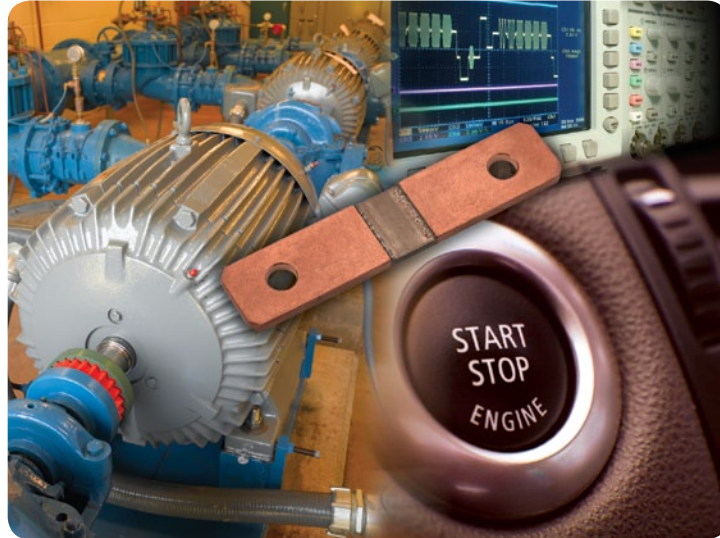


POWER METAL STRIP® RESISTOR

WSBS8518



Power Metal Strip® Battery Shunt Resistor, Very Low Value (100 $\mu\Omega$, 125 $\mu\Omega$ and 250 $\mu\Omega$)



KEY BENEFITS

- Very low resistance values: 100 $\mu\Omega$ and 125 $\mu\Omega$
- 36 W (600 A) power capability in an 8518 package
- Very low inductance: < 5 nH
- Low thermal EMF: < 3 $\mu\text{V} / ^\circ\text{C}$
- All-welded construction
- RoHS-compliant, lead (Pb)-free construction

APPLICATIONS

- Automotive battery management
- Automotive hybrid and electric vehicle power management
- Industrial high-power DC motor control
- Instrumentation high-current measurement

RESOURCES

- Datasheet: WSBS8518 - <http://www.vishay.com/doc?30134>
- For technical questions contact ww2bresistors@vishay.com



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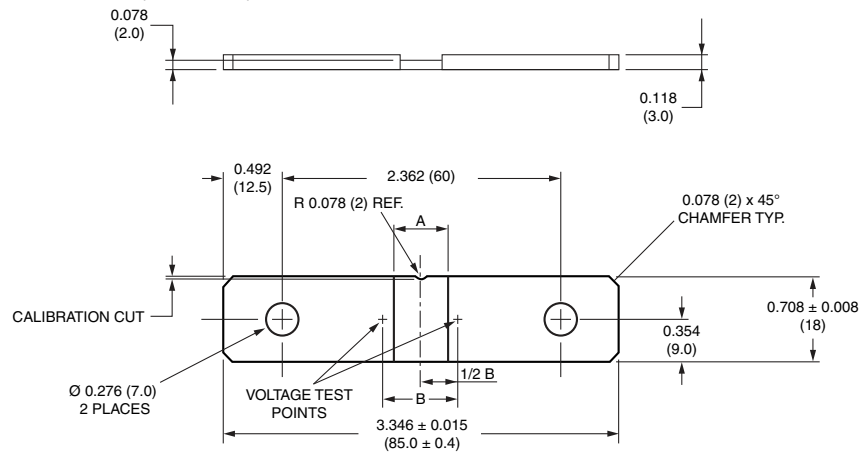
FEATURES

- High power to resistor size ratio
- Proprietary processing technique produces extremely low resistance values
- All welded construction
- Very low inductance (< 5 nH)
- Low thermal EMF (< 3 μV/°C)
- Compliant to RoHS directive 2002/95/EC



RoHS
COMPLIANT
GREEN
(5-2008)**

DIMENSIONS in inches (millimeters)



STANDARD ELECTRICAL SPECIFICATIONS

| GLOBAL MODEL | SIZE | POWER RATING $P_{70^\circ\text{C}}$ W | TOLERANCE % | RESISTANCE VALUE RANGE Ω | RESISTANCE VALUES CURRENTLY AVAILABLE (1) Ω | WEIGHT (typical) g/1000 pieces |
|--------------|------|---|----------------|---------------------------------------|--|--------------------------------------|
| WSBS8518 | 8518 | 36 | 5.0 | 50μ to 1000μ | 100μ, 125μ, 250μ | 46 300 |

Note

(1) Other values may be available, contact factory

TECHNICAL SPECIFICATIONS

| PARAMETER | UNIT | RESISTOR CHARACTERISTICS |
|-----------------------------|--------|--------------------------|
| Temperature Coefficient | ppm/°C | ± 225 |
| Operating Temperature Range | °C | - 65 to + 170 |
| Maximum Current Rating | A | $(P/R)^{1/2}$ |

GLOBAL PART NUMBER INFORMATION

GLOBAL PART NUMBERING: WSBS8518L1250JK (WSBS8518, 0.000125 Ω, ± 5 %)

W S B S 8 5 1 8 L 1 2 5 0 J K

| GLOBAL MODEL | RESISTANCE VALUE | TOLERANCE CODE | PACKAGING CODE | SPECIAL |
|--------------|--|----------------|----------------|---|
| WSBS8518 | L = mΩ L1000 = 0.000100 Ω L1250 = 0.000125 Ω L2500 = 0.000250 Ω | J = ± 5.0 % | K = Bulk pack | (Dash number) (Up to 2 digits) From 1 to 99 as applicable |

Revision 02-Jul-10

Resistors - Low Resistance Battery Shunt Resistor