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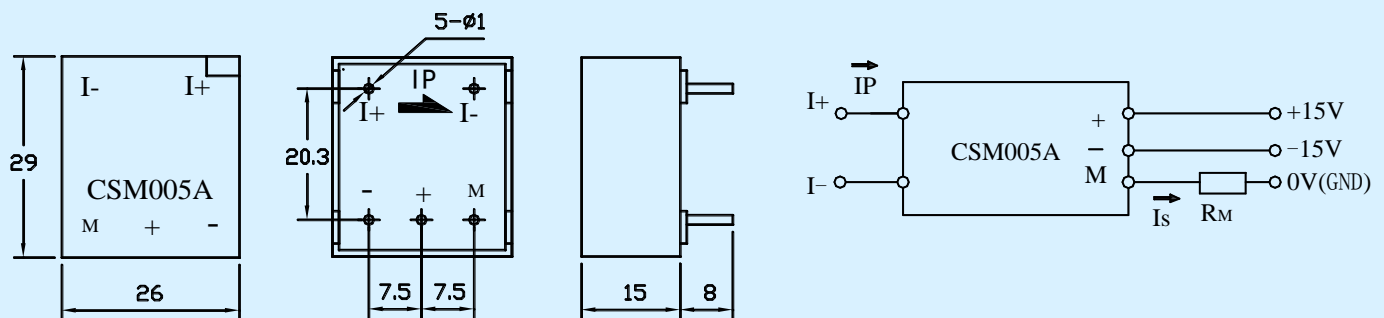
CSM005A Hall-effect Current Sensor Series



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	CSM001A	CSM002A	CSM003A	CSM005A	
I_{PN}	Primary nominal input current	1	2	3	5	A
I_P	Measuring range of primary current	0~±2	0~±4	0~±6	0~±10	A
I_{SN}	Secondary nominal output current	25	25	25	25	mA
K_N	Conversion ratio	25:1000	12:960	8:960	5:1000	
R_M	Measuring resistance ($V_C=±15V$)	$±I_{PN \max}$	100~460	$±I_P \max$	100~205	Ω
V_C	Supply voltage	±12~±15(±5%)				V
I_C	Current consumption	$V_C=±15V$	10+ I_S			mA
V_D	Insulation voltage	AC/50Hz/1min	2.5			kV
ϵ_L	Linearity	<0.2				%FS
X	Accuracy	$T_A=25^\circ C$ $V_C=±15V$	<±0.7			%
I_O	Zero offset current	$T_A=25^\circ C$	<±0.15			mA
I_{OM}	Residual current	$I_P \rightarrow 0$	<±0.15			mA
I_{OT}	Thermal drift of I_O	$I_P=0$ $T_A=-25\sim+85^\circ C$	<±0.5			mA
T_R	Response time	<1				μs
f	Frequency bandwidth(-1dB)	DC~100				kHz
T_A	Ambient operating temperature	-25~+85				°C
T_S	Ambient storage temperature	-40~+100				°C
R_S	Secondary coil resistance ($T_A=85^\circ C$)	50				Ω
	Standard	Q/3201CHGL02-2007				

Dimensions of drawing (mm) Connection



Elucidation: ++: +15V -: -15V M: I_{OUT}

Remarks

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