

MST Product Selection Guide

2026

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

*Package: SO(SOT23-3L);SN(SOT553-5L);SP(PSot23-3L);SQ(QFN 2020-3L);SF(SOT89-5L);
SM(DFN1616-6L);UA(TO92S-3L);VK(TO94-4L);VL(TO94-3L);
SS(DFN1010-4L);SR(SOT23-6L);SD(QFN2020-6L);
SL(SOT23-3LStraight Lead) ;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 (Typ) | OD | OC | PU | TSD | MP | RP | Note |
|-------------|-------------|---------------|-------------|---------------------|----------------------|----|----|----|-----|----|----|---|
| MH176 | UA/SO/SD/SM | 1.8V~6.0V | E/K | +/- 25 | 5mA | V | | | | | | Low Operating Voltage Hall Effect Latch |
| MH178 | UA/SO | 2.0V~5.5V | E/K | +/- 30 | 9uA | V | | | | V | | Micropower Hall Effect Latch |
| MH179 | UA/SO | 2.0V~5.5V | E/K | +/- 30 | 0.6mA | V | | | | V | | Micropower Hall Effect Latch(2K Hz) |

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

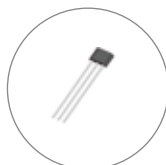
| | | | | | | | | | | | | |
|-------|----------------|----------|-----|---------|-------|---|---|---|--|---|--|--|
| MH163 | SO | 3.5V~24V | E/K | +/- 30 | 3.5mA | V | | V | | V | | General Purpose Hall Effect Latch(S->low) |
| MH173 | SO | 2.5V~26V | E/K | +/- 30 | 3mA | | | V | | V | | Built-in Pull High Res Hall Effect Latch(S->Low) |
| MH180 | UA/SO | 2.5V~26V | E/K | +/- 50 | 2.4mA | V | | | | V | | General Purpose Hall Effect Latch |
| MH181 | UA/SO | 3.5V~20V | E/K | +/- 50 | 4mA | | V | | | V | | General-Purpose Hall Effect Latch |
| MH182 | UA/SO | 3.0V~24V | E/K | +/- 40 | 2mA | V | | | | | | Multi-Purpose Hall Effect Latch |
| MH183 | UA/SO | 2.5V~26V | E/K | +/- 150 | 1.8mA | V | | | | V | | Ultra Low Sensitivity Hall Effect Latch |
| MH185 | SO | 2.5V~26V | E/K | +/- 30 | 3mA | V | | | | V | | High Sensitivity Hall Effect Latch(S->Low) |
| MH186 | UA/SO | 3.0V~26V | E/K | +/- 30 | 3mA | V | | | | V | | High Sensitivity Hall Effect Latch |
| MH188 | UA/SO/SD/SM/SA | 2.5V~26V | E/K | +/- 15 | 2mA | V | | | | V | | Ultra High Sensitivity Hall Effect Latch |
| MH189 | UA/SO | 3.0V~26V | E/K | +/- 15 | 2mA | V | | | | | | Ultra High Sensitivity Hall Effect Latch(AECQ) |
| MH190 | UA/SO | 4.0V~30V | E/K | +/- 60 | 3mA | | V | | | V | | High Voltage, Bipolar Process, Hall Effect Latch |
| MH193 | UA/SO | 2.5V~26V | E/K | +/- 15 | 2mA | | | V | | V | | Built-in Pull High Res Hall Effect Latch |
| MH41F | UA | 3.3V-30V | K | +/- 50 | 3mA | V | | | | | | High ESD Level Hall Effect Latch |

Direction

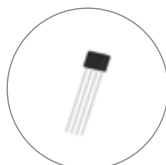
| Part Number | Package | Voltage range | Temperature | Bop/ Brp(Typ/Gauss) | Supply Current (Typ) | OD | OC | PU | TSD | MP | RP | Note |
|-------------|---------|---------------|-------------|---------------------|----------------------|----|----|----|-----|----|----|---------------------------------------|
| MH452 | VK/SD | 2.5V-26V | E/K | +/- 15 | 2mA | V | | | | | V | Dual Hall Speed and Direction Sensors |



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



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



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



QFN2.0*2.0-6L(SD)
2.0*2.0*0.6(mm)



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

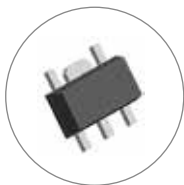
Fan Driver

One coil fan driver

| Part Number | Package | Voltage range | Temperature | Bop/Brp(Typ/Gauss) | Driving Current (Typ) | TP | SW | AR | FG | RD | PWM | TSD | RP | Note |
|-------------|----------|---------------|-------------|--------------------|-----------------------|----|----|----|----|----|-----|-----|----|---|
| MH361 | VK | 3.5V ~ 20V | E/K | +/- 30 | 400mA | V | | V | V | V | | V | | Single Phase Fan Motor Driver with Auto-restart |
| MH3610 | VS | 3.5V ~ 16V | K | +/- 25 | 550mA | V | V | V | V | | V | V | V | 12V Low Noise Single Coil Motor Driver with PWM |
| MH3611 | VS | 3.5V ~ 16V | K | +/- 25 | 700mA | V | 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 | +/- 20 | 500mA | V | V | V | V | V | V | V | V | Single Phase Fan Motor Driver with Soft-Switch |

