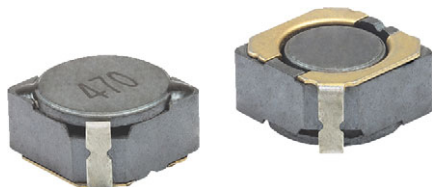


## Ferrite Power Inductor, Shielded Drum Core



### LINKS TO ADDITIONAL RESOURCES


[Product Page](#)

### ELECTRICAL SPECIFICATIONS

#### Operating temperature:

-40 °C to +105 °C (temperature rise included)

#### Resistance to solder heat:

255 °C for 10 s (2 times max. through reflow)

### FEATURES

- 7.0 mm x 7.0 mm x 4.0 mm max. SMD package
- Shielded drum core ferrite construction for reduced leakage flux
- Inductance range: 1.5  $\mu$ H to 1000  $\mu$ H
- 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 power supplies
- Noise suppression and filtering

### STANDARD ELECTRICAL SPECIFICATIONS

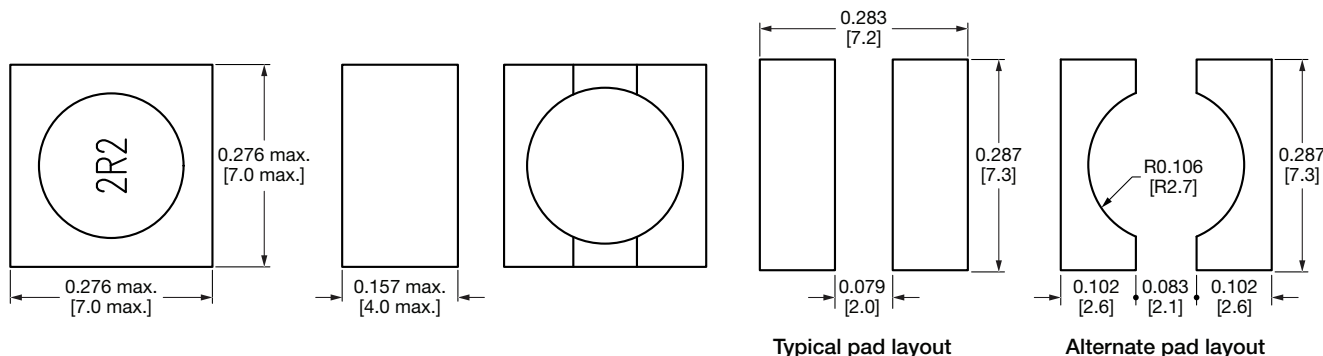
| PART NUMBER      | L <sub>0</sub> INDUCTANCE<br>( $\mu$ H) | INDUCTANCE<br>TOLERANCE<br>(%) | DCR MAX.<br>(m $\Omega$ ) | HEAT RATING CURRENT<br>DC TYP.<br>(A) <sup>(1)</sup> |
|------------------|-----------------------------------------|--------------------------------|---------------------------|------------------------------------------------------|
| IFDC2525DZER1R5N | 1.5                                     | 30                             | 15                        | 5.20                                                 |
| IFDC2525DZER2R2N | 2.2                                     | 30                             | 18                        | 4.50                                                 |
| IFDC2525DZER3R3N | 3.3                                     | 30                             | 20                        | 3.50                                                 |
| IFDC2525DZER4R7N | 4.7                                     | 30                             | 25                        | 2.80                                                 |
| IFDC2525DZER6R2N | 6.2                                     | 30                             | 29                        | 2.60                                                 |
| IFDC2525DZER6R8N | 6.8                                     | 30                             | 29                        | 2.40                                                 |
| IFDC2525DZER8R2N | 8.2                                     | 30                             | 34                        | 2.20                                                 |
| IFDC2525DZER100M | 10                                      | 20                             | 38                        | 2.00                                                 |
| IFDC2525DZER120M | 12                                      | 20                             | 53                        | 1.70                                                 |
| IFDC2525DZER150M | 15                                      | 20                             | 57                        | 1.60                                                 |
| IFDC2525DZER180M | 18                                      | 20                             | 92                        | 1.50                                                 |
| IFDC2525DZER220M | 22                                      | 20                             | 96                        | 1.30                                                 |
| IFDC2525DZER270M | 27                                      | 20                             | 109                       | 1.20                                                 |
| IFDC2525DZER330M | 33                                      | 20                             | 124                       | 1.10                                                 |
| IFDC2525DZER390M | 39                                      | 20                             | 138                       | 1.00                                                 |
| IFDC2525DZER470M | 47                                      | 20                             | 155                       | 0.95                                                 |
| IFDC2525DZER560M | 56                                      | 20                             | 202                       | 0.85                                                 |
| IFDC2525DZER680M | 68                                      | 20                             | 234                       | 0.75                                                 |
| IFDC2525DZER820M | 82                                      | 20                             | 324                       | 0.70                                                 |
| IFDC2525DZER101M | 100                                     | 20                             | 358                       | 0.65                                                 |
| IFDC2525DZER121M | 120                                     | 20                             | 470                       | 0.59                                                 |
| IFDC2525DZER151M | 150                                     | 20                             | 580                       | 0.54                                                 |
| IFDC2525DZER181M | 180                                     | 20                             | 690                       | 0.49                                                 |
| IFDC2525DZER221M | 220                                     | 20                             | 890                       | 0.43                                                 |
| IFDC2525DZER271M | 270                                     | 20                             | 1290                      | 0.40                                                 |
| IFDC2525DZER331M | 330                                     | 20                             | 1700                      | 0.37                                                 |
| IFDC2525DZER391M | 390                                     | 20                             | 1750                      | 0.34                                                 |
| IFDC2525DZER471M | 470                                     | 20                             | 2200                      | 0.32                                                 |
| IFDC2525DZER561M | 560                                     | 20                             | 2850                      | 0.29                                                 |
| IFDC2525DZER821M | 820                                     | 20                             | 4050                      | 0.22                                                 |
| IFDC2525DZER102M | 1000                                    | 20                             | 5700                      | 0.20                                                 |

#### Notes

- All test data is referenced to 25 °C ambient
  - Test condition: 100 kHz, 0.3 V for 8.2  $\mu$ H and below, and 1 kHz, 0.3 V for 10  $\mu$ H and above
  - Storage condition: -40 °C to +105 °C (on board); and -10 °C to +40 °C and < 70 % RH (in component packaging)
- <sup>(1)</sup> DC current (A) that will cause an approximate  $\Delta$ T of 40 °C or cause L<sub>0</sub> to drop by 35 %, whichever is lower



**DIMENSIONS** in inches [millimeters]



**DESCRIPTION**

|            |                  |                      |              |                                |
|------------|------------------|----------------------|--------------|--------------------------------|
| IFDC2525DZ | 2.2 $\mu$ H      | $\pm 30 \%$          | ER           | e3                             |
| MODEL      | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | PACKAGE CODE | JEDEC® LEAD (Pb)-FREE STANDARD |

**GLOBAL PART NUMBER**

|                |             |                       |                   |                                    |
|----------------|-------------|-----------------------|-------------------|------------------------------------|
| I F D C        | 2 5 2 5 D Z | E R                   | 2 R 2             | N                                  |
| PRODUCT FAMILY | SIZE        | PACKAGE CODE          | INDUCTANCE VALUE  | INDUCTANCE TOLERANCE               |
|                |             | ER =<br>tape and reel | 2R2 = 2.2 $\mu$ H | M = $\pm 20 \%$<br>N = $\pm 30 \%$ |



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