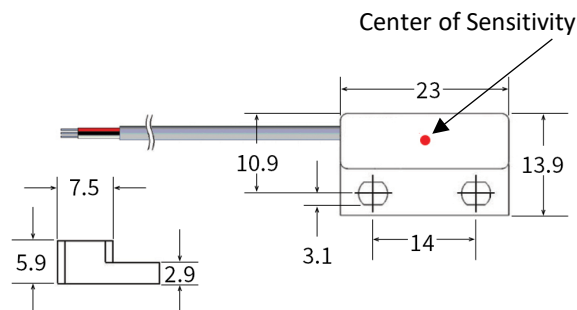


MH04 Series Micro-Power Hall Sensor

- Hall Effect Sensors offer solid state reliability, low power consumption, and consistent activation points over a wide temperature range in a rugged and environmentally isolated package.
- Micro-Power versions operate on 2.5-3.5V battery voltage with only 5µA average supply current vs. the industry average of 5mA
- Custom options include: output- switch, latch, etc., high temperature resistance, package design and much more.



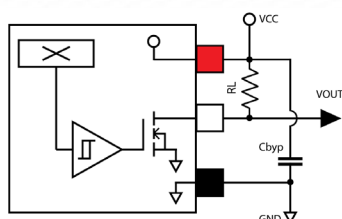
Part Description:

MH04-10S-300W

Series	Hall Model	Hall Function	Cable Length (mm)	Termination
MH04	10 (Micro-Power)*, 11 (Standard) *Micro-Power version only available as switch function	S (Switch) L (Latch)	300	W = 5mm Stripped & Tinned

Electrical & Environmental Characteristics		Micro-Power Switch			Standard Switch & Latch			Unit
Specification	Conditions	Min	Typ	Max	Min	Typ	Max	
Supply Voltage	Operating	2.5	2.75	3.5	3	-	24	V
Output Leakage Current	V _{out} = Max Voltage	-	< 1	1	-	-	-	µA
Output On Voltage		-	100	300	-	185	500	mV
Awake Time		-	45	90	-	-	-	µs
Period		-	45	90	-	-	-	Ms
Duty Cycle		-	0.1	-	-	-	-	%
Chopping Frequency		-	340	-	-	800	-	kHz
Supply Current	Chip Awake	-	-	2	-	-	4	mA
	Chip Asleep	-	-	8	-	-	-	µA
	V _{cc} = 3.5V	-	6.7	10	-	-	-	µA
	V _{cc} = 12V	-	-	-	-	-	4	mA
Operating Temperature	*Higher temperature versions available	-40	-	+85*	-40	-40	+85*	C
Storage Temperature		-65	-	+105	-65	-65	+105	C

Magnetic Characteristics		Micro-Power Switch		Standard Switch	Standard Latch	Unit
Specification	Conditions	Typ		Typ	Typ	
Operation Point	V _{out} = Low (Output On)	37		35	22	G
Release Point	V _{out} = High (Output Off)	31		25	-23	G
Hysteresis		6		10	45	G

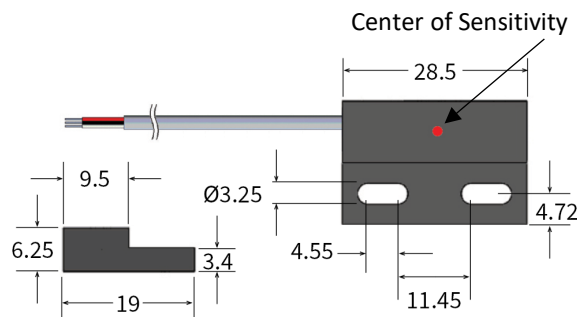


Notes:

- Add external pull-up resistor (RL) for sinking output between VCC and VOUT.
- Add external bypass capacitor (CBYP) close to the sensor to reduce external noise as needed.

MH21 Series Micro-Power Hall Sensor

- Hall Effect Sensors offer solid state reliability, low power consumption, and consistent activation points over a wide temperature range in a rugged and environmentally isolated package.
- Micro-Power versions operate on 2.5-3.5V battery voltage with only 5µA average supply current vs. the industry average of 5mA
- Custom options include: output- switch, latch, etc., high temperature resistance, package design and much more.



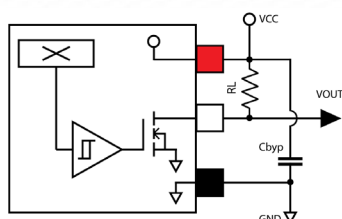
Part Description:

MH21-10S-300W

Series	Hall Model	Hall Function	Cable Length (mm)	Termination
MH21	10 (Micro-Power)*, 11 (Standard) *Micro-Power version only available as switch function	S (Switch) L (Latch)	300	W = 5mm Stripped & Tinned

Electrical & Environmental Characteristics		Micro-Power Switch			Standard Switch & Latch			Unit
Specification	Conditions	Min	Typ	Max	Min	Typ	Max	
Supply Voltage	Operating	2.5	2.75	3.5	3	-	24	V
Output Leakage Current	V _{out} = Max Voltage	-	< 1	1	-	-	-	µA
Output On Voltage		-	100	300	-	185	500	mV
Awake Time		-	45	90	-	-	-	µs
Period		-	45	90	-	-	-	Ms
Duty Cycle		-	0.1	-	-	-	-	%
Chopping Frequency		-	340	-	-	800	-	kHz
Supply Current	Chip Awake	-	-	2	-	-	4	mA
	Chip Asleep	-	-	8	-	-	-	µA
	V _{cc} = 3.5V	-	6.7	10	-	-	-	µA
	V _{cc} = 12V	-	-	-	-	-	4	mA
Operating Temperature	*Higher temperature versions available	-40	-	+85*	-40	-40	+85*	C
Storage Temperature		-65	-	+105	-65	-65	+105	C

Magnetic Characteristics		Micro-Power Switch		Standard Switch	Standard Latch	Unit
Specification	Conditions	Typ		Typ	Typ	
Operation Point	V _{out} = Low (Output On)	37		35	22	G
Release Point	V _{out} = High (Output Off)	31		25	-23	G
Hysteresis		6		10	45	G



Notes:

- Add external pull-up resistor (RL) for sinking output between VCC and VOUT.
- Add external bypass capacitor (CBYP) close to the sensor to reduce external noise as needed.