Two coil fan driver

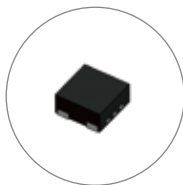
| Part Number | Package | Voltage range | Temperature | Bop/Brp(Typ/Gauss) | Driving Current (Typ) | TP | SW | AR | FG | RD | PWM | TSD | RP | Note |
|-------------|---------|---------------|-------------|--------------------|-----------------------|----|----|----|----|----|-----|-----|----|--|
| MH276 | VK | 3.5V ~ 16V | E | +/- 40 | 350mA | | | | | | | V | V | Complementary Output Hall Effect Latch |
| MH277 | VK | 3.5V ~ 16V | E | +/- 40 | 400mA | | | | | | | | V | Complementary Output Hall Effect Latch |
| MH284 | VK | 2.5V ~ 20V | E/K | +/- 20 | 600mA | | | V | | | | V | V | Hall-Effect Smart Fan Motor Controller |
| MH381 | VK/SF | 2.5V ~ 20V | E/K | +/- 30 | 600mA | | | V | V | V | | V | V | High peak current CMOS 3-Wire Fan Driver |
| MH382 | VK/SF | 4.5V ~ 30V | E/K | +/- 30 | 300mA | | | V | V | V | | V | V | 24V CMOS 3-Wire Fan Driver |



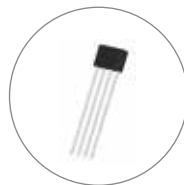
SOT89-5L(SF)
4.5*2.5*1.5(mm)



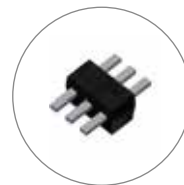
QFN2020-6L(SD)
2.0*2.0*0.6(mm)



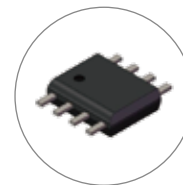
DFN1.6*1.6-6L(SM)
1.6*1.6*0.4(mm)



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



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



SOP8(VS)
3.9*4.9*1.4(mm)

Linear Hall Effect

Programming Linear

| Part Number | Package | Voltage range | Temperature | Sensitivity (Range) | Supply Current (Typ) | TP | Note |
|-------------|---------|---------------|-------------|---------------------|----------------------|----|---|
| MH485 | VL | 4.5V~5.5V | K | 0.9~25mV/G | 13mA | V | High Speed Programming Linear Hall IC |
| MH486 | VK | 4.5V~5.5V | K | 0.9~25mV/G | 13mA | V | High Speed Programming Linear Hall IC +Vref |

Programming linear AECQ-100

| Part Number | Package | Voltage range | Temperature | Sensitivity (Range) | Supply Current (Typ) | TP | Note |
|-------------|---------|---------------|-------------|---------------------|----------------------|----|---------------------|
| MH489 | VL | 4.5V~5.5V | K | 0.9~25mV/G | 13mA | V | AECQ-100 Automotive |
| MH490 | VK | 4.5V~5.5V | K | 0.9~25mV/G | 13mA | V | AECQ-100 Automotive |

Ratio-Metric Linear

| Part Number | Package | Voltage range | Temperature | Sensitivity (Typ) | Supply Current (Typ) | Sorting | TP | Note |
|-------------|-------------|---------------|-------------|--------------------------------------|----------------------|------------------|------------------|---|
| MH481 | UA/SO/SQ/SR | 3.0V~ 6.5V | I | 1.8~2.1mV/G | 2.5mA | | V | Ratio-metric Linear Hall Effect Sensor |
| MH4802 | SO/SP | 3.0V~10V | E | 1.7~2.3mV/G | 2.3mA | | V | Ratio-metric unipolar linear hall sensor |
| MH4803 | SO/SP | 2.7V~8.0V | E | 2.6~3.1mV/G | 1.15mA | | V | Ratio-metric unipolar linear hall sensor |
| MH4804 | SO/SP/SR | 2.7V~8.0V | E | 3.5mV/G | 1.15mA | | V | Rail to Rail Ratio-metric unipolar linear hall sensor |
| MH491 | UA/SO | 2.8V~ 6.0V | I | 1.5mV/G 2mV/G 2.5mV/G 3mV/G | 3.3mA | A B C D | V V V V | CMOS Ratio-Metric Linear Hall Effect IC |
| MH493 | UA/SO | 2.8V~ 6.0V | I | 4mV/G 7mV/G 10mV/G 13mV/G | 3.3mA | A B C D | V V V V | CMOS Ratio-Metric Linear Hall Effect IC |
| MH49A3 | SD/SM | 2.8V~ 6.0V | E/K | 4mV/G,7mV/G 10mV/G,13mV/G | 3.3mA | | V | Multi-Sensitivity Ratio-Metric Linear Hall Sensor |

