

### 36 W Power Metal Strip Battery Shunt Resistor with Molded Enclosure



#### KEY BENEFITS

- The WSBM8518 is a standard WSBS8518 battery shunt that includes a molded enclosure with a 4-pin connector, providing easy PCB connection to the shunt resistor assembly
- 36 W (to 600 A) power capability in 8518 size shunt
- Very low resistance values (100  $\mu\Omega$ )

#### APPLICATIONS

- Automotive: battery management of gas/diesel, hybrid, and all-electric systems
- Industrial: battery management of forklift, utility trucks, and other heavy industrial applications

#### RESOURCES

- Datasheet: WSBM8518 - <http://www.vishay.com/doc?31094>
- For technical questions contact [ww2bresistors@vishay.com](mailto:ww2bresistors@vishay.com)



**RoHS**  
COMPLIANT

**GREEN**  
(5-2008)

Resistors - 36 W (to 600 A) Power Capability



# POWER METAL STRIP® RESISTORS

## WSBM8518

### 36 W Power Metal Strip Battery Shunt Resistor with Molded Enclosure



#### FEATURES

- High power-resistor size ratio
- Proprietary processing technique produces extremely low resistance values
- All welded construction
- Solid metal manganese-copper alloy resistive element with low TCR (< 20 ppm/°C)
- Molded enclosure allows for easy PCB connection
- Includes 4-pin female connector (Molex # MX150334820401)
- Very low inductance (< 5 nH)
- Low thermal EMF (< 3 μV/°C)
- Material categorization: For definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)

#### STANDARD ELECTRICAL SPECIFICATIONS

| GLOBAL MODEL | SIZE | POWER RATING<br>$P_{70\text{ }^\circ\text{C}}$<br>W | TOLERANCE<br>% | RESISTANCE VALUE<br>RANGE<br>$\Omega$ | RESISTANCE VALUES<br>CURRENTLY AVAILABLE <sup>(1)</sup><br>$\Omega$ | WEIGHT<br>(typical)<br>g |
|--------------|------|---|----------------|---------------------------------------|---|--------------------------|
| WSBM8518     | 8518 | 36  | 5.0            | 0.0001                                | 100μ  | 60                       |

#### Note

(1) Other values may be available, contact factory

#### TECHNICAL SPECIFICATIONS

| PARAMETER                                  | UNIT   | RESISTOR CHARACTERISTICS |
|--|--------|--------------------------|
| Temperature Coefficient                    | ppm/°C | ± 225                    |
| Temperature Coefficient (Element material) | ppm/°C | ± 20                     |
| Operating Temperature Range                | °C     | - 65 to + 170            |
| Thermal EMF                                | μV/°C  | < 3                      |
| Inductance                                 | nH     | < 5                      |
| Maximum Current Rating                     | A      | (P/R) <sup>1/2</sup>     |

#### GLOBAL PART NUMBER INFORMATION

GLOBAL PART NUMBERING: WSBM8518L1000JK (WSBM8518, 0.000100 Ω, ± 5 %)

W S B M 8 5 1 8 L 1 0 0 0 J K

GLOBAL MODEL  
(8 digits)  
**WSBM8518**

RESISTANCE VALUE  
(5 digits)  
L = mΩ  
L1000 = 0.000100 Ω

TOLERANCE CODE  
(1 digit)  
J = ± 5.0 %

PACKAGING CODE  
(1 digit)  
K = Bulk pack

SPECIAL  
(up to 2 digits)  
(Dash number)  
From 1 to 99 as  
applicable

Revision 26-Sep-12

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