

MCS500ET2 Hall-effect Current Sensor Series

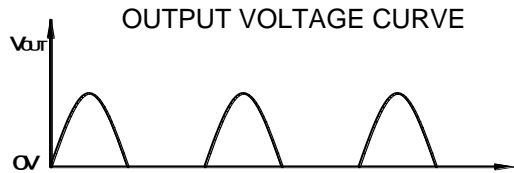
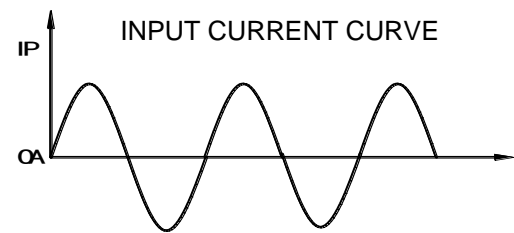
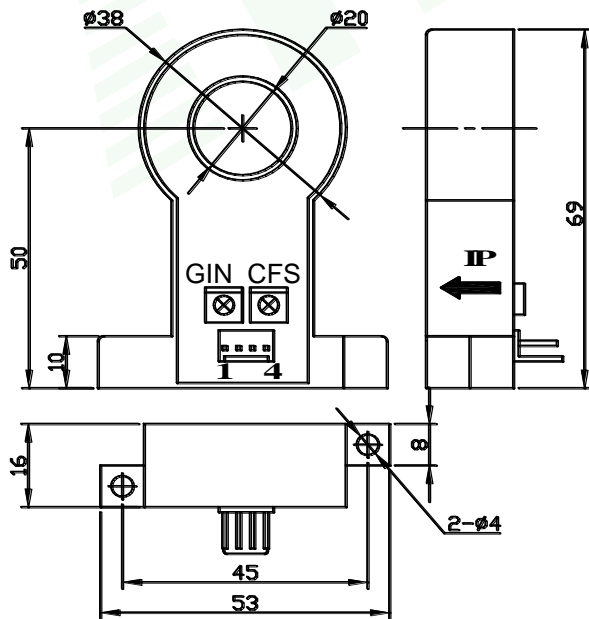
Open loop current sensor based on the principle of Hall-effect. It can be used for measuring AC,DC,pulsed and mixed current.



Electrical characteristics

Type	MCS050 ET2	MCS050 ET2	MCS050 ET2	MCS050 ET2	MCS050E T2	MCS050E T2			
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		$T_A=25^\circ C$		<20			mV	
V_{OM}	Residual voltage		$I_{PN} \rightarrow 0$		<20			mV	
V_{OT}	Thermal drift of V_O		$I_P=0$		$T_A = -25 \sim +85^\circ C$		<±1	mV/°C	
T_R	Response time		≤7					μs	
f	Frequency bandwidth(-3dB)		DC~20					kHz	
T_A	Ambient operating temperature		-25~+85					°C	
T_S	Ambient storage temperature		-40~+100					°C	
R_L	Load resistance		≥10					KΩ	
Standard	Q/320115QHKJ01-2010								

Dimensions of drawing (mm)



Elucidation: 1:+15V 2:0V 3:V 4:0V OFS:Z GIN:G t

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.

