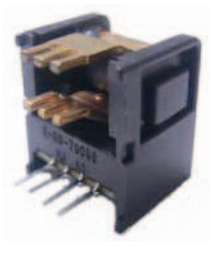
Hall Effect Current Sensors L18P***D15 Series





Features:

- Open Loop type
- Printed circuit board mounting
- Integrated primary
- Voltage output
- Busbar version from 40A to 60A
- Insulated plastic case according to UL94V0

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

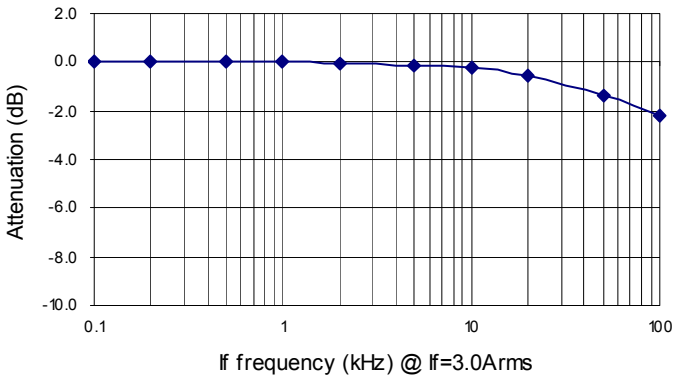
T_A=25°C, V_{CC}=±15V, R_L=10kΩ

Parameters	Symbol	L18P003 D15	L18P005 D15	L18P010 D15	L18P015 D15	L18P020 D15	L18P025 D15	L18P030 D15	L18P040 D15	L18P050 D15	L18P060 D15
Rated current	I_f	±3A	±5A	±10A	±15A	±20A	±25A	±30A	±40A	±50A	±60A
Maximum Current	I_{fmax}	±9A	±15A	±30A	±45A	±60A	±75A	±90A	±120A	±150A	±180A
Output Voltage	V_{OUT}	±4V ±0.040V @ ±I_f							±4V ±0.050V @ ±I_f		
Offset Voltage	V_{OE}	0V ±0.040V @ I_f = 0A							0V ±0.050V @ I_f = 0A		
Accuracy[1]	X	± 1% @ I_f									
Output Linearity[1]	ε_L	≤ ±1% @ I_f									
Power Supply	V_{CC}	±15V ±5%									
Consumption Current	I_C	≤15mA									
Response Time	t_r	≤ 5µs (@ di/dt = 10A / 5µs)									
Output Temperature Characteristic[1]	TCV_{OUT}	≤ ±2.0mV/ °C									
Offset Temperature Characteristic	TCV_{OE}	≤ ±1.5mV/ °C									
Hysteresis error	V_{OH}	≤25mV (0A ⇔ I_f)							≤40mV (0A ⇔ I_f)		
Withstand Voltage	V_d	AC3000V for 1minute (sensing current 0.5mA), inside of aperture ⇔ terminal									
Insulation Resistance	R_{IS}	> 500MΩ (500V DC), inside of aperture ⇔ terminal									
Frequency Bandwidth[2]	f	DC .. 50kHz									
Operating Temperature	T_A	-20°C~+85°C									
Storage Temperature	T_S	-20°C~+85°C									

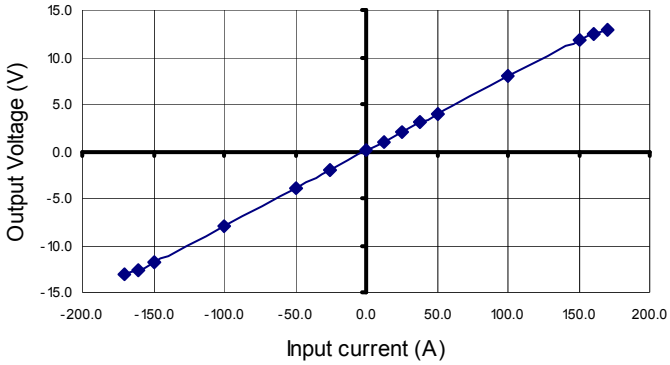
[1] Without offset — [2] Small signal only to avoid excessive heating of magnetic core

Electrical Performances

Frequency Characteristic (L18P050D15)



Saturation Characteristic (L18P050D15)



