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
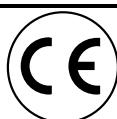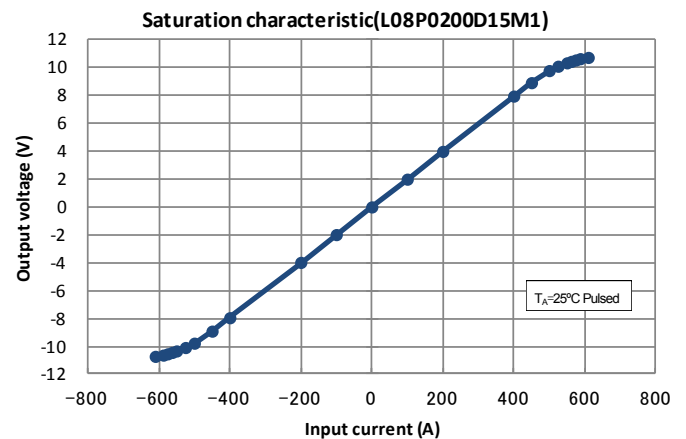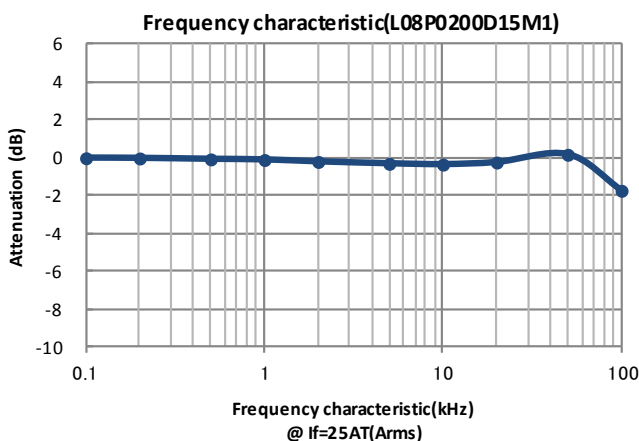- Current overload capability

Specifications

T_A=25ºC, V_{CC}=±15V, R_L=10kΩ

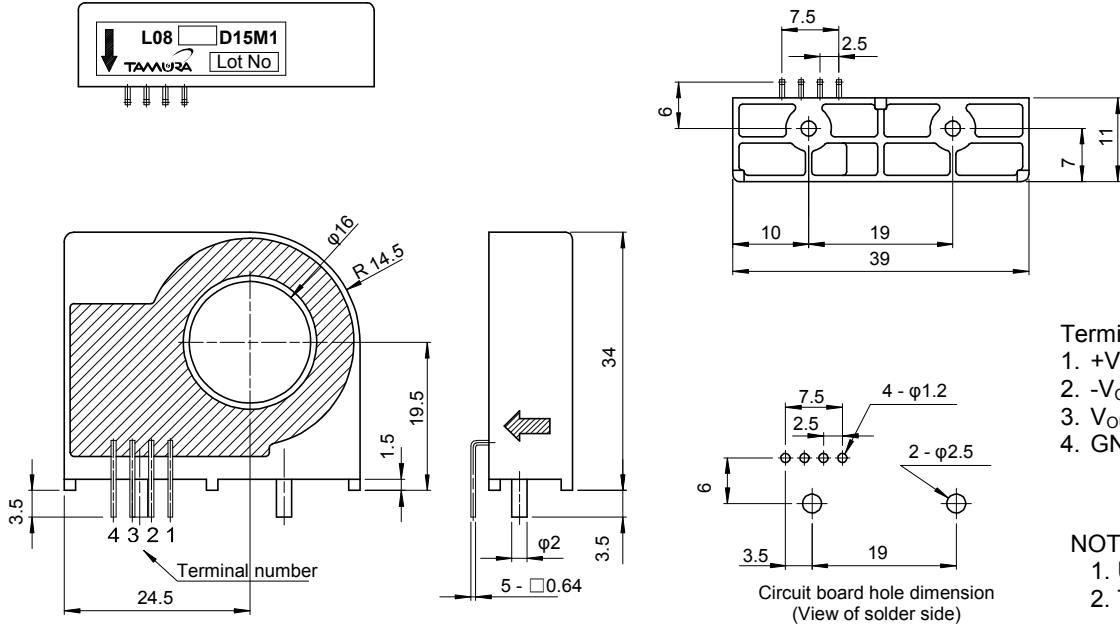| Parameters	Symbol	L08P050D15M1	L08P100D15M1	L08P150D15M1	L08P200D15M1
Primary nominal current	I_f	50AT	100AT	150AT	200AT
Saturation current	I_{fmax}	≥ ±150AT	≥ ±300AT	≥ ±450AT	≥ ±450AT
Rated output voltage	V_o	4V ± 0.040V (at If)			
Offset voltage[1]	V_{of}	≤ ± 0.030V (at If = 0A)			
Output linearity[2] (0A～If)	ε_L	≤ ± 1% (at If)			
Power supply voltage	V_{CC}	±15V ± 5%			
Consumption current	Icc	12mA typ.			
Response time[3]	t_r	≤ 10µs (at di/dt = 100A / µs)			
Thermal drift of gain[4]	TcVo	≤ ± 0.1% / ºC	≤ ± 0.05% / ºC		
Thermal drift of offset	TcVof	≤ ± 2m V / ºC	≤ ± 1mV / ºC		
Hysteresis error(at If=0A→If→0A）	V_{OH}	≤ 30mV	≤ 20mV		
Insulation voltage	V_d	AC 2500V for 1minute (sensing current 0.5mA), inside of through hole ⇔ terminal			
Insulation resistance	R_{IS}	> 500MΩ (at DC500V）, inside of through hole ⇔ terminal			
Ambient operation temperature	T_A	-10ºC ~ +80ºC			
Ambient storage temperature	T_S	-20ºC ~ +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 — [4] Without Thermal drift of offset
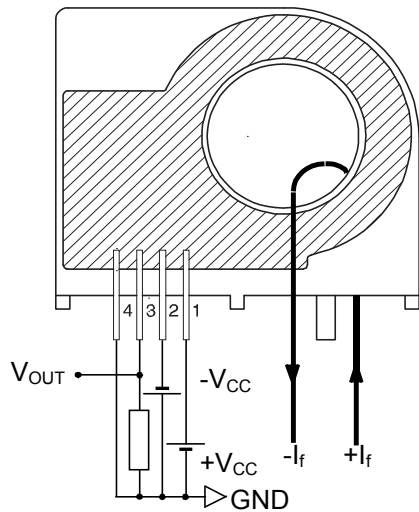
Electrical Performances

Frequency characteristic(L08P0200D15M1)

Frequency characteristic(kHz)
@ If=25AT(Arms)

Saturation characteristic(L08P0200D15M1)

T_A=25ºC Pulsed

Input current (A)

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Mechanical dimensions

L08 [ ] D15M1
TAMURA   Lot No

Terminal number

Terminal number:
1. $+V_{CC}(+15V)$
2. $-V_{CC}(-15V)$
3. V_{OUT}
4. GND

Circuit board hole dimension
(View of solder side)

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

Electrical connection diagram

V_{OUT} $-V_{CC}$ $-I_f$ $+I_f$
$+V_{CC}$
GND

Package & Weight Information

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

CE

RoHS COMPLIANT