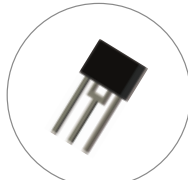
Linear Hall Effect

MH50XX

| Part Number | Package | Voltage range | Temperature | Sensitivity (Typ) | Supply Current (Typ) | TP | Note |
|-------------|----------|---------------|-------------|-------------------|----------------------|----|----------------------------------|
| MH501P | SO/UA/SM | 1.7V~5.5V | K | 1.5mV/G | 1.3mA | V | Sensitivity Optional Linear Hall |
| MH5002 | SO/UA/SM | 1.7V~5.5V | K | 2.0mV/G | 1.3mA | V | Sensitivity Optional Linear Hall |
| MH5003 | SO/UA/SM | 1.7V~5.5V | K | 3.0mV/G | 1.3mA | V | Sensitivity Optional Linear Hall |
| MH5004 | SO/UA/SM | 1.7V~5.5V | K | 4.0mV/G | 1.3mA | V | Sensitivity Optional Linear Hall |
| MH5007 | SO/UA/SM | 1.7V~5.5V | K | 7.0mV/G | 1.3mA | V | Sensitivity Optional Linear Hall |
| MH5013 | SO/UA/SM | 1.7V~5.5V | K | 13.0mV/G | 1.3mA | V | Sensitivity Optional Linear Hall |



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



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



Sot23-3L(SL)
4.1*1.6*1.1(mm)



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



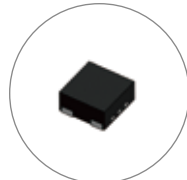
QFN2.0*2.0-6L(SD)
2.0*2.0*0.6(mm)



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



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



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



PSot23-3L(SP)
2.92*1.3*1.0(mm)



Sot23-6L(SR)
3.0*1.6*1.1(mm)

Omni-polar Switch

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

| Part Number | Package | Voltage range | Temperature | Bops/N(Typ/Gauss) | BH(Typ/Gauss) | Supply Current (Typ) | OD | TP | HZ | MP(μ A) | Note |
|-------------|-------------|---------------|-------------|-------------------|---------------|----------------------|----|-----|----|--------------|--|
| MH231 | UA/SO/SP/SA | 1.65V-5.5V | E | +/- 30 | 10 | 1uA | V | 20 | V | | Nanopower CMOS Output Hall Effect Switch |
| MH232 | SS | 1.65V-5.5V | E | +/-28 | 10 | 1.2uA | V | 20 | V | | Dual Output Micropower Hall Switch |
| MH233 | UA/SO | 1.65V-5.5V | E/K | +/-30 | 10 | 2mA | V | 3K | | | High Sensitivity Omni-Polar Hall Effect Switch |
| MH234 | UA/SO | 1.65V~5.5V | E | +/- 30 | 10 | 3.7uA | V | 200 | V | | 200Hz MicroPower CMOS Output Hall Switch |
| MH235 | UA/SO/SP/SA | 1.65V~5.5V | E | +/- 30 | 10 | 1uA | V | 20 | V | | Nanopower CMOS Output Hall Effect Switch |
| MH236 | UA/SS/SP | 1.65V-5.5V | E | +/- 25 | 10 | 1uA | V | 20 | V | | High Sensitivity Micropower Hall Switch |
| MH238 | UA/SO | 1.65V~5.5V | E | +/- 20 | 10 | 1uA | V | 20 | V | | Nanopower CMOS Output Hall Effect Switch |
| MH239 | UA/SO/SP/SA | 1.65V-5.5V | E | +/- 50 | 10 | 1uA | V | 20 | V | | Nanopower CMOS Output Hall Effect Switch |
| MH248 | UA/SO/SQ | 1.8V~5.5V | E | +/-30 | 10 | 10uA | V | | V | | Micropower Hall Effect Switch |
| MH251 | UA/SP/SO/SQ | 1.65V~3.5V | E | +/-30 | 10 | 5uA | V | | V | | Micropower CMOS Output Hall Effect Switch |
| MH253 | UA/SO | 2.5V-6.0V | E/K | +/-30 | 10 | 2.6mA | V | | | | High Sensitivity Omni-Polar Hall Effect Switch |

Omni-polar Switch

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

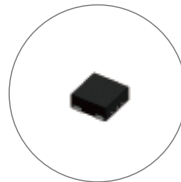
| Part Number | Package | Voltage range | Temperature | BopS/N(Typ/Gauss) | BH(Typ/Gauss) | Supply Current (Typ) | OD | TP | PU | Note |
|-------------|---------|---------------|-------------|-------------------|---------------|----------------------|----|----|----|---|
| MH271 | UA/SO | 2.5V~26V | E/K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



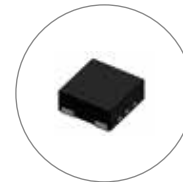
Sot23-3L(SO)
2.9*1.6*1.1(mm)



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



DFN1.0*1.0-4L(SS)
1.0*1.0*0.4(mm)



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



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

Uni-polar Switch

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

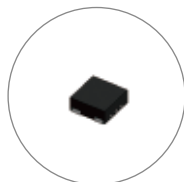
| Part Number | Package | Voltage range | Temperature | Bop(Typ/Gauss) | BH(Typ/Gauss) | Supply Current (Typ) | OD | TP | MP (μA) | Note |
|-------------|----------|---------------|-------------|----------------|---------------|----------------------|----|----|---------|---|
| MH230 | UA/SS/SO | 1.7V~5.5V | E | -30 | 10 | 1uA | V | V | V | Micropower CMOS Unipolar Hall Effect Switch |
| MH254 | UA/SS/SO | 1.7V~5.5V | E | -30 | 10 | 5uA | V | V | V | Micropower CMOS Unipolar Hall Effect Switch |

