



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

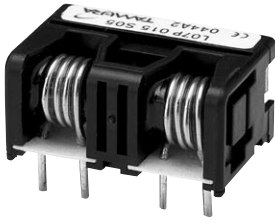
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Hall Effect Current Sensors L07P***D15 Series



Features:

- Open Loop type
- Dual integrated primary
- Bipolar power supply
- Printed circuit board mounting
- Insulated plastic case according to UL94V0
- UL Recognition

Advantage:

- Excellent accuracy and linearity
- Wide nominal current range
- Low temperature drift
- Wide frequency bandwidth
- No insertion loss
- High Immunity To External Interference
- Optimised response time
- Current overload capability

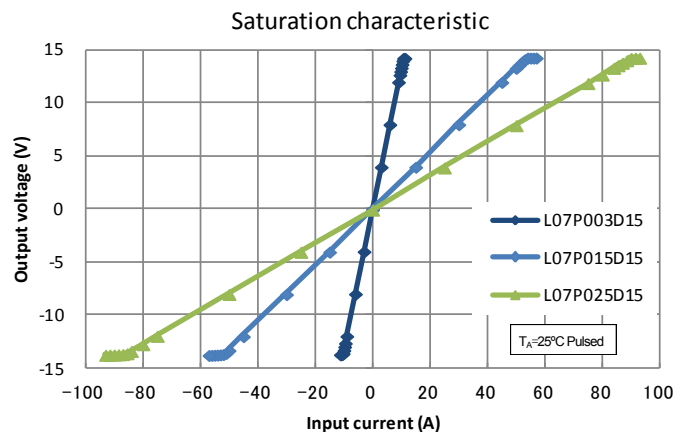
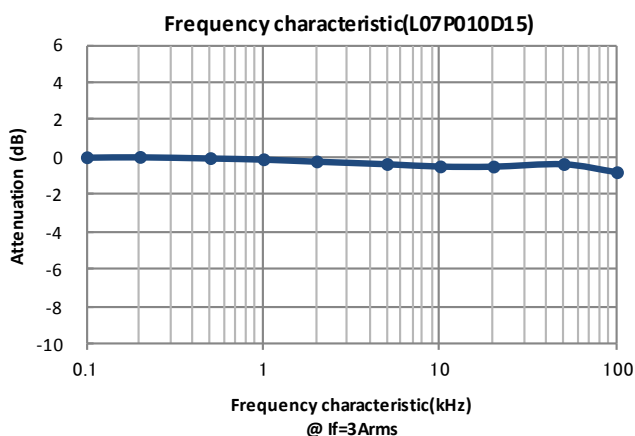
Specifications

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

Parameters	Symbol	L07P003D15	L07P005D15	L07P010D15	L07P015D15	L07P020D15	L07P025D15	L07P030D15
Primary nominal current	I_f	3A	5A	10A	15A	20A	25A	30A
Saturation current	I_{fmax}	$\geq \pm I_f \times 3$						
Rated output voltage	V_o	$4\text{V} \pm 0.060\text{V}$ (at I_f)						
Offset voltage ¹	V_{of}	$\leq \pm 0.060\text{V}$ (at $I_f = 0\text{A}$)						
Output linearity ² (0A~ I_f)	ϵ_L	$\leq \pm 1\%$ (at I_f)						
Power supply voltage	V_{CC}	$\pm 15\text{V} \pm 5\%$						
Consumption current	I_c	$\leq \pm 30\text{mA}$						
Response time ³	t_r	$\leq 5\mu\text{s}$ (at $di/dt = I_f / \mu\text{s}$)						
Thermal drift of gain ⁴	$TcVo$	$\leq \pm 0.1\%$ / $^{\circ}\text{C}$						
Thermal drift of offset	$TcVof$	$\leq \pm 2.5\text{mV}$ / $^{\circ}\text{C}$						
Hysteresis error	V_{OH}	$\leq 30\text{mV}$ (at $I_f = 0\text{A} \rightarrow I_f \rightarrow 0\text{A}$)						
Insulation voltage	V_d	AC2000V for 1minute (sensing current 0.5mA), primary \leftrightarrow secondary						
Insulation resistance	R_{IS}	$\geq 500\text{M}\Omega$ (at DC500V), primary \leftrightarrow secondary						
Ambient operation temperature	T_A	$-30^{\circ}\text{C} \sim +80^{\circ}\text{C}$						
Ambient storage temperature	T_S	$-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$						

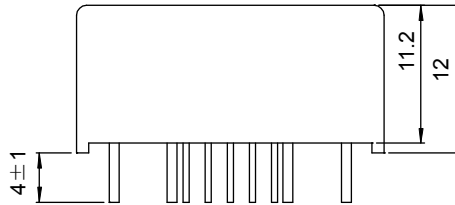
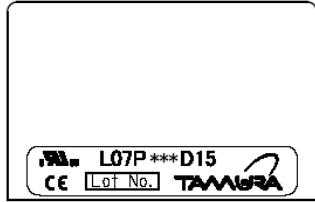
¹ After removal of core hysteresis — ² Without offset — ³ Time between 10% input current full scale and 90% of sensor output full scale. each channel's value, non-measured circuit is set to 0A. — ⁴ Without Thermal drift of offset

Electrical Performances



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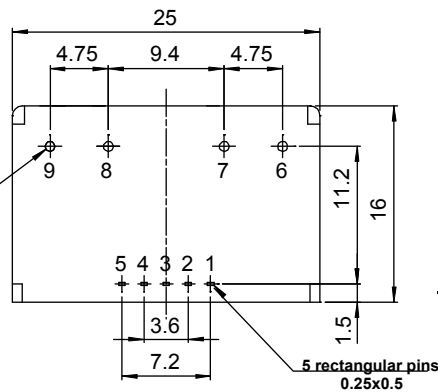
Mechanical dimensions



NOTES

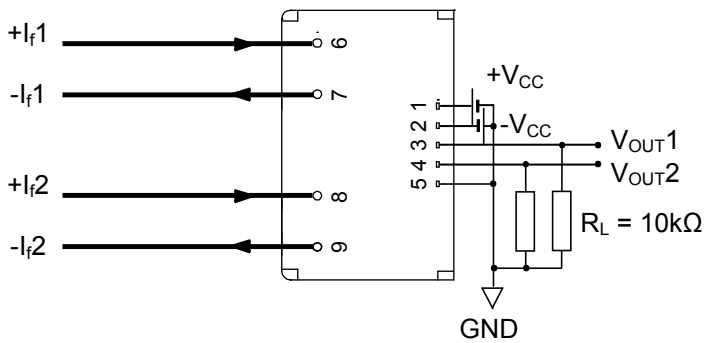
1. Unit is mm
2. Tolerance is 0.5mm

A	φD
3A	φ0.6
5A	φ0.8
10~15A	φ1.4
20~30A	φ1.6



Terminal	Function
1	+V _{CC} (+15V)
2	-V _{CC} (-15V)
3	V _{OUT1}
4	V _{OUT2}
5	GND
6	Primary input current1 (+)
7	Primary input current1 (-)
8	Primary input current2 (+)
9	Primary input current2 (-)

Electrical connection diagram



UL Standard

UL 508 , CSA C22.2 No.14
(UL FILE No.E243511)

- For use in Pollution Degree 2 Environment.
- Maximum Surrounding air temperature rating, 80°C.

Package & Weight Information

Weight	Pcs/box	Pcs/carton	Pcs/pallet
12g	100	400	12800