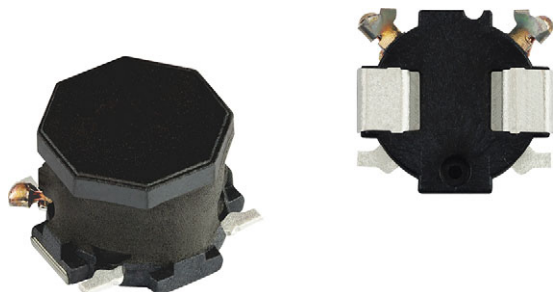


## Automotive Ferrite Power Inductors, Shielded



### FEATURES

- 6.5 mm x 6.0 mm x 4.8 mm size
- NiZn ferrite core with iron-embedded epoxy encapsulation for magnetic shielding
- Inductance range 1  $\mu$ H to 10  $\mu$ H
- AEC-Q200 qualified
- Material categorization:  
for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)


**RoHS**  
COMPLIANT

**HALOGEN**  
**FREE**  
**GREEN**  
(5-2008)

### APPLICATIONS

- DC/DC converters for automotive control units
- Power line noise suppression and filtering
- LED lighting drivers

### LINKS TO ADDITIONAL RESOURCES


[Product Page](#)

### STANDARD ELECTRICAL SPECIFICATIONS

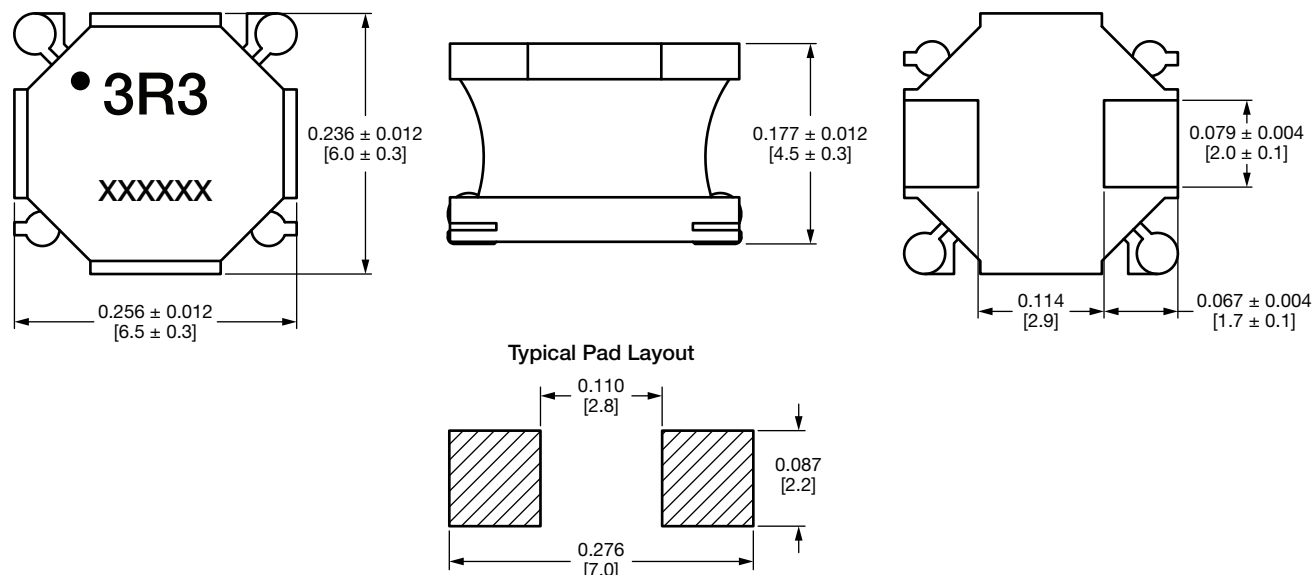
| PART NUMBER       | $L_0$<br>INDUCTANCE<br>$\pm 20\%$ AT 0 A<br>( $\mu$ H) | DCR TYP.<br>25 °C<br>(m $\Omega$ ) | DCR MAX.<br>25 °C<br>(m $\Omega$ ) | HEAT RATING<br>CURRENT DC TYP.<br>$I_{DC}$<br>(A) <sup>(1)</sup> | SATURATION<br>CURRENT DC TYP.<br>$I_{SAT}$<br>(A) <sup>(2)</sup> |
|-------------------|--------------------------------------------------------|------------------------------------|------------------------------------|------------------------------------------------------------------|------------------------------------------------------------------|
| IFSC2525DHER1R0MA | 1.0                                                    | 13                                 | 16                                 | 5.9                                                              | 9.3                                                              |
| IFSC2525DHER1R5MA | 1.5                                                    | 15                                 | 18                                 | 5.5                                                              | 7.2                                                              |
| IFSC2525DHER2R2MA | 2.2                                                    | 21                                 | 25                                 | 4.6                                                              | 5.8                                                              |
| IFSC2525DHER3R3MA | 3.3                                                    | 27                                 | 33                                 | 4.1                                                              | 5.5                                                              |
| IFSC2525DHER4R7MA | 4.7                                                    | 29                                 | 35                                 | 3.8                                                              | 4.1                                                              |
| IFSC2525DHER5R6MA | 5.6                                                    | 32                                 | 37                                 | 3.6                                                              | 3.6                                                              |
| IFSC2525DHER6R8MA | 6.8                                                    | 42                                 | 50                                 | 3.3                                                              | 3.6                                                              |
| IFSC2525DHER8R2MA | 8.2                                                    | 50                                 | 60                                 | 3.0                                                              | 3.1                                                              |
| IFSC2525DHER100MA | 10                                                     | 56                                 | 73                                 | 2.7                                                              | 3.0                                                              |

