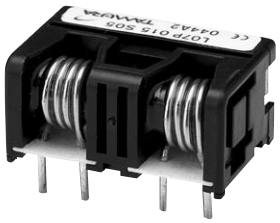
Hall Effect Current Sensors L07P***D15 Series



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

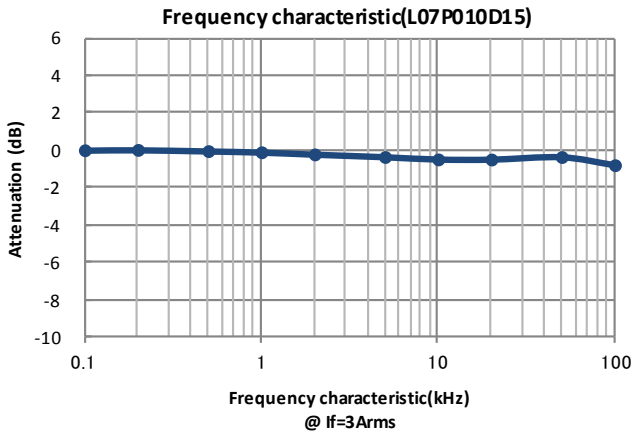
Specifications

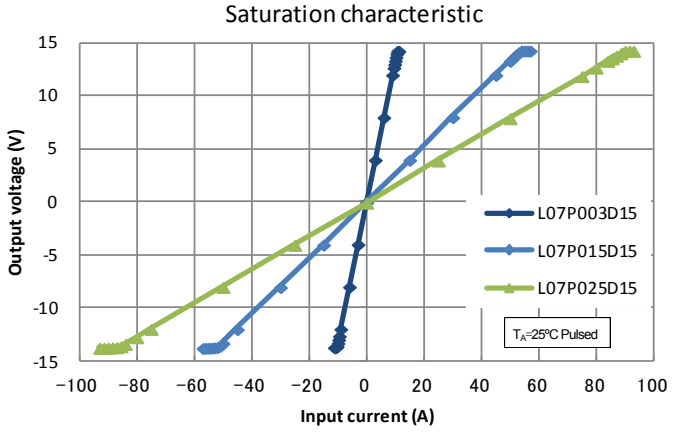
T_A=25ºC, V_{CC}=±15V, R_L=10kΩ

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}	≥ ± I_f x 3						
Rated output voltage	V_o	4V ±0.060V (at If)						
Offset voltage[1]	V_{of}	≤ ±0.060V (at If = 0A)						
Output linearity[2](0A～If)	ε_L	≤ ±1% (at If)						
Power supply voltage	V_{CC}	±15V±5%						
Consumption current	I_C	≤ ±30mA						
Response time[3]	t_r	≤ 5μs (at di/dt = I_f/ μs)						
Thermal drift of gain[4]	TcVo	≤ ±0.1% / ºC						
Thermal drift of offset	TcVof	≤ ±2.5mV / ºC						
Hysteresis error	V_{OH}	≤ 30mV (at If = 0A→If →0A)						
Insulation voltage	V_d	AC2000V for 1minute (sensing current 0.5mA), primary ⇔ secondary						
Insulation resistance	R_{IS}	≥ 500MΩ(at DC500V), primary ⇔ secondary						
Ambient operation temperature	T_A	-30ºC~+80ºC						
Ambient storage temperature	T_S	-40ºC~+85ºC						

[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

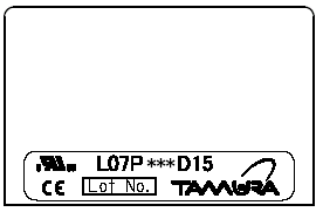
Electrical Performances

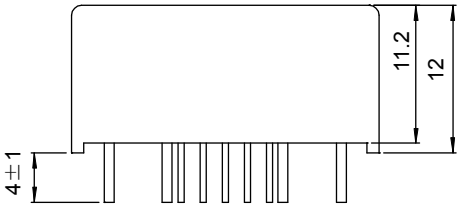




Hall Effect Current Sensors L07P***D15 Series

Mechanical dimensions

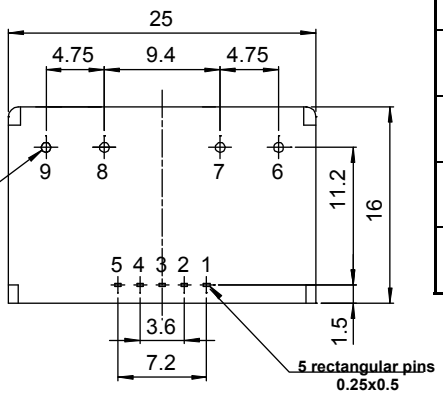




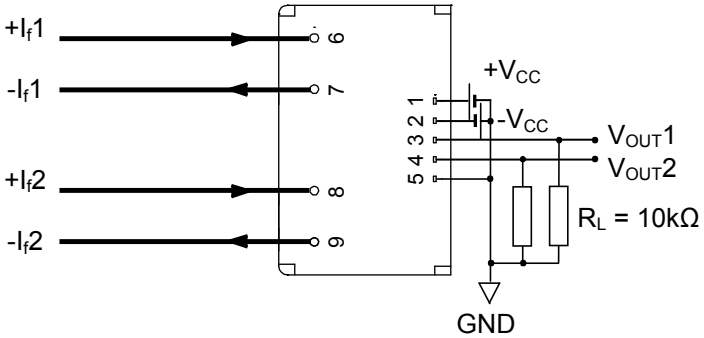
NOTES
1. Unit is mm
2. Tolerance is 0.5mm

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

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



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