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

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



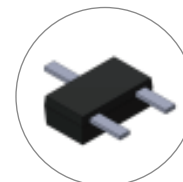
Sot23-3L(SO)
2.9*1.6*1.1(mm)



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



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



SOT23L-3L(SL)
4.1*1.6*1.1(mm)

Pressure Sensor

M01 Series

| <i>Part Number</i> | <i>Signal Output</i> | <i>Working Voltage</i> | <i>Working Temperature</i> | <i>Pressure Type</i> | <i>Pressure Range (Bar)</i> | <i>Package Size</i> |
|--------------------|----------------------|------------------------|----------------------------|----------------------|-----------------------------|-------------------------|
| M0100 | Digital | 1.8~5.5V | -40~85°C | Gauge Pressure | 0.01~1.3 | Refer to specifications |
| M0101 | Analog | 1.8~5.5V | -40~85°C | Absolute Pressure | 0~15 | Refer to specifications |
| M0102 | Analog | 1.8~5.5V | -40~85°C | Gauge Pressure | -0.8~0.48 | SOP6 |
| M0105 | Analog | 1.8~5.5V | -40~85°C | Gauge Pressure | -1~1 | SOP6 |
| M0106 | Analog | 1.8~5.5V | -40~85°C | Gauge Pressure | -1~10 | SOP6 |
| M0110 | Digital | 2.5~5.5V | -40~85°C | Gauge Pressure | -1~1 | SOP6 |
| M0111 | Digital | 1.8~5.5V | -40~85°C | Gauge Pressure | -1~10 | SOP6 |



Pressure Sensor

17 Bit Encoder

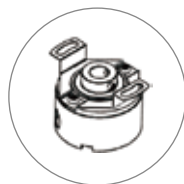
KEM17S-35-D

| 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 | 5 μs | HIGH: VOH ≥ 4.9V LOW: VLO ≤ 0.1V | 762 bytes | Communication rate 2.5Mbps | 17 BIT ABSOLUTE ENCODER, SINGLE-TURN |

Absolute Encoder

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 | 5 μs | High: VOH ≥ 4.9V Low: VLO ≤ 0.1V | 762 bytes | Communication rate 2.5Mbps | 16 BIT MULTI TURN 17 BIT SINGLE TURN ABSOLUTE ENCODER |



KEM17S-35-D



KEM17M-OT-35mm

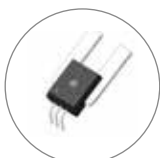
Current Sensor

MCT series

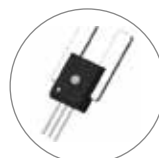
| Part Number | VCC (V) | VOUT(Q)(V) | IP (A) | Sens Typ. (mV/A) | BW (kHz) | Response(μ S) | AECQ | Package type |
|-------------|---------|------------|-----------|------------------|----------|--------------------|------|-----------------|
| MCT050BR-3 | 3.3 | Vcc/2 | \pm 50 | 26.4 | 170 | 3 | | PFF,PSF,PSS,SMT |
| MCT050BF-3 | 3.3 | 1.65 | \pm 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 | Vcc/2 | \pm 100 | 13.2 | 170 | 3 | | PFF,PSF,PSS,SMT |
| MCT100BF-3 | 3.3 | 1.65 | \pm 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 | Vcc/2 | \pm 150 | 8.8 | 170 | 3 | | PFF,PSF,PSS,SMT |
| MCT150BF-3 | 3.3 | 1.65 | \pm 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 | Vcc/2 | \pm 200 | 6.6 | 170 | 3 | | PFF,PSF,PSS,SMT |
| MCT200BF-3 | 3.3 | 1.65 | \pm 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 | Vcc/2 | \pm 250 | 5.3 | 170 | 3 | | PFF,PSF,PSS,SMT |
| MCT250BF-3 | 3.3 | 1.65 | \pm 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 | Vcc/2 | \pm 50 | 40 | 170 | 3 | | PFF,PSF,PSS,SMT |
| MCT050BF | 5 | 2.5 | \pm 50 | 40 | 170 | 3 | | PFF,PSF,PSS,SMT |
| MCT050UR | 5 | Vcc/10 | 50 | 80 | 170 | 3 | | PFF,PSF,PSS,SMT |
| MCT050UF | 5 | 0.5 | 50 | 80 | 170 | 3 | | PFF,PSF,PSS,SMT |
| MCT100BR | 5 | Vcc/2 | \pm 100 | 20 | 170 | 3 | | PFF,PSF,PSS,SMT |
| MCT100BF | 5 | 2.5 | \pm 100 | 20 | 170 | 3 | | PFF,PSF,PSS,SMT |
| MCT100UR | 5 | Vcc/10 | 100 | 40 | 170 | 3 | | PFF,PSF,PSS,SMT |
| MCT100UF | 5 | 0.5 | 100 | 40 | 170 | 3 | | PFF,PSF,PSS,SMT |
| MCT150BR | 5 | Vcc/2 | \pm 150 | 13.33 | 170 | 3 | | PFF,PSF,PSS,SMT |
| MCT150BF | 5 | 2.5 | \pm 150 | 13.33 | 170 | 3 | | PFF,PSF,PSS,SMT |
| MCT150UR | 5 | Vcc/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 | Vcc/2 | \pm 200 | 10 | 170 | 3 | | PFF,PSF,PSS,SMT |
| MCT200BF | 5 | 2.5 | \pm 200 | 10 | 170 | 3 | | PFF,PSF,PSS,SMT |



