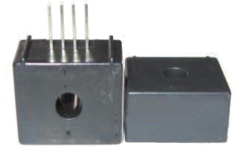


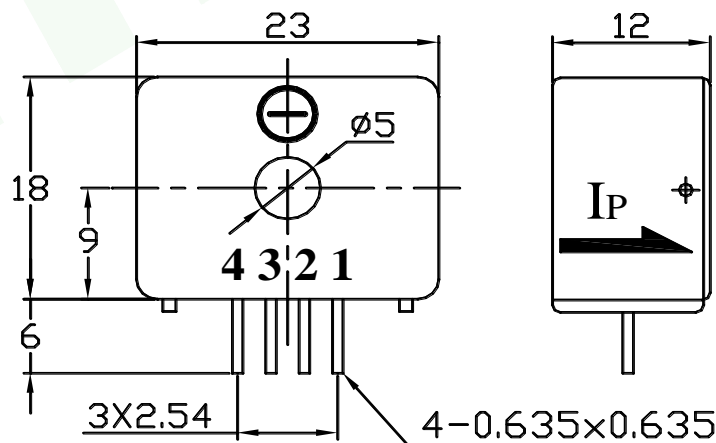
MCS040G Hall-effect Current Sensor Series

Open loop current sensor based on the principle of Hall-effect. It can be used for measuring AC,DC,pulsed and mixed current.



Electrical characteristics						
	Type	MCS010G	MCS020G	MCS030G	MCS040G	
I_{PN}	Primary nominal input current	10	20	30	40	A
I_P	Measuring range of primary current	$0 \sim \pm 20$	$0 \sim \pm 40$	$0 \sim \pm 60$	$0 \sim \pm 80$	A
V_{OUT}	Nominal output voltage	$\pm 1 (\pm 1\%)$				V
V_C	Supply voltage	$+12 (\pm 5\%)$				V
I_C	Current consumption	$V_C = \pm 15V$	< 20			mA
V_d	Insulation voltage	AC/50Hz/1min	2.5			kV
ε_L	Linearity	< 1				%FS
V_0	Offset voltage	$T_A = 25^\circ C$	$< \pm 20$			V
V_{OM}	Residual voltage	$I_{PN} \rightarrow 0$	$< \pm 10$			mV
V_{OT}	Thermal drift of V_0	$I_{PN} = 0$	$T_A = -25 \sim +85^\circ C$	$< \pm 1$		mV/ $^\circ C$
T_R	Response time	≤ 3				ms
f	Frequency bandwidth(-3dB)	DC~20				kHz
T_A	Ambient operating temperature	$-25 \sim +70$				$^\circ C$
T_S	Ambient storage temperature	$-40 \sim +85$				$^\circ C$
R_L	Load resistance	≥ 10				K Ω
	Standard	Q/3201CHGL02-2007				

Dimensions of drawing (mm)



Elucidation: 1:+15V 2:0V(GND) 3: V_{OUT} 4:-15V

Remarks

- Incorrect connection may lead to the damage of the sensor.
- V_{OUT} is positive when the I_P flows in the direction of the arrow.