

## Hall Effect Current Sensors L08P\*\*\*D15M1 Series



### Features:

- Open Loop type
- Printed circuit board mounting
- 4 pin PCB connection
- Bipolar power supply
- 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

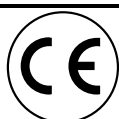
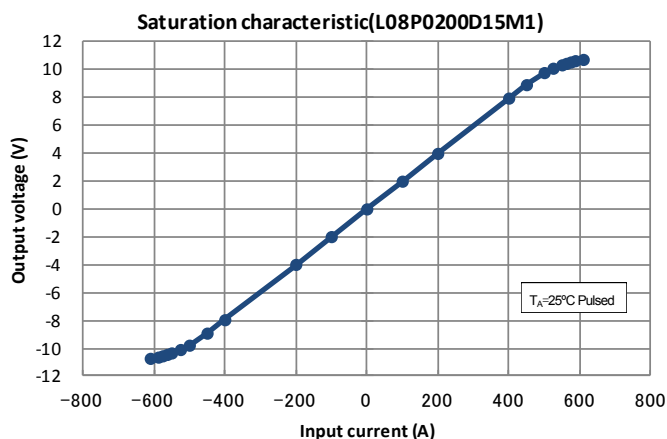
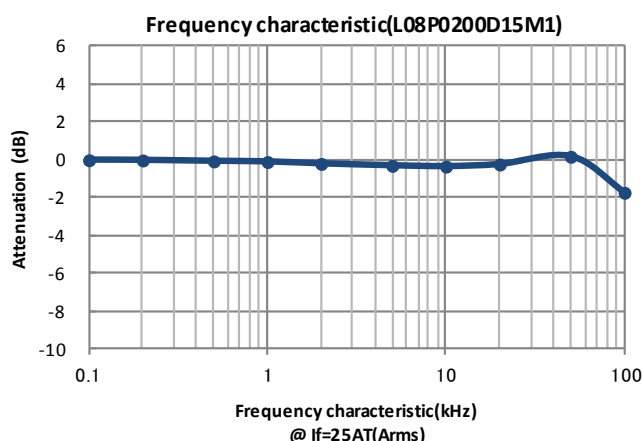
## Specifications

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

Parameters	Symbol	L08P050D15M1	L08P100D15M1	L08P150D15M1	L08P200D15M1
Primary nominal current	I <sub>f</sub>	50AT	100AT	150AT	200AT
Saturation current	I <sub>fmax</sub>	≥ ±150AT	≥ ±300AT	≥ ±450AT	≥ ±450AT
Rated output voltage	V <sub>o</sub>	4V ± 0.040V (at I <sub>f</sub> )			
Offset voltage <sup>1</sup>	V <sub>of</sub>	≤ ± 0.030V (at I <sub>f</sub> = 0A)			
Output linearity <sup>2</sup> (0A~I <sub>f</sub> )	ε <sub>L</sub>	≤ ± 1% (at I <sub>f</sub> )			
Power supply voltage	V <sub>CC</sub>	±15V ± 5%			
Consumption current	I <sub>cc</sub>	12mA typ.			
Response time <sup>3</sup>	t <sub>r</sub>	≤ 10μs (at di/dt = 100A / μs)			
Thermal drift of gain <sup>4</sup>	TcVo	≤ ± 0.1% / °C	≤ ± 0.05% / °C		
Thermal drift of offset	TcVof	≤ ± 2m V / °C	≤ ± 1mV / °C		
Hysteresis error(at I <sub>f</sub> =0A→I <sub>f</sub> →0A)	V <sub>OH</sub>	≤ 30mV	≤ 20mV		
Insulation voltage	V <sub>d</sub>	AC 2500V for 1minute (sensing current 0.5mA), inside of through hole ⇔ terminal			
Insulation resistance	R <sub>IS</sub>	> 500MΩ (at DC500V) , inside of through hole ⇔ terminal			
Ambient operation temperature	T <sub>A</sub>	-10°C ~ +80°C			
Ambient storage temperature	T <sub>S</sub>	-20°C ~ +85°C			

