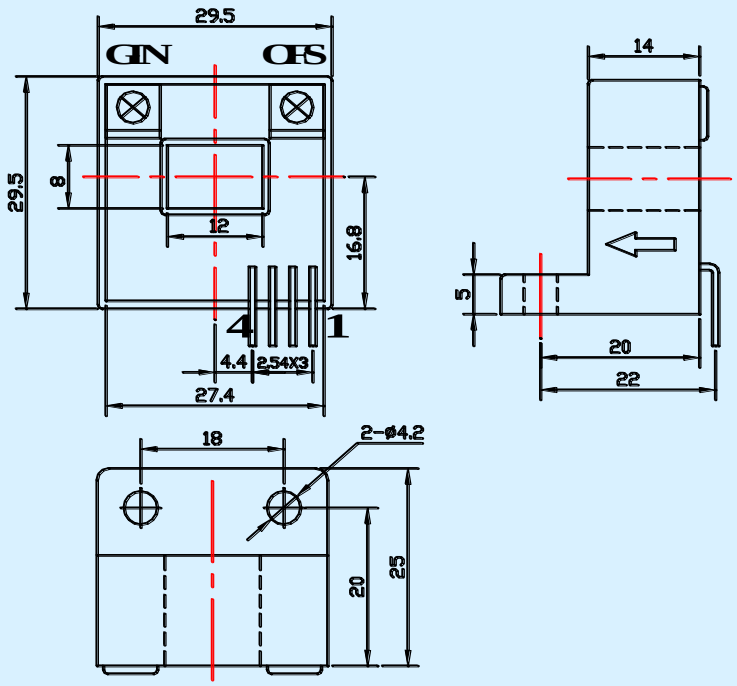
CS200YT5 Hall-effect Current Sensor Series

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	CS050YT5	CS100YT5	CS150YT5	CS200YT5	
I_{PN}	Primary nominal input current	50	100	150	200	A
I_P	Measuring range of primary current	0~±100	0~±200	0~±300	0~±400	A
V_{OUT}	Nominal output voltage	1±1%				V
V_C	Supply voltage	+5(±5%)				V
I_C	Current consumption	<20				mA
V_D	Insulation voltage	AC/50Hz/1min	2.5			kV
ε_L	Linearity	<1				%FS
V_O	Offset voltage	T_A=25℃	2.5 ±1%			V
V_{OM}	Residual voltage	I_{PN}→0	<±20			mV
V_{OT}	Thermal drift of V_0	I_P=0 T_A=-25~+70℃	<±0.5			mV/℃
T_R	Response time	≤3				μs
f	Frequency bandwidth(-3dB)	DC~20				kHz
T_A	Ambient operating temperature	–25~+85				℃
T_S	Ambient storage temperature	–40~+100				℃
R_L	Load resistance	≥10				KΩ
	Standard	Q/320115QHJ01-2010				

Dimensions of drawing (mm)



Elucidation: 1:+5V 2: 0V(GND) 3: V_{OUT} 4:ref (2.5V) OFS:Zero adjustment GIN:Gain adjustment

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.