



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



Hall Effect Current Sensor S21S180D15JN



Features:

- Closed Loop type
- Current or voltage output
- Conversion ratio K = 1:4000
- Panel mounting with JST connector
- Aperture
- Insulated plastic case according to UL94V0

Advantages:

- Excellent accuracy and linearity
- Low temperature drift
- Wide frequency bandwidth
- No insertion loss
- High Immunity to external interferences
- Optimised response time
- Current overload capability

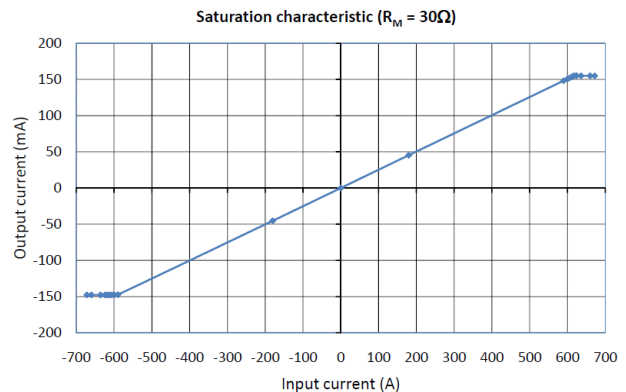
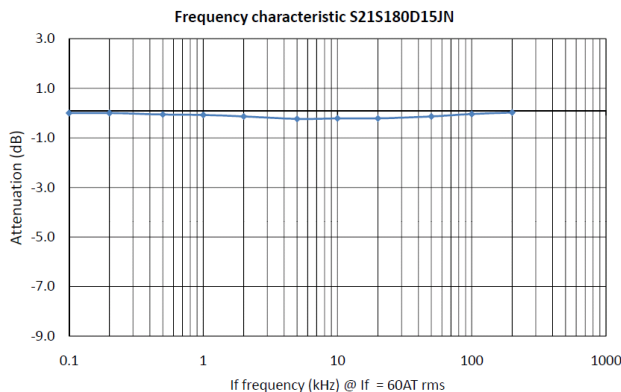
Specifications

$T_A=25^{\circ}\text{C}$, $V_{CC}=\pm 15\text{V}$

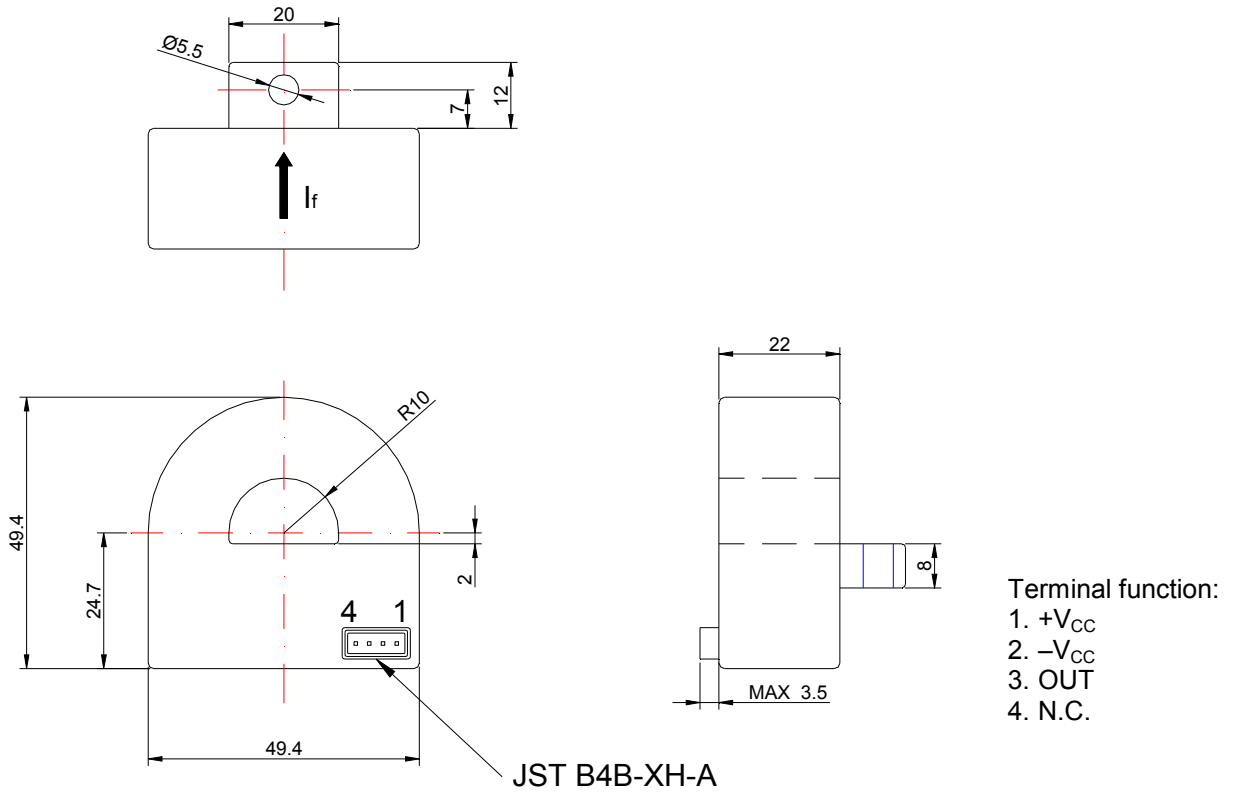
Parameters	Symbol	S21S180D15JN
Rated Current	I_f	180A
Maximum Current ¹	I_{fmax}	$\pm 540\text{A}$
Measuring resistance $I_f = \pm A_{DC}$ @ 80°C	R_M	$5\Omega \sim 30\Omega$
Conversion Ratio	K	1 : 4000
Output Current	I_{OUT}	$\pm 45\text{mA}$
Offset Current	I_{OE}	$\pm 0.2\text{mA}$ @ $I_f = 0\text{A}$
Output Current Accuracy	X	$I_{OUT} \pm 1\%$ (without I_{OE})
Output Linearity	ϵ_L	$\pm 0.3\%$ @ I_f
Supply Voltage ²	V_{CC}	$\pm 15\text{V} \pm 5\%$
Consumption Current	I_{CC}	$\leq \pm 16\text{mA}$ (Output Current is not included)
Response Time ³	t_r	$\leq 1\mu\text{s}$ @ $di/dt = 100\text{A} / \mu\text{s}$
Output Temperature Characteristic	$T_{CI_{OUT}}$	$\pm 0.02\% / ^{\circ}\text{C}$ @ I_f
Offset Temperature Characteristic	$T_{CI_{OE}}$	$\pm 0.01\text{mA} / ^{\circ}\text{C}$ @ $I_f = 0\text{A}$
Hysteresis allowance	I_{OH}	$\leq 0.2\text{mA}$ ($0\text{A} \leftrightarrow I_f$)
Insulation Withstanding	V_d	AC 2500V, for 1minute (sensing current 0.5mA), inside of aperture \leftrightarrow terminal
Insulation Resistance	R_{IS}	$> 500\text{M}\Omega$ (@ DC 500V) inside of aperture \leftrightarrow terminal
Frequency Bandwidth	f	DC .. 200 kHz
Secondary Coil Resistance	R_s	48Ω (typical)
Operating Temperature	T_A	$-30^{\circ}\text{C} \sim +80^{\circ}\text{C}$
Storage Temperature	T_s	$-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$

