

# WCM307 Series

## Power Inductors

### Product Description

West Coast Magnetics' 307 series power inductors offer exceptional performance in a compact package. These inductors can handle very high DC currents and high AC ripple currents from 60 Hz up to 500 kHz. They offer exceptional reliability with an operating temperature rating of 200° C.

### Features and Benefits

Available with patented Foil Technology for high ripple, high frequency applications - Compact Size - Low Cost - High Current Rating - 200° C Temperature Rating .



### Shaped Foil Technology™

West Coast Magnetics' exclusive Shaped Foil Technology™ combines the low DCR of a foil winding, with the low AC winding resistance of litz wire. For many high ripple, high frequency applications it has significantly lower winding losses than any litz or solid wire winding. Check with WCM's engineering department to see if it is right for your application.

### Engineering Data

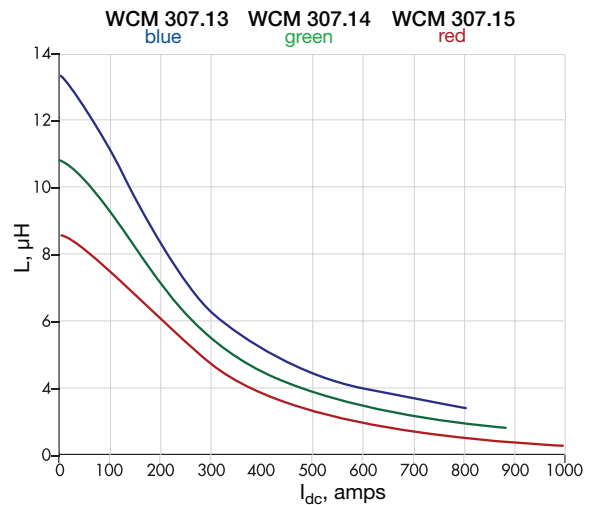
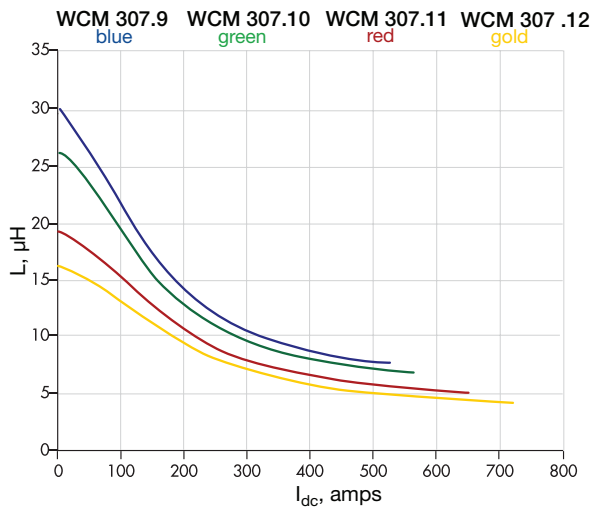
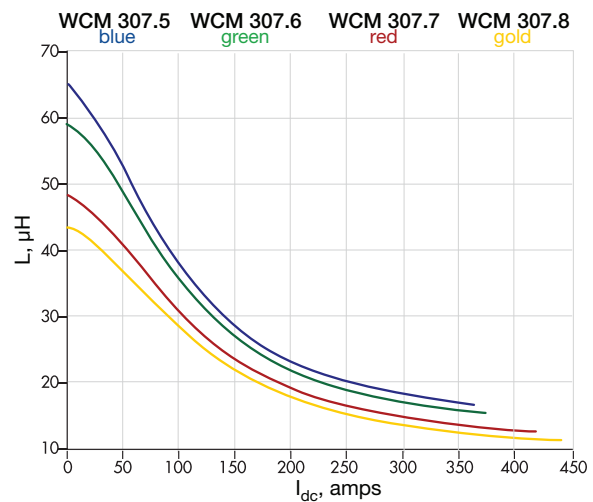
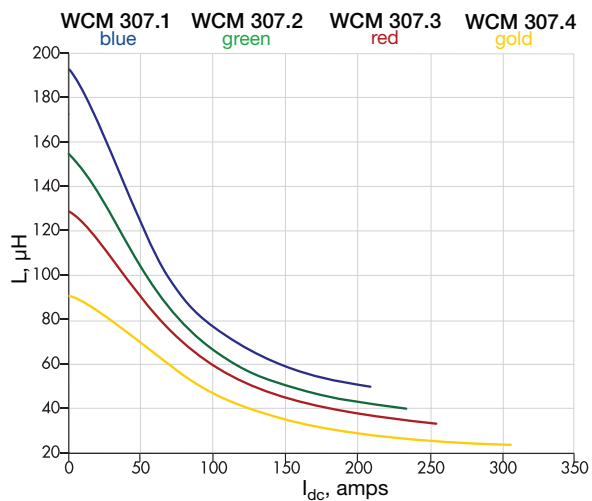
| Product Code | Inductance (µH) | DCR (mOhms) | Current Rating* I <sub>rms</sub> 40° C | Current Rating* I <sub>rms</sub> 80° C | Current Rating* I <sub>rms</sub> 120° C |
|--------------|-----------------|-------------|--|--|---|
| WCM307-01    | 193.4           | 14.72       | 20                                     | 28                                     | 34                                      |
| WCM307-02    | 154.8           | 11.29       | 22                                     | 32                                     | 39                                      |
| WCM307-03    | 128.7           | 9.01        | 25                                     | 36                                     | 44                                      |
| WCM307-04    | 90.5            | 6.04        | 31                                     | 44                                     | 54                                      |
| WCM307-05    | 64.8            | 4.06        | 38                                     | 53                                     | 66                                      |
| WCM307-06    | 59.0            | 3.62        | 40                                     | 57                                     | 70                                      |