Standard PFF



PSF Leadform



PSS Leadform



SMT Leadform

Current Sensor

MCT series

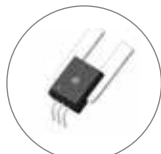
| Part Number | VCC (V) | VOUT(Q)(V) | IP (A) | Sens Typ. (mV/A) | BW (kHz) | Response(μ S) | AECQ | Package type |
|-------------|---------|------------|-----------|------------------|----------|--------------------|------|-----------------|
| MCT200UR | 5 | Vcc/10 | 200 | 20 | 170 | 3 | | PFF,PSF,PSS,SMT |
| MCT200UF | 5 | 0.5 | 200 | 20 | 170 | 3 | | PFF,PSF,PSS,SMT |
| MCT250BR | 5 | Vcc/2 | \pm 250 | 8 | 170 | 3 | | PFF,PSF,PSS,SMT |
| MCT250BF | 5 | 2.5 | \pm 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

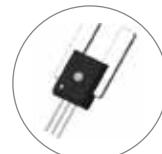
| Part Number | VCC (V) | VOUT(Q)(V) | IP (A) | Sens Typ. (mV/A) | BW (kHz) | Response(μ S) | AECQ | Package type |
|-------------|---------|------------|-----------|------------------|----------|--------------------|------|-----------------|
| MCA050BR | 5 | Vcc/2 | \pm 50 | 40 | 240 | 2 | V | PFF,PSF,PSS,SMT |
| MCA050BF | 5 | 2.5 | \pm 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 | \pm 100 | 20 | 240 | 2 | V | PFF,PSF,PSS,SMT |
| MCA100BF | 5 | 2.5 | \pm 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 | \pm 150 | 13.33 | 240 | 2 | V | PFF,PSF,PSS,SMT |
| MCA150BF | 5 | 2.5 | \pm 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 | \pm 200 | 10 | 240 | 2 | V | PFF,PSF,PSS,SMT |
| MCA200BF | 5 | 2.5 | \pm 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 | \pm 250 | 8 | 240 | 2 | V | PFF,PSF,PSS,SMT |
| MCA250BF | 5 | 2.5 | \pm 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 (μ S) | 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 |

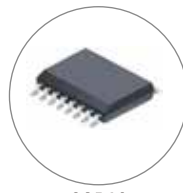


SOP16

Current Sensor

MCS235K series

| Part Number | VCC (V) | VOUT(Q)(V) | IP (A) | Sens Typ. (mV/A) | BW (kHz) | Response(μS) | 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 |

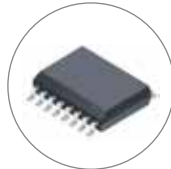


SOP16

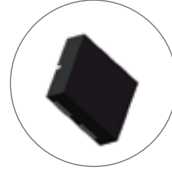
Current Sensor

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(μ s) | AECQ | Package type |
|-------------------|---------|------------|-----------|------------------|----------|--------------------|------|--------------|
| MCS383K-30B5QFRG | 5 | VCCx0.5 | \pm 30 | 66 | 600 | 0.8 | V | QFN |
| MCS383K-40B5QFRG | 5 | VCCx0.5 | \pm 40 | 50 | 600 | 0.8 | V | QFN |
| MCS383K-50B5QFRG | 5 | VCCx0.5 | \pm 40 | 40 | 600 | 0.8 | V | QFN |
| MCS383K-100B5QFRG | 5 | VCCx0.5 | \pm 100 | 20 | 600 | 0.8 | V | QFN |
| MCS383K-150B5QFRG | 5 | VCCx0.5 | \pm 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 | \pm 30 | 44 | 600 | 0.8 | V | QFN |
| MCS383K-40B3QFRG | 3.3 | VCCx0.5 | \pm 40 | 33 | 600 | 0.8 | V | QFN |
| MCS383K-50B3QFRG | 3.3 | VCCx0.5 | \pm 50 | 26.4 | 600 | 0.8 | V | QFN |
| MCS383K-100B3QFRG | 3.3 | VCCx0.5 | \pm 100 | 13.2 | 600 | 0.8 | V | QFN |
| MCS383K-150B3QFRG | 3.3 | VCCx0.5 | \pm 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 (μ s) | AECQ | Package type |
|-------------------|---------|------------|-----------|------------------|----------|---------------------|------|--------------|
| MCS385K-30B5QFRG | 5 | VCCx0.5 | \pm 30 | 66 | 1000 | 0.5 | V | QFN |
| MCS385K-40B5QFRG | 5 | VCCx0.5 | \pm 40 | 50 | 1000 | 0.5 | V | QFN |
| MCS385K-50B5QFRG | 5 | VCCx0.5 | \pm 50 | 40 | 1000 | 0.5 | V | QFN |
| MCS385K-100B5QFRG | 5 | VCCx0.5 | \pm 100 | 20 | 1000 | 0.5 | V | QFN |
| MCS385K-150B5QFRG | 5 | VCCx0.5 | \pm 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 | \pm 30 | 44 | 1000 | 0.5 | V | QFN |
| MCS385K-40B3QFRG | 3.3 | VCCx0.5 | \pm 40 | 33 | 1000 | 0.5 | V | QFN |
| MCS385K-50B3QFRG | 3.3 | VCCx0.5 | \pm 50 | 26.4 | 1000 | 0.5 | V | QFN |
| MCS385K-100B3QFRG | 3.3 | VCCx0.5 | \pm 100 | 13.2 | 1000 | 0.5 | V | QFN |
| MCS385K-150B3QFRG | 3.3 | VCCx0.5 | \pm 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 |