### Notes

- All test data is referenced to 25 °C ambient
- Test condition: 100 kHz, 1 V
- Operating temperature range -55 °C to +150 °C
- Storage condition: -55 °C to +150 °C (on board); and -10 °C to +40 °C and < 70 % RH (in component packaging)
- Resistance to solder heat: 260 °C for 5 s (2 times max. through reflow)

<sup>(1)</sup> DC current (A) that will cause an approximate  $\Delta T$  of 40 °C

<sup>(2)</sup> DC current (A) that will cause  $L_0$  to drop approximately 30 %

**DIMENSIONS** in inches [millimeters]

**DESCRIPTION**

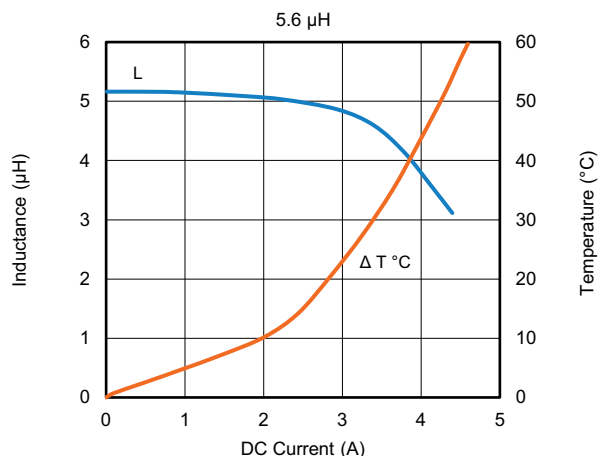
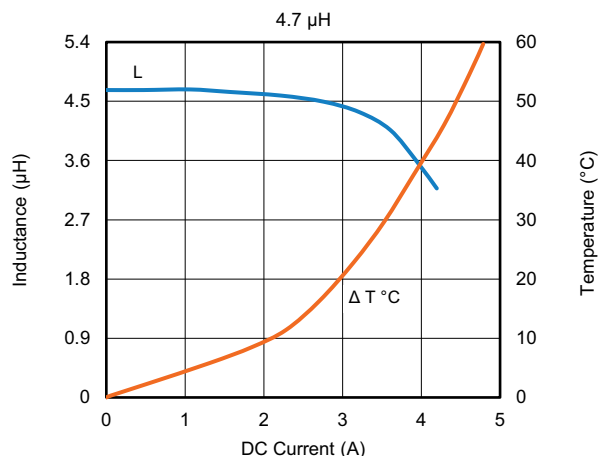
