PPM**

## Application Scope



**BLDC**



**Automation**



**Artificial Intelligence**



**Smart Meter**



**Industry**



**Robot**



**Appliance 3C**



**Big Data**



**White Goods**

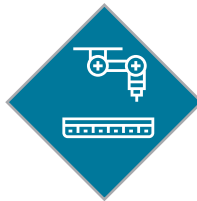


**Automotive**

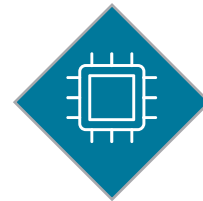
## R&D Strengths



**Custom Made  
Capability**



**Focus CMOS  
Technology**



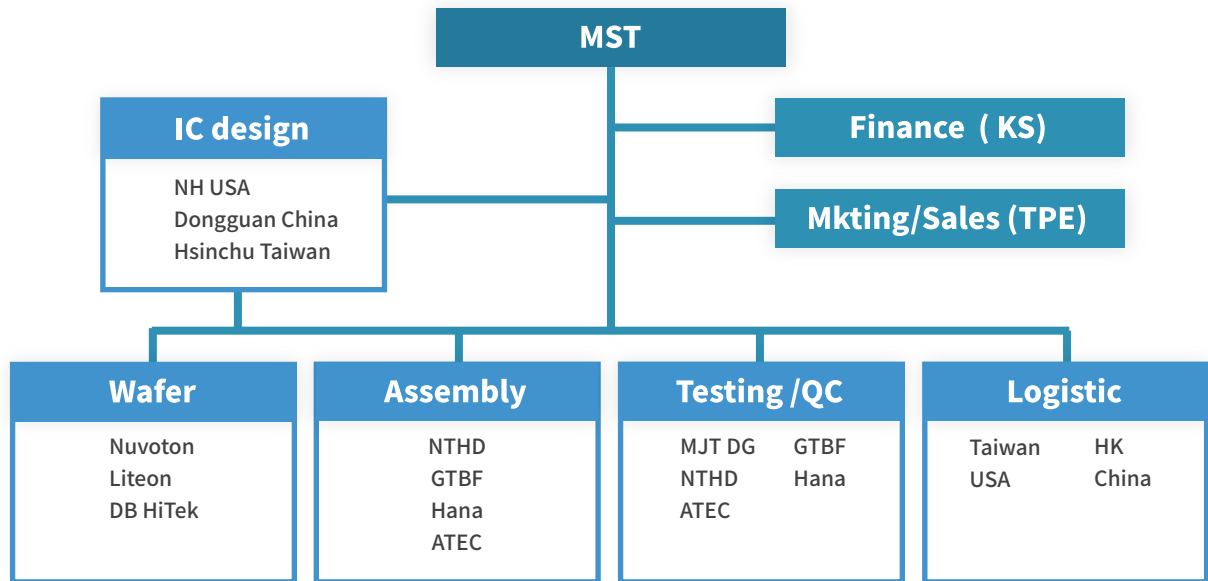
**Hall IC  
MEMS Focus**



**Advance  
Testing Skill**



**Strong  
FAE Support**



## QA



### Discipline & 6S Audits

Inspectors and Operators discipline will be audited **daily**.



### Product Audit

Customer product (base on end Product Requirement) will be audited **every month** based on different customers.



### System Audit

Quality Management System Audit will be carried out **twice** per year.



### Process Audit

Manufacturing process (base on Control Plan) will be audited **every week** base on different customers.

# Contact

US MST Service Window:

Office phone:+1 603-565-0265

Contact Person: Trent Wood

Own Testing Factory: DongGuan/China

FAE: Taipei, HsinChu, Guang zhou

Warehouse: Hong Kong

Fin/Adm: Kaohsiung, Taiwan / Taipei, Taiwan

Sales office: Taipei, Taiwan / Guangzhou, China

Marketing office: Taipei, Taiwan

Asia Service Window:

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Contact Person: Paul Lin

Wechat public account:Magnesensor



# Product Selection Guide

[www.magnesensor.com](http://www.magnesensor.com)