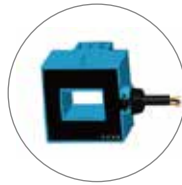


QFN

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 (μs) | Bandwidth(kHz) |
|---------------|-----------|---------|--------------------------|--------------------------|--|--|--------------------|----------------|
| MCK-50BKT5-R | Open Loop | ±5 | 2.5±0.625V, ±1% | 13 | 50 | 100 | 1.3 | 250 |
| MCK-100BKT5-R | Open Loop | ±5 | 2.5±0.625V, ±1% | 13 | 100 | 200 | 2.3 | 250 |
| MCK-200BKT5-R | Open Loop | ±5 | 2.5±0.625V, ±1% | 13 | 200 | 400 | 3.3 | 250 |
| MCK-300BKT5-R | Open Loop | ±5 | 2.5±0.625V, ±1% | 13 | 300 | 600 | 4.3 | 250 |
| MCK-400BKT5-R | Open Loop | ±5 | 2.5±0.625V, ±1% | 13 | 400 | 800 | 5.3 | 250 |
| MCK-600BKT5-R | Open Loop | ±5 | 2.5±0.625V, ±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 (μs) | Bandwidth(kHz) |
|---------------|-----------|---------|--------------------------|--------------------------|--|--|--------------------|----------------|
| MCK-50BKT5-S | Open Loop | ±5 | 2.5±0.625V, ±1% | 13 | 50 | 100 | 7.3 | 250 |
| MCK-100BKT5-S | Open Loop | ±5 | 2.5±0.625V, ±1% | 13 | 100 | 200 | 8.3 | 250 |
| MCK-200BKT5-S | Open Loop | ±5 | 2.5±0.625V, ±1% | 13 | 200 | 400 | 9.3 | 250 |
| MCK-300BKT5-S | Open Loop | ±5 | 2.5±0.625V, ±1% | 13 | 300 | 600 | 10.3 | 250 |
| MCK-400BKT5-S | Open Loop | ±5 | 2.5±0.625V, ±1% | 13 | 400 | 800 | 11.3 | 250 |
| MCK-600BKT5-S | Open Loop | ±5 | 2.5±0.625V, ±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 _{PMV}) (A) | Measuring Current Range (I _{PMV}) (A) | Response Time (μs) | Bandwidth (kHz) |
|-------------|-----------|-----------|--------------------------|--------------------------|---|---|--------------------|-----------------|
| MCK-50EKA | Open Loop | ±12 ~ ±15 | 4 | 25 | 50 | 100 | 5 | 50 |
| MCK-100EKA | Open Loop | ±12 ~ ±15 | 4 | 25 | 100 | 200 | 5 | 50 |
| MCK-200EKA | Open Loop | ±12 ~ ±15 | 4 | 25 | 200 | 400 | 5 | 50 |
| MCK-300EKA | Open Loop | ±12 ~ ±15 | 4 | 25 | 300 | 600 | 5 | 50 |
| MCK-400EKA | Open Loop | ±12 ~ ±15 | 4 | 25 | 400 | 800 | 5 | 50 |
| MCK-500EKA | Open Loop | ±12 ~ ±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 _{PMV}) (A) | Measuring Current Range (I _{PMV}) (A) | Response Time (μs) | Bandwidth (kHz) |
|-------------|-----------|---------|--------------------------|--------------------------|---|---|--------------------|-----------------|
| MCK-100EKB | Open Loop | ±15 | 4 | 18 | 100 | 300 | 5 | 20 |
| MCK-200EKB | Open Loop | ±15 | 4 | 18 | 200 | 600 | 5 | 20 |
| MCK-300EKB | Open Loop | ±15 | 4 | 18 | 300 | 900 | 5 | 20 |
| MCK-500EKB | Open Loop | ±15 | 4 | 18 | 500 | 1500 | 5 | 20 |
| MCK-1000EKB | Open Loop | ±15 | 4 | 18 | 1000 | 2000 | 5 | 20 |
| MCK-2000EKB | Open Loop | ±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 _{IN}) (A) | Measuring Current Range (I _{IN}) (A) | Response Time (μs) | Bandwidth(kHz) |
|-------------|-----------------|---------|---------------------------------------|--------------------------|--|--|--------------------|----------------|
| MED-0.3LCM | Leakage Current | ±5 | 2.5+2*I _{IN} /I _p | 25 | 0.3 | 0~±0.6 | | 0.7 |
| MED-0.6LCM | Leakage Current | ±5 | 2.5+2*I _{IN} /I _p | 25 | 0.6 | 0~±0.85 | | 0.7 |
| MED-1LCM | Leakage Current | ±5 | 2.5+2*I _{IN} /I _p | 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 _{IN}) (A) | Sensor Sen. (mV/A) | Measuring Current Range (I _{IN}) (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 _{PN}) (A) | Measuring Current Range (I _{PN}) (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 _{PN}) (A) | Measuring Current Range (I _{PN}) (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 |