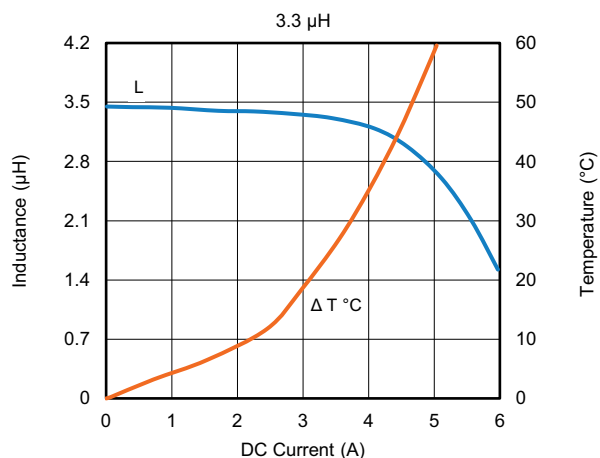
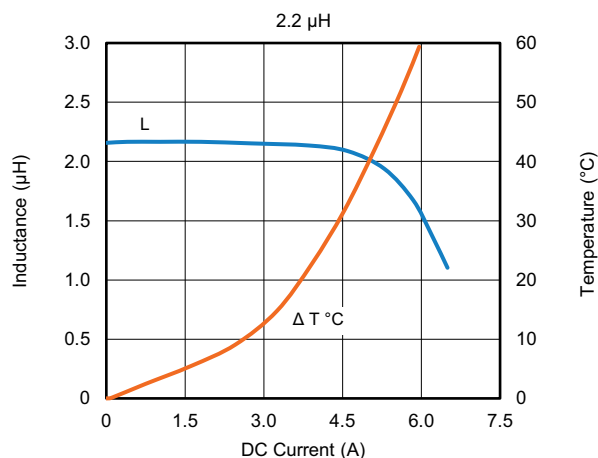
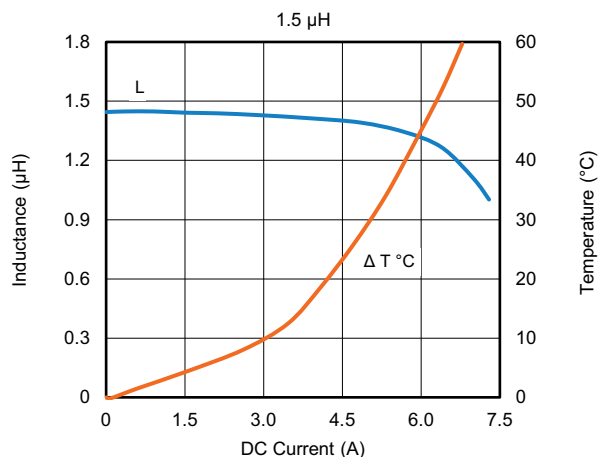
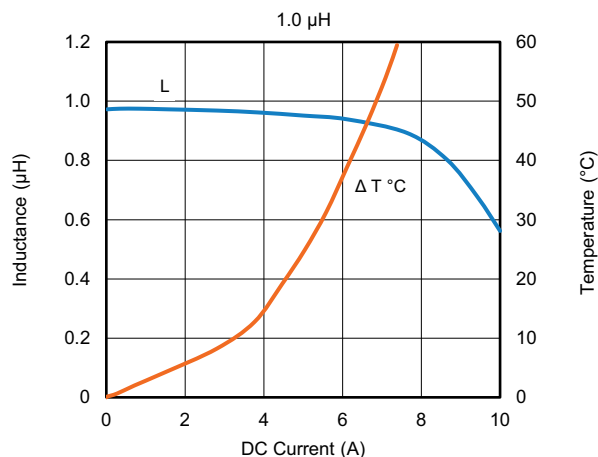
|                     |                  |                      |              |                                |
|---------------------|------------------|----------------------|--------------|--------------------------------|
| <b>IFSC2525DH-A</b> | <b>10 µH</b>     | <b>± 20 %</b>        | <b>ER</b>    | <b>e3</b>                      |
| MODEL               | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | PACKAGE CODE | JEDEC® LEAD (Pb)-FREE STANDARD |