¹ @ $V_{CC}=\pm 15\text{V}$ for 10 Seconds — ² Rated Current is restricted by V_{CC} — ³ Time between 10% input current full scale and 90% of sensor output full scale

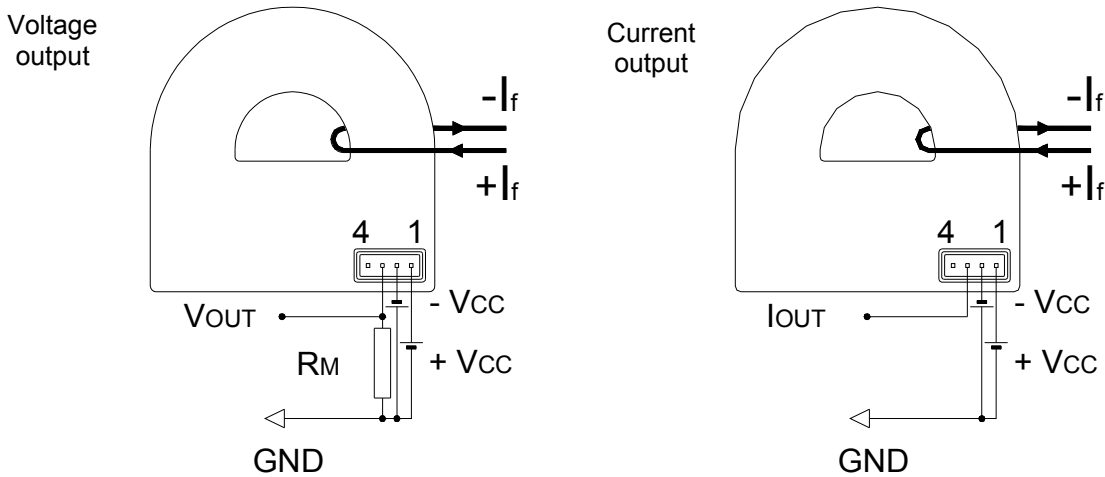
Electrical Performances



Mechanical dimensions in mm



Electrical connection diagram



Package & Weight Information

Weight	Pcs/box	Pcs/carton	Pcs/pallet
71g	25	100	1600