

# Models CLSM-50/100MT **Closed Loop Hall Effect**

## Description

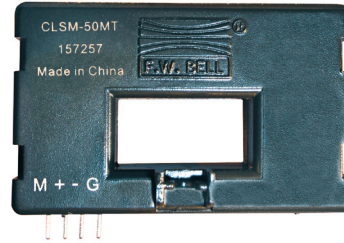
Models CLSM-50/100MT are closed loop Hall effect current sensors that accurately measure DC and AC current and provide electrical isolation between the current carrying conductor and the output of the sensor.

## Features

- Noncontact measurement of high current
- Measures DC, AC and impulse currents
- Very fast response and high accuracy
- High overload capacity

## Applications

- Variable speed drives for motors
- Welding Equipment
- Power supply Equipment
- Measure and control system
- Over current protection
- Protection of power semiconductors



## Electrical Specifications

Nominal current (I<sub>N</sub>) .....  
 Current range .....  
 Nominal output current (I<sub>M</sub>) .....  
 Turns Ratio .....  
 Measuring Resistance (R<sub>M</sub>) .....  
 Overall accuracy at 25°C .....  
 Supply voltage (V<sub>dc</sub>) .....  
 Current consumption .....

### CLSM-50MT

±50 A  
 0 to ±100 A  
 1000 / 1  
 0 to 100□  
 ±0.5 % of I<sub>N</sub>  
 ±15 to ±18  
 15 mA + output current

### CLSM-100MT

±100 A  
 0 to ±150 A  
 ±50 mA  
 2000 / 1  
 0 to 50□  
 ±0.5 % of I<sub>N</sub>  
 ±15 to ±18  
 15 mA + output current

## Accuracy-Dynamic Performance

Zero current offset at 25°C.....  
 Offset current temperature drift (-25°C to +85°C) ....  
 Linearity .....  
 Response time .....  
 di / dt .....  
 Frequency range .....

< ±0.2mA  
 < ±0.3mA  
 better than ±0.1%  
 better than 0.5µs  
 better than 70A/µs  
 DC to 250KHz (-3dB)

## General Information

Operating temperature.....  
 Storage temperature .....  
 Package .....  
 Isolation voltage .....  
 Output reference .....  
 Weight .....  
 Mounting .....  
 Aperture size (mm).....

-25°C to +85°C  
 -40°C to +100°C  
 flame retardant plastic case, UL94V-0  
 5kV/50Hz/1 min.  
 To obtain a positive output on terminal M, input current must flow in the direction of the arrow (conventional flow)  
 30 grams  
 34 grams  
 Designed to mount directly on PCB via through hole connection pins  
 10.5 x 20.6

## Notes:

1. Busbar temperature should not exceed 100°C.
2. The dynamic performance is the best when the busbar fills the aperture.

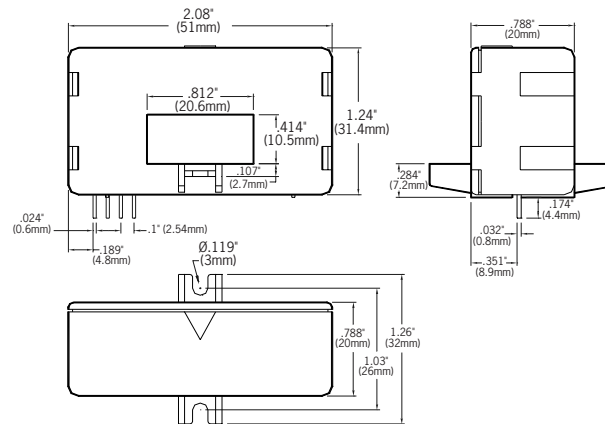


# Mechanical Dimensions

All dimensions are in inches (millimeters)

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### Connection Schematic