**GLOBAL PART NUMBER**

|                |                    |                              |                    |                      |          |
|----------------|--------------------|------------------------------|--------------------|----------------------|----------|
| <b>I F S C</b> | <b>2 5 2 5 D H</b> | <b>E R</b>                   | <b>1 0 0</b>       | <b>M</b>             | <b>A</b> |
| PRODUCT FAMILY | SIZE               | PACKAGE CODE                 | INDUCTANCE VALUE   | INDUCTANCE TOLERANCE | SERIES   |
|                |                    | <b>ER =</b><br>tape and reel | <b>100 = 10 µH</b> | <b>M = ± 20 %</b>    |          |

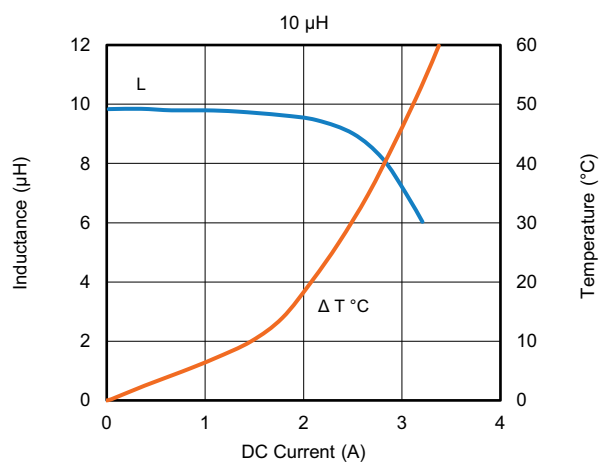
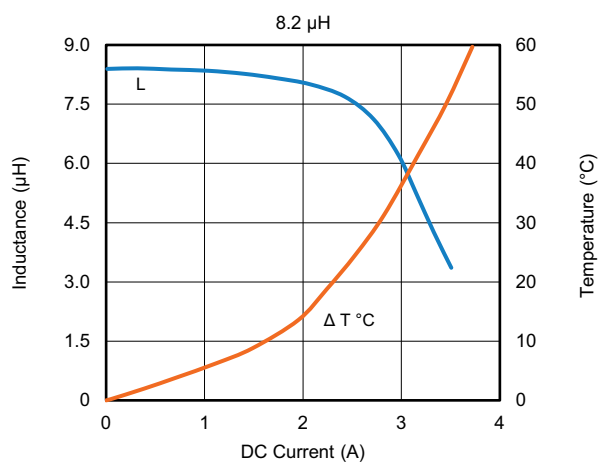
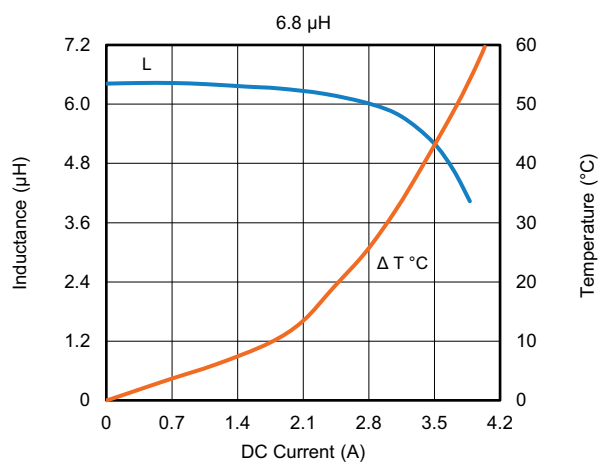


PERFORMANCE GRAPHS





## PERFORMANCE GRAPHS





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