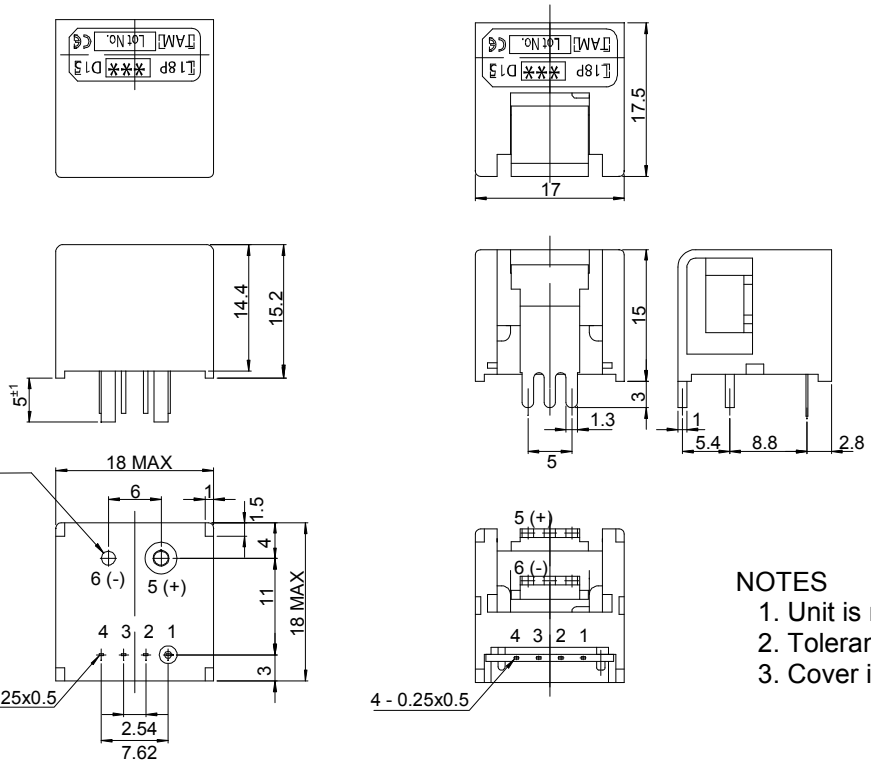
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Hall Effect Current Sensors L18P***D15 Series

Mechanical dimensions in mm

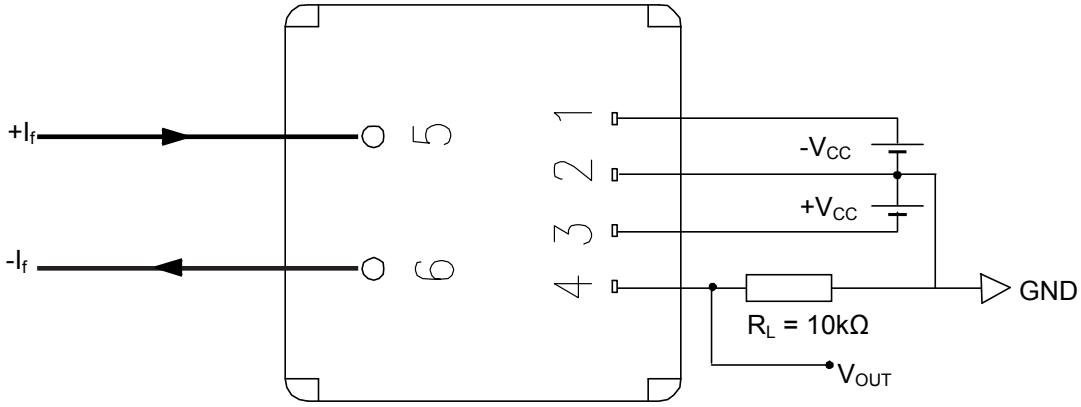
Terminal Pin Identification
1: $-V_{CC}$
2: GND
3: $+V_{CC}$
4: Output
5: Primary input current (+)
6: Primary input current (-)



A	φD
3A	φ0.6
5A	φ0.8
10A	Φ1.1
15A	φ1.4
20~30A	φ1.6

NOTES
1. Unit is mm
2. Tolerance is 0.5mm
3. Cover is optional

Electrical connection diagram



Package & Weight Information

Weight	Pcs/box	Pcs/carton	Pcs/pallet
8g	100	600	9600

c UL us pending

RoHS COMPLIANT

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