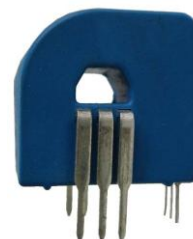




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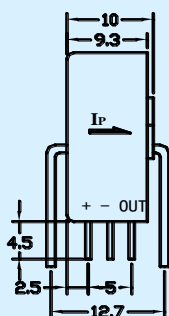
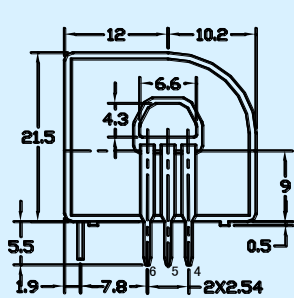
CSM050NPT Hall-effect Current Sensor Series



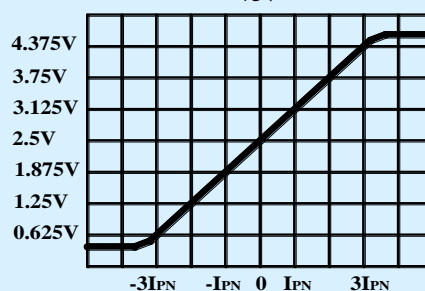
Closed loop current sensor based on the principle of Hall-effect. It can be used for measuring AC,DC,pulsed and mixed current.

Electrical characteristics						
	Type	CSM006NPT	CSM015NPT	CSM025NPT	CSM050NPT	
I_{PN}	Primary nominal input current	6	15	25	50	A
I_P	Measuring range of primary current	0~±19.2	0~±48	0~±80	0~±150	A
C_S	Circle quantity of secondary coil	960±1	1200±1	2000±2	2000±2	
R_{IM}	Internal measuring resistance	100±0.5%	50±0.5%	50±0.5%	25±0.5%	Ω
V_{OUT}	Secondary nominal output voltage	0.625±0.5%	0.625±0.5%	0.625±0.5%	0.625±0.5%	V
V_C	Supply voltage	+5(±5%)				V
I_C	Current consumption	$I_P=0$	<20			mA
V_D	Insulation voltage	AC/50Hz/1min	2.5			kV
ϵ_L	Linearity	<0.1			%FS	
X	Accuracy	$T_A=25^\circ C$	<±0.7			%
V_O	Zero offset voltage	$I_P=0 T_A=25^\circ C$	<2.5±1%			V
V_{OT}	Thermal drift of V_0	$I_P=0 T_A=-40\sim+85^\circ C$	±0.5			mV/°C
di/dt	di/dt accurately followed	>50			A/μs	
T_R	Response time	<500			ns	
f	Frequency bandwidth(-1dB)	DC~200			kHz	
T_A	Ambient operating temperature	-40~+85			°C	
T_S	Ambient storage temperature	-40~+100			°C	
	Standard	Q/3201CHGL02-2007				

Dimensions of drawing (mm)



Input current--Output voltage
+5V



Elucidation: ++:5V --:0V(GND) OUT:V_{OUT}

Primary connection

Primary coil	Primary nominal input current I_{PN} (A)	Secondary nominal voltage V_{OUT} (V)	Primary resistance (mΩ)	Primary inductance (uH)	Connection
1	±6(±15;±25;±50)	2.5±0.625	0.18	0.013	
2	±3(±7.5;±12.5;±25)	2.5±0.625	0.81	0.05	
3	±2(±5;±8.3;±16.6)	2.5±0.625	1.62	0.12	

Remarks

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