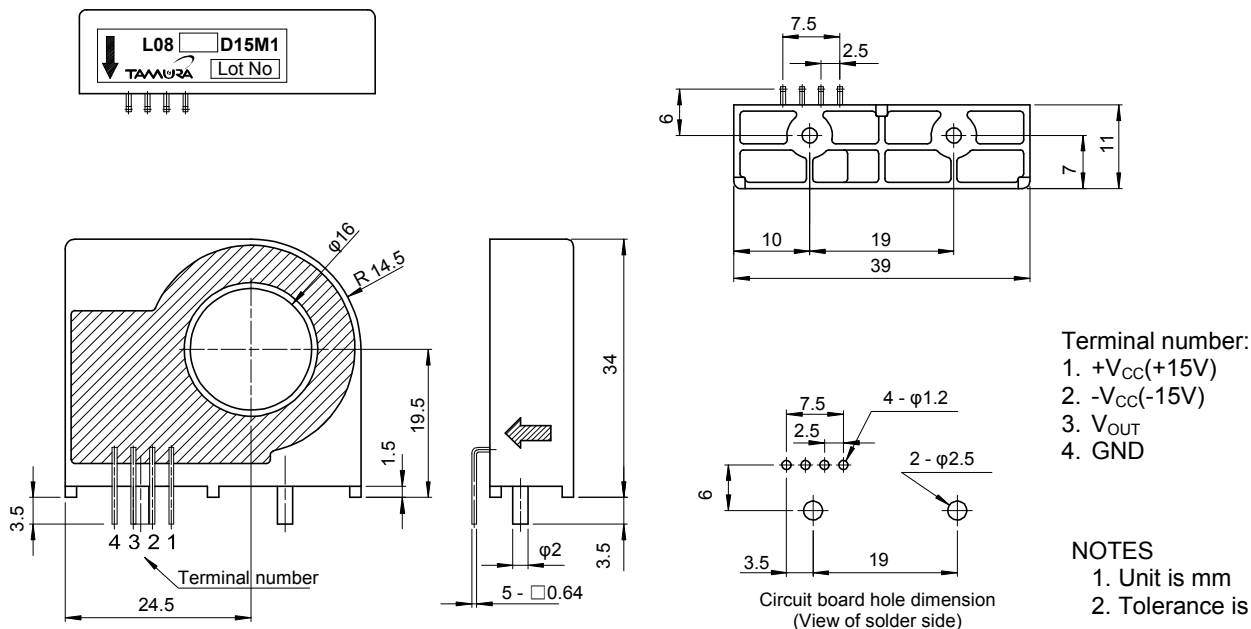
<sup>1</sup> After removal of core hysteresis — <sup>2</sup> Without offset — <sup>3</sup> Time between 10% input current full scale and 90% of sensor output full scale — <sup>4</sup> Without Thermal drift of offset

## Electrical Performances

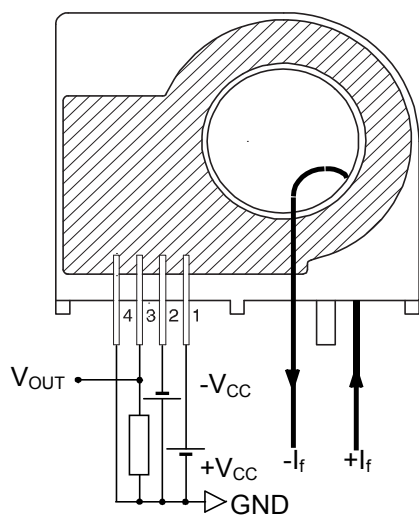


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### Mechanical dimensions

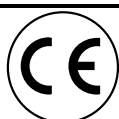


### Electrical connection diagram



### Package & Weight Information

Weight	Pcs/box	Pcs/carton	Pcs/pallet
20g	50	500	9000



# Mouser Electronics

Authorized Distributor

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Tamura:

[L08P150D15M1](#) [L08P050D15M1](#) [L08P200D15M1](#) [L08P100D15M1](#)