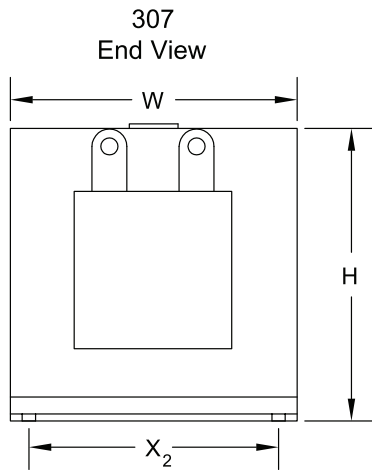
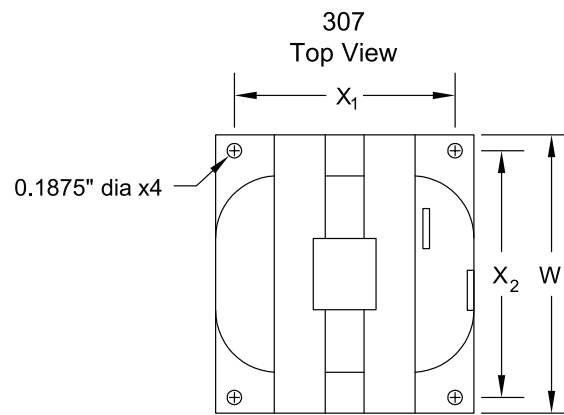
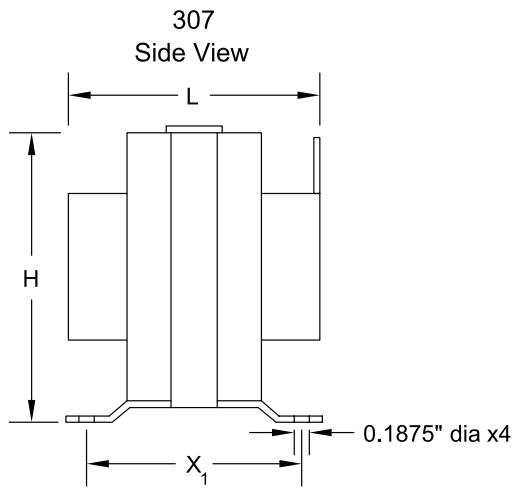
## Engineering Data Conitnued

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|--------------|------------------------------|-------------|--|--|---|
| WCM307-07    | 48.3                         | 2.94        | 44                                     | 63                                     | 77                                      |
| WCM307-08    | 43.4                         | 2.58        | 47                                     | 67                                     | 82                                      |
| WCM307-09    | 30.1                         | 1.84        | 55                                     | 79                                     | 97                                      |
| WCM307-10    | 26.2                         | 1.51        | 62                                     | 88                                     | 108                                     |
| WCM307-11    | 19.3                         | 1.15        | 70                                     | 101                                    | 124                                     |
| WCM307-12    | 16.2                         | 0.95        | 78                                     | 111                                    | 136                                     |
| WCM307-13    | 13.4                         | 0.75        | 88                                     | 125                                    | 152                                     |
| WCM307-14    | 10.8                         | 0.65        | 95                                     | 134                                    | 165                                     |
| WCM307-15    | 8.6                          | 0.50        | 108                                    | 152                                    | 188                                     |

## Graphs WCM307 Series



# Schematics WCM307 Series



| Product Code | W                   | H                  | L                   | X <sub>1</sub>      | X <sub>2</sub>      |
|--------------|---------------------|--------------------|---------------------|---------------------|---------------------|
| WCM307       | <u>2.21</u><br>5.61 | <u>2.4</u><br>6.10 | <u>1.82</u><br>4.57 | <u>1.42</u><br>3.61 | <u>1.75</u><br>4.45 |

**Dimensions:**  
Inches  
mm

**Note:**  
Please specify vertical or horizontal mount with your order.