



## Hall Effect Current Sensors L08P\*\*\*D15W / IPV

#### Features:

- Open Loop type
- Printed circuit board mounting
- 4 pin PCB connection
- Bipolar power supply
- Extended measurement range
- Insulated plastic case according to UL94V0
- Advantages:
- Excellent accuracy
- Very good linearity
- Low temperature drift
- No insertion loss
- High Immunity To External Interference

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

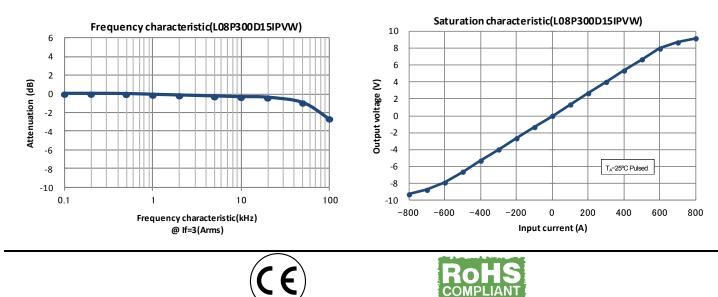
Current overload capability

#### **Specifications**

| Parameters                            | Symbol            | L08P100D15IPV   | L08P200D15W | L08P300D15IPVW |
|---------------------------------------|-------------------|---|-------------|----------------|
| Primary nominal current               | l <sub>f</sub>    | 100AT   | 200AT       | 300AT          |
| Saturation current                    | I <sub>fmax</sub> | ≥ ±300AT  | ≥ ±600AT    | ≥ ±600AT       |
| Rated output voltage                  | Vo                | 4V ±0.040V (at lf)  |             |                |
| Offset voltage <sup>1</sup>           | V <sub>of</sub>   | ≤ ± 0.030V (at If = 0A)   |             |                |
| Output linearity <sup>2</sup> (0A~If) | ٤∟                | ≤ ±1% (at If)   |             |                |
| Power supply voltage                  | Vcc               | ±15V ± 5%   |             |                |
| Consumption current                   | lcc               | ≤ 20mA  |             |                |
| Response time <sup>3</sup>            | tr                | ≤ 5µs (at di/dt = 100A / µs)  |             |                |
| Thermal drift of gain <sup>4</sup>    | TcVo              | ≤ ± 0.05% /°C   |             |                |
| Thermal drift of offset               | TcVof             | ≤ ± 1.0mV /ºC   |             |                |
| Hysteresis error                      | V <sub>OH</sub>   | ≤ 20mV (at If=0A→If→0A)   |             |                |
| Insulation voltage                    | V <sub>d</sub>    | AC 2500V for 1minute (sensing current 0.5mA), inside of through hole $\Leftrightarrow$ terminal |             |                |
| Insulation resistance                 | R <sub>IS</sub>   | ≥ 500MΩ (at DC500V), inside of through hole $\Leftrightarrow$ terminal                          |             |                |
| Ambient operation temperature         | T <sub>A</sub>    | -20°C ~ +80°C   |             |                |
| Ambient storage temperature           | Ts                | -25°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**