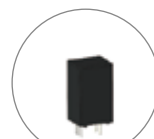
MCB-CAS Series



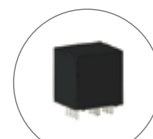
MCB-CASR Series



MCB-CKSR Series



MCK-LY Series



MCK-LY Series

Power-Saving Module

Solenoid valve Power Saving Series

| Series | Input (V) | Power saving ratio setting | Power saving convert time (ms) | Operating Temp. | Start Power(W) | Saving Power(W) | Type |
|--------|-----------|----------------------------|--------------------------------|-----------------|----------------|-----------------|---------------|
| PAB | 12/24VDV | adj | 300~999 | -20 ~ +60 | 15 ~ 60 | 4 ~ 8 | JB-DIN43650 A |
| PBB | 12/24VDV | adj | 1~999 | -20 ~ +60 | 4~7 | 1~ 4 | JB-DIN43650 B |
| PA | 12/24VDV | adj | 300~999 | -20 ~ +60 | 15 ~ 60 | 4 ~ 8 | PCBA |
| PB | 12/24VDV | adj | 1~999 | -20 ~ +60 | 4 ~7 | 1~ 4 | PCBA |
| PD | 12/24VDV | adj | 300~999 | -20 ~ +60 | 15 ~ 60 | 4 ~ 8 | External |



PAB series



PBB series



PA series



PB series



PD series

Magnetic Switch Module

AMR Sensor Series Module

| Series | Input (V) | Switching current | Leakage current | Operating Temp. | Internal Voltage Drop | Switching Frequency | Type |
|----------------|--------------|-------------------|-----------------|-----------------|-----------------------|---------------------|------------------------------------|
| AIS series | 10~30VDC | 100mA Max. | 0.06mA Max. | -10 ~ +70 | 3.5V Max. | 1000Hz | EG/EH/EE - Electronic - 2-Wire |
| AIS series-NPN | 5~30VDC | 200mA Max. | 0.01mA Max. | -10 ~ +70 | 0.7V Max. | 1000Hz | EG/EH/EE - Electronic - 3-Wire NPN |
| AIS series-PNP | 5~30VDC | 200mA Max. | 0.01mA Max. | -10 ~ +70 | 0.7V Max. | 1000Hz | EG/EH/EE - Electronic - 3-Wire PNP |
| AIS series-RW | 5~240 VAC/DC | 100mA Max. | None | -10 ~ +70 | 2.5V Max. | 200Hz | CG/CH - Reed Switch - 2-Wire |



AIS series



AIS series-NPN



AIS series-PNP



AIS series-RW

AMR Switch Series finished product

| Series | Input (V) | Switching current | Leakage current | Operating Temp. | Internal Voltage Drop | Switching Frequency | Type |
|----------------|--------------|-------------------|-----------------|-----------------|-----------------------|---------------------|------------------------------------|
| AIS series | 10~30VDC | 100mA Max. | 0.06mA Max. | -10 ~ +70 | 3.5V Max. | 1000Hz | EG/EH/EE - Electronic - 2-Wire |
| AIS series-NPN | 5~30VDC | 200mA Max. | 0.01mA Max. | -10 ~ +70 | 0.7V Max. | 1000Hz | EG/EH/EE - Electronic - 3-Wire NPN |
| AIS series-PNP | 5~30VDC | 200mA Max. | 0.01mA Max. | -10 ~ +70 | 0.7V Max. | 1000Hz | EG/EH/EE - Electronic - 3-Wire PNP |
| AIS series-RW | 5~240 VAC/DC | 100mA Max. | None | -10 ~ +70 | 2.5V Max. | 200Hz | CG/CH - Reed Switch - 2-Wire |



AIS series



AIS series-NPN



AIS series-PNP



AIS series-RW

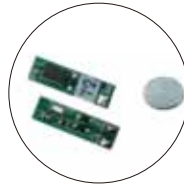
Proximity Switch Module

Hall Sensor Series Module

| Series | Voltage Range | Switching current | Leakage current | Operating Temp. | Sensing Distance | Switching Frequency | Type |
|-------------------|---------------|-------------------|-----------------|-----------------|------------------|---------------------|-----------------------------|
| AIH series-NPN NO | 5~30 VDC | 30V / 200mA | 0.01mA Max. | -10 ~ +70 | 10mm ± 10% | 1000Hz | H8/H12 - Electronic |
| AIH series-NPN NC | 5~30 VDC | 30V / 200mA | 0.01mA Max. | -10 ~ +70 | 10mm ± 10% | 1000Hz | H8/H12 - Electronic |
| AIH series-PNP NO | 5~30 VDC | 30V / 200mA | 0.01mA Max. | -10 ~ +70 | 10mm ± 10% | 1000Hz | H8/H12 - Electronic |
| AIH series-PNP NC | 5~30 VDC | 30V / 200mA | 0.01mA Max. | -10 ~ +70 | 10mm ± 10% | 1000Hz | H8/H12 - Electronic |
| AIH series-RW NO | 6~36 VDC | 100mA | None | -10 ~ +70 | 10mm ± 10% | 200Hz | H8/H12 - RS - 2-Wire |
| AIH series-RW NC | 6~36 VDC | 100mA | None | -10 ~ +70 | 10mm ± 10% | 200Hz | H8/H12 - RS - 2-Wire |
| AIH series-RW NC | 5~30 VDC | 30V / 200mA | 0.01mA Max. | -10 ~ +70 | 10mm ± 10% | 1000Hz | H8/H12 - Electronic -3-Wire |



