

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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## Hall Effect Current Sensors L34S\*\*\*D15 Series

### Features:

- Open Loop type
- Panel mounting
- Bipolar power supply
- Large aperture
- Insulated plastic case according to UL94V0
- UL Recognition

## Advantage:

- Excellent accuracy and linearity
- · Wide nominal current range
- Low temperature drift
- No insertion loss
- High Immunity To External Interference
- · Optimised response time
- · Current overload capability

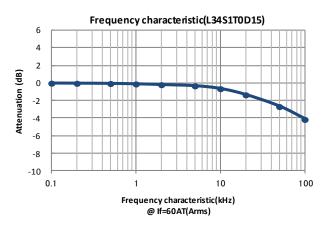
**Specifications** 

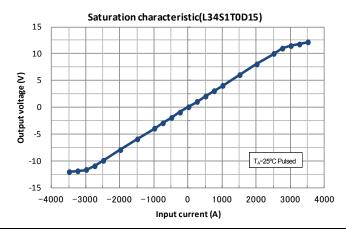
 $T_A$ =25°C,  $V_{CC}$ =±15V,  $R_L$ =10k $\Omega$ 

Opecifications							7V, INL-10K12			
Parameters	Symbol	L34S200D15	L34S300D15	L34S400D15	L34S500D15	L34S600D15	L34S800D15	L34S1T0D15	L34S1T2D15	L34S1T5D15
Primary nominal cur- rent	I <sub>f</sub>	200A	300A	400A	500A	600A	800A	1000A	1200A	1500A
Saturation current	I <sub>fmax</sub>	≥ ±600A	≥ ±900A	≥ ±1200A	≥ ±1500A	≥ ±1800A	≥ ±2400A	≥ ±2500A	≥ ±2500A	≥ ±2500A
Rated output voltage	V <sub>o</sub>	4V ± 0.040V (at If)								
Offset voltage <sup>1</sup>	V <sub>of</sub>	≤ ± 0.020V (at If=0A)								
Output linearity <sup>2</sup> ( 0A, 0.5I <sub>f</sub> , I <sub>f</sub> )	εμ	≤ ± 0.5% (at If)								
Power supply voltage	V <sub>cc</sub>	± 15V ±5 %								
Consumption current	lcc	≤ 25mA								
Response time <sup>3</sup>	t <sub>r</sub>	≤ 5µs (at di/dt = 100A / µs)								
Thermal drift of gain <sup>4</sup>	TcVo	≤ ± 0.05% / °C								
Thermal drift of offset	TcVof	≤ ± 1.0 mV/°C								
Hysteresis error	V <sub>OH</sub>	≤ 10mV (at If=0A→If→0A)								
Insulation voltage	V <sub>d</sub>	AC3000V for 1minute (sensing current 0.5mA), inside of aperture ⇔ terminal								
Insulation resistance	R <sub>IS</sub>	≥ 500MΩ (at DC500V), inside of aperture ⇔ terminal								
Ambient operation temperature	T <sub>A</sub>	-30°C~+80°C								
Ambient storage temperature	Ts	-40°C~+85°C								

<sup>&</sup>lt;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**







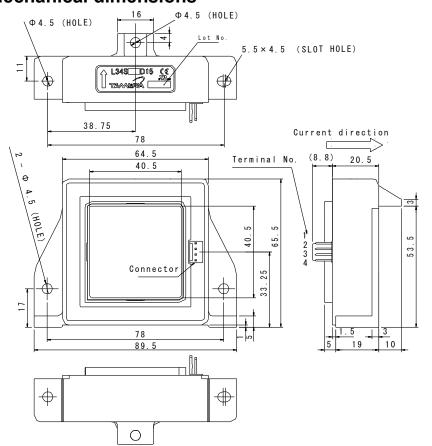






## Hall Effect Current Sensors L34S\*\*\*D15 Series

## **Mechanical dimensions**



#### **NOTES**

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

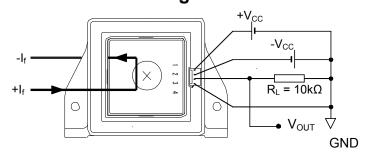
#### Connector

Manufacturer	Part Number	Old Part Number
Molex	22-04-1041	5045-04A

### Terminal Number:

- 1: +V<sub>CC</sub>(+15V)
- 2: V<sub>CC</sub>(-15V)
- 3: V<sub>OUT</sub>
- 4: GND

# **Electrical connection diagram**



## **UL Standard**

UL 508, CSA C22.2 No.14 (UL FILE No.E243511)

- For use in Pollution Degree 2 Environment.
- Maximum Surrounding air temperature rating, 80°C.

## CAUTION

Do not wrap the primary conductor around the core part of the product for preventing to reduce the required Spacings.

# Package & Weight Information

Weight	Pcs/box	Pcs/carton	Pcs/pallet
165g	10	50	-





