

# **CSHMB** Series - DC Current Sensor

The CSHMB Hall Effect current sensor, with a galvanic insulation, is designed to measure DC current and is fully certified to DO-160. The output provides an accurate linear voltage signal versus measured current and has a full bidirectional scale range.



# **Applications**

Aerospace
Military
Rail
Ground Vehicles
High Reliability

### **Features**

- Compact, lightweight design
- EMI and lightning protected
- Full scale range +/-50 to +/-800 amps
- No voltage drop on primary line
- Sine and Random vibration rated

### **Benefits**

- Custom units available
- Unidirectional or bidirectional
- Single or differential output voltage
- Standard values : 100, 200, 400, 500, 800 amps
- · Designed for direct mounting to bus bar assembly or bus bar contactor

# **Specifications**

#### **ELECTRICAL CHARACTERISTICS**

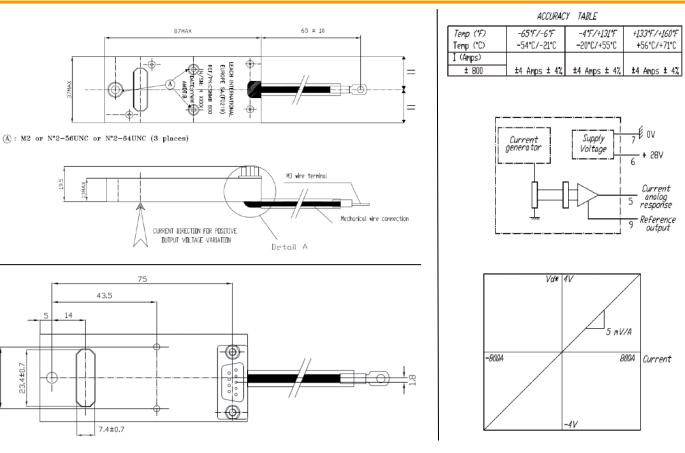
Voltage supply range Consumption Output current Full scale differential voltage Reference voltage Accuracy Dielectric strength 16 to 32Vdc to MIL-STD-704 < 40mA < 10mA - 4V to 4V +4.5V +/-20mV 4% over the temperature range (2.5% capability) 1000 Vdc



# **Environmental and Physical Data**

Operating temperature range	- 40°C to + 75°C (- 55°C to + 105°C capability)
Shock (MIL STD 202 method 213)	30g / 11 ms
Salt spray (MIL STD 202 method 101)	96H
Humidity	240H
Altitude	15 000 m
Voltage spike	DO-160D sect 17 cat A
EMI	DO-160D sect 18, 19 & 20
Lightning	DO-160D cat 22 ca B2F2
Weight	90g max
Dimensions	87mm (3.42 '') x 37mm (1.45'') x 13mm (0.51'')

# **Configurations and Schematics**



### **Worldwide Locations**

North America 6900 Orangethorpe Avenue Buena Park, CA 90620 Phone: (714) 736-7599

25,55

www.esterline.com/powersystems

#### Asia-Pacific

Unit 602-603 6/F Lakeside 1 No 8 Science Park West Avenue Phase Two Hong Kong Science Park Tai Po, N.T., Hong Kong Phone: (852) 2 191 3830 Fax: (852) 2 389 5803 Europe 2 Rue Goethe F-57430 Sarralbe France Phone: (33) 3 87 97 98 97 Fax: (33) 3 87 97 84 04





Vd¥ = Differential voltage between Ref Dutput and Current Analg

©2012 Esterline Technologies Corporation / 500 - 108th Avenue NE, Suite 1500 / Bellevue, WA 98004 This datasheet is designed for initial selection and comparison of products. Please contact Esterline Power Systems for further information or for a LEACH® Product Control Drawing (PCD).