AIH series-NPN



AIH series-PNP



AIH series-RW

Hall Switch Series finished product

| Series | Voltage Range | Switching current | Leakage current | Operating Temp. | Sensing Distance | Switching Frequency | Type |
|-------------------|---------------|-------------------|-----------------|-----------------|------------------|---------------------|------------------------------|
| AIH series-NPN NO | 5~30 VDC | 30V / 200mA | 0.01mA Max. | -10 ~ +70 | 10mm ± 10% | 1000Hz | H8/H12 - Electronic |
| AIH series-NPN NC | 5~30 VDC | 30V / 200mA | 0.01mA Max. | -10 ~ +70 | 10mm ± 10% | 1000Hz | H8/H12 - Electronic |
| AIH series-PNP NO | 5~30 VDC | 30V / 200mA | 0.01mA Max. | -10 ~ +70 | 10mm ± 10% | 1000Hz | H8/H12 - Electronic |
| AIH series-PNP NC | 5~30 VDC | 30V / 200mA | 0.01mA Max. | -10 ~ +70 | 10mm ± 10% | 1000Hz | H8/H12 - Electronic |
| AIH series-RW NO | 6~36 VDC | 100mA | None | -10 ~ +70 | 10mm ± 10% | 200Hz | H8/H12 - RS - 2-Wire |
| AIH series-RW NC | 6~36 VDC | 100mA | None | -10 ~ +70 | 10mm ± 10% | 200Hz | H8/H12 - RS - 2-Wire |
| AIH series-RW NC | 5~30 VDC | 30V / 200mA | 0.01mA Max. | -10 ~ +70 | 10mm ± 10% | 1000Hz | H8/H12 - Electronic - 3-Wire |



AIH series-NPN



AIH series-PNP



AIH series-RW

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

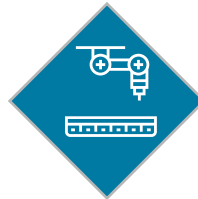


Automotive

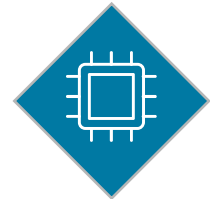
R&D Strengths



**Custom Made
Capability**



**Focus CMOS
Technology**



**Hall IC
MEMS Focus**

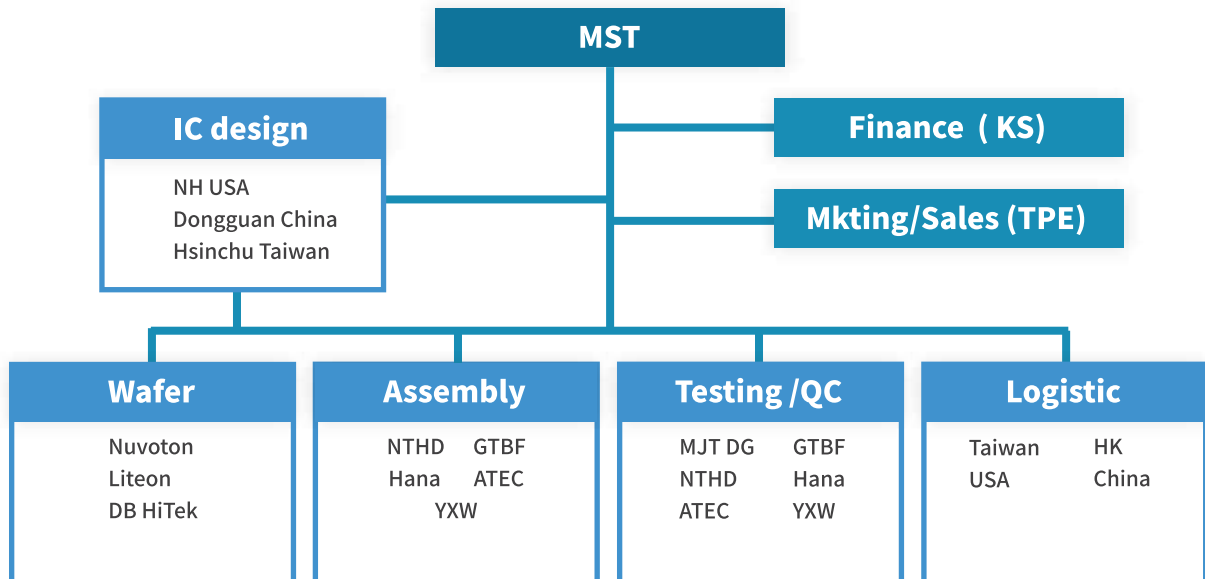


**Advanced
Testing Skill**



**Strong
FAE Support**

MST Manufacturing



QA



Discipline & 6S Audits

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



Product Audit

Customer product(based 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 (based on Control Plan) will be audited every **week based** on different customers.

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

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Product Selection Guide

www.magnesensor.com