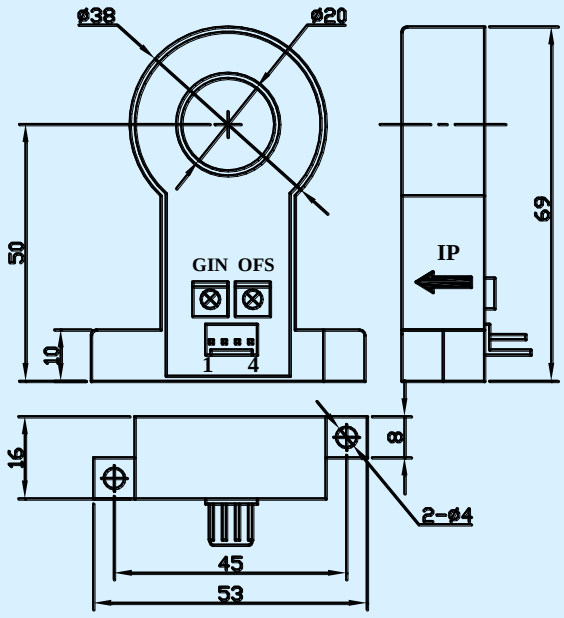
CS500E Hall-effect Current Sensor Series

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	CS050E	CS100E	CS200E	CS300E	CS400E	CS500E	
I_{PN}	Primary nominal input current	50	100	200	300	400	500	A
I_P	Measuring range of primary current	0~±100	0~±200	0~±400	0~±600	0~±800	0~±800	A
V_{OUT}	Nominal output voltage	4±1%						V
V_C	Supply voltage	±12~±15(±5%)						V
I_C	Current consumption	V_C=±15V		<20				mA
V_D	Insulation voltage	AC/50Hz/1min		2.5				kV
ε_L	Linearity	<1						%FS
V_O	Offset voltage	T_A=25℃		<±25				mV
V_{OM}	Residual voltage	I_{PN}→0		<±20				mV
V_{OT}	Thermal drift of V_0	I_P=0 T_A=–25~+85℃		<±1				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/3201CHGL02-2007						

Dimensions of drawing (mm)



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