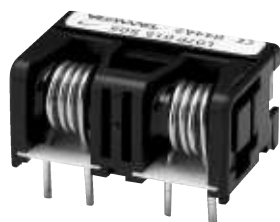


# Hall Effect Current Sensors L07P\*\*\*D15 Series



## Features:

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

## 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

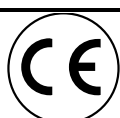
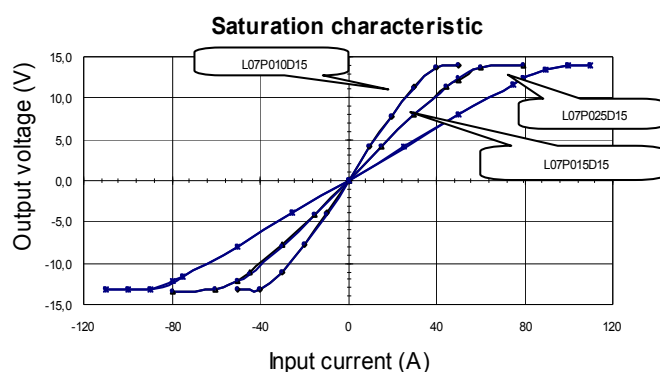
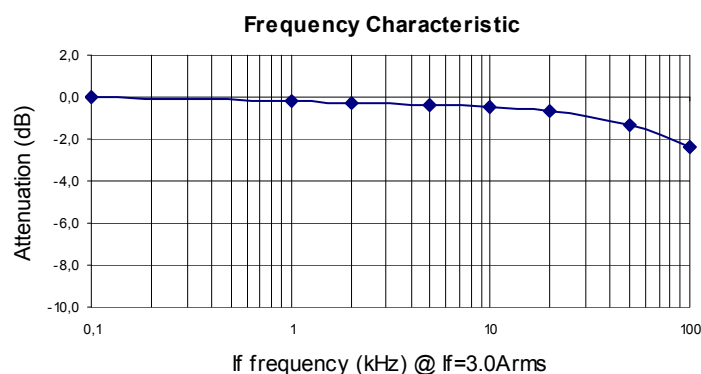
## Specifications

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

Parameters	Symbol	L07P003D15	L07P005D15	L07P010D15	L07P015D15	L07P020D15	L07P025D15	L07P030D15
Rated current	$I_f$	$\pm 3\text{A}$	$\pm 5\text{A}$	$\pm 10\text{A}$	$\pm 15\text{A}$	$\pm 20\text{A}$	$\pm 25\text{A}$	$\pm 30\text{A}$
Maximum Current	$I_{fmax}$	$\pm 9\text{A}$	$\pm 15\text{A}$	$\pm 30\text{A}$	$\pm 45\text{A}$	$\pm 60\text{A}$	$\pm 75\text{A}$	$\pm 90\text{A}$
Output Voltage	$V_{OUT}$	$4\text{V} \pm 60\text{mV} @ \pm I_f$						
Offset Voltage	$V_{OE}$	$0 \pm 60\text{mV} @ I_f = 0\text{A}$						
Accuracy <sup>1</sup>	$X$	$\pm 1\% @ I_f$						
Output Linearity <sup>1</sup>	$\epsilon_L$	$\leq \pm 1\% @ I_f$						
Power Supply	$V_{CC}$	$\pm 15\text{V} \pm 5\%$						
Current Consumption	$I_C$	$\leq 15\text{mA}$ per channel						
Response Time <sup>2</sup>	$t_r$	$\leq 5\mu\text{s} @ di/dt = I_f / \mu\text{s}$						
Output Temperature Characteristic <sup>1</sup>	$TCV_{OUT}$	$\leq \pm 2 \text{ mV}/^{\circ}\text{C}$						
Offset Temperature Characteristic	$TCV_{OE}$	$\leq \pm 2 \text{ mV}/^{\circ}\text{C} @ I_f=0\text{A}$						
Hysteresis error	$V_{OH}$	$\leq 30\text{mV} (0\text{A} \leftrightarrow I_f)$						
Withstand Voltage	$V_d$	AC2000V for 1minute (sensing current 0.5mA), inside of through hole $\leftrightarrow$ terminal						
Insulation Resistance	$R_{IS}$	$> 500\text{M}\Omega$ (500V DC), inside of through hole $\leftrightarrow$ terminal						
Frequency Bandwidth <sup>3</sup>	$f$	DC .. 50kHz						
Operating Temperature	$T_A$	$-10^{\circ}\text{C} \sim +80^{\circ}\text{C}$						
Storage Temperature	$T_s$	$-15^{\circ}\text{C} \sim +85^{\circ}\text{C}$						

