



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 Sensors L12P***D15 Series



Features:

- Open Loop type
- Printed circuit board mounting
- Bipolar power supply
- Extended measurement range
- Insulated plastic case according to UL94V0

Advantages:

- Excellent accuracy
- Very good linearity
- Low temperature drift
- No insertion loss
- High Immunity To External Interference
- Current overload capability

Specifications

 $T_A=25^{\circ}\text{C}, V_{CC}=\pm 15\text{V}, R_L=10\text{k}\Omega$

Parameters	Symbol	L12P025D15
Primary nominal current	I_f	25A
Saturation current	I_{fmax}	$\geq \pm 75\text{A}$
Rated output voltage	V_o	$4\text{V} \pm 0.040\text{V}$ (at I_f)
Offset voltage ¹	V_{of}	$\leq \pm 0.040\text{V}$ (at $I_f=0\text{A}$)
Output linearity ² (0A~ I_f)	ϵ_L	$\leq \pm 1\%$ (at I_f)
Power supply voltage ³	V_{CC}	$\pm 12\text{V} \pm 5\% \sim \pm 15\text{V} \pm 5\%$
Consumption current	I_{CC}	$\leq \pm 15\text{mA}$
Response time ⁴	t_r	$\leq 3\mu\text{s}$ (at $di/dt = I_f / \mu\text{s}$)
Thermal drift of gain ⁵	$TcVo$	$\leq \pm 0.1\% / ^{\circ}\text{C}$
Thermal drift of offset	$TcVof$	$\leq \pm 3.0\text{mV} / ^{\circ}\text{C}$
Hysteresis error	V_{OH}	$\leq 25\text{mV}$ (at $I_f = 0\text{A} \rightarrow I_f \rightarrow 0\text{A}$)
Insulation voltage	V_d	AC 2500V for 1minute (sensing current 0.5mA), primary conductor \leftrightarrow terminal
Insulation resistance	R_{IS}	$\geq 500\text{M}\Omega$ (at DC500V), primary conductor \leftrightarrow terminal
Ambient operation temperature	T_A	$-30^{\circ}\text{C} \sim +80^{\circ}\text{C}$
Ambient storage temperature	T_S	$-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$

¹ After removal of core hysteresis- ² Without offset - ³ Maximum current is restricted by V_{CC} - ⁴ Time between 10% input current full scale and 90% of sensor output full scale ⁵ Without Thermal drift of offset

Electrical Performance