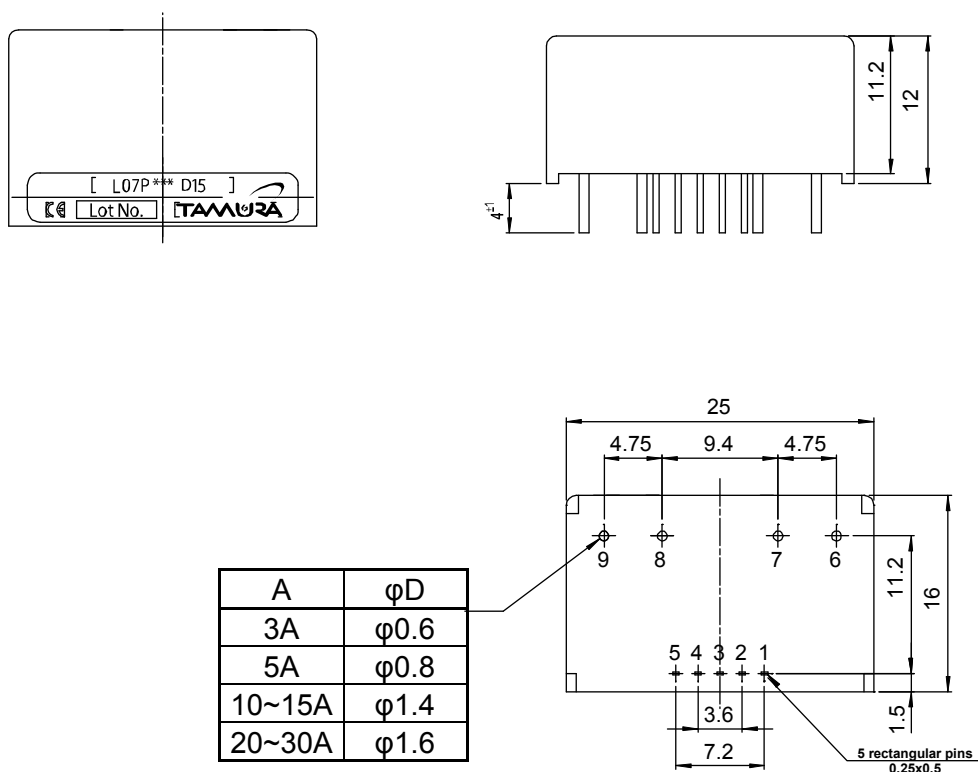
<sup>1</sup> Without offset — <sup>2</sup> Time between 10% input current full scale and 90% of sensor output full scale — <sup>3</sup> Small signal only to avoid excessive heating of magnetic core

## Electrical Performances



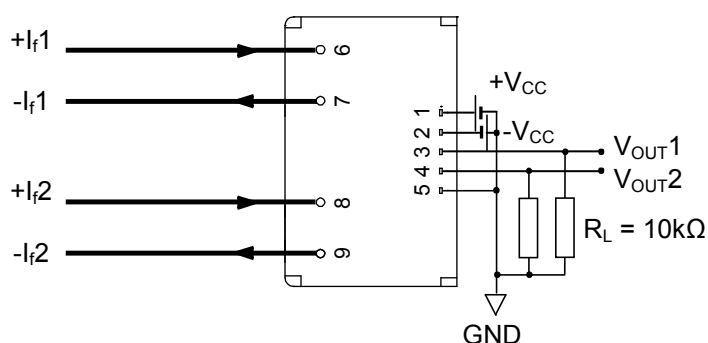
# Hall Effect Current Sensors L07P\*\*\*D15 Series

## Mechanical dimensions in mm



Terminal	Function
1	+15V
2	-15V
3	V <sub>OUT1</sub>
4	V <sub>OUT2</sub>
5	GND
6	+I <sub>f1</sub>
7	-I <sub>f1</sub>
8	+I <sub>f2</sub>
9	-I <sub>f2</sub>

## Electrical connection diagram



## Package & Weight Information

Weight	Pcs/box	Pcs/carton	Pcs/pallet
12g	100	400	9600