

Ferrite Power Inductor, Shielded Drum Core



FEATURES

- 6.0 mm x 6.0 mm x 3.0 mm max. SMD package
- Shielded drum core ferrite construction to reduce leakage flux
- Low profile inductors from 2.2 μH to 330 μH
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



RoHS
COMPLIANT
HALOGEN
FREE
GREEN
(5-2008)

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)

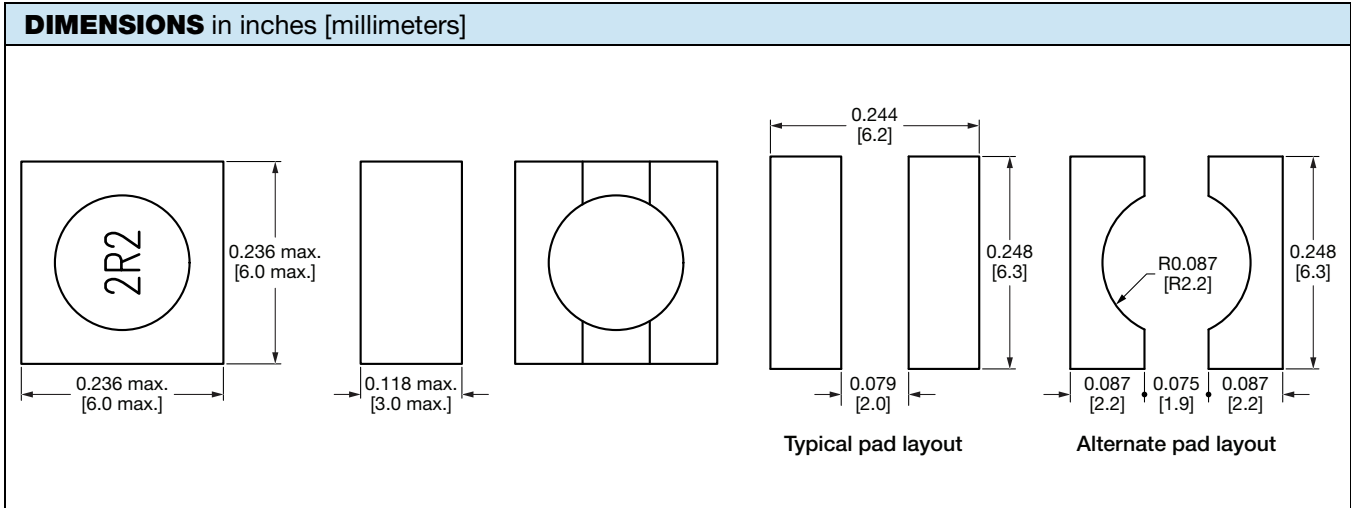
APPLICATIONS

- DC/DC power supplies
- Noise suppression and filtering

| STANDARD ELECTRICAL SPECIFICATIONS | | | | | |
|------------------------------------|--|--------------------------------|---------------------------|--|---|
| PART NUMBER | L ₀ INDUCTANCE (μH) | INDUCTANCE TOLERANCE (%) | DCR MAX. (m Ω) | HEAT RATING CURRENT DC TYP. (A) ⁽¹⁾ | SATURATION CURRENT DC TYP. (A) ⁽²⁾ |
| IFDC2020CZER2R2N | 2.2 | 30 | 17 | 2.60 | 2.60 |
| IFDC2020CZER3R3N | 3.3 | 30 | 29 | 2.40 | 2.40 |
| IFDC2020CZER4R7N | 4.7 | 30 | 39 | 2.10 | 2.10 |
| IFDC2020CZER6R8N | 6.8 | 30 | 48 | 1.85 | 1.85 |
| IFDC2020CZER8R2N | 8.2 | 30 | 57 | 1.58 | 1.58 |
| IFDC2020CZER100M | 10 | 20 | 65 | 1.30 | 1.30 |
| IFDC2020CZER120M | 12 | 20 | 76 | 1.20 | 1.20 |
| IFDC2020CZER150M | 15 | 20 | 95 | 1.10 | 1.10 |
| IFDC2020CZER180M | 18 | 20 | 110 | 1.00 | 1.00 |
| IFDC2020CZER220M | 22 | 20 | 122 | 0.90 | 0.90 |
| IFDC2020CZER330M | 33 | 20 | 189 | 0.75 | 0.75 |
| IFDC2020CZER470M | 47 | 20 | 250 | 0.62 | 0.62 |
| IFDC2020CZER560M | 56 | 20 | 305 | 0.58 | 0.58 |
| IFDC2020CZER680M | 68 | 20 | 355 | 0.52 | 0.52 |
| IFDC2020CZER820M | 82 | 20 | 463 | 0.46 | 0.46 |
| IFDC2020CZER101M | 100 | 20 | 520 | 0.42 | 0.42 |
| IFDC2020CZER121M | 120 | 20 | 560 | 0.40 | 0.40 |
| IFDC2020CZER151M | 150 | 20 | 680 | 0.35 | 0.35 |
| IFDC2020CZER181M | 180 | 20 | 930 | 0.32 | 0.32 |
| IFDC2020CZER221M | 220 | 20 | 1150 | 0.30 | 0.30 |
| IFDC2020CZER271M | 270 | 20 | 1560 | 0.27 | 0.27 |
| IFDC2020CZER331M | 330 | 20 | 1980 | 0.25 | 0.25 |

Notes

- All test data is referenced to 25 °C ambient
- Test condition: 100 kHz, 0.3 V for 8.2 μH and below, and 1 kHz, 0.3 V for 10 μH and above
- Storage condition: -40 °C to +105 °C (on board); and -10 °C to +40 °C and < 70 % RH (in component packaging)
- (1) DC current (A) that will result in ΔT no greater than 40 °C
- (2) DC current (A) that will result in L₀ drop no greater than 35 %



| DESCRIPTION | | | | |
|-------------|------------------|----------------------|--------------|--------------------------------|
| IFDC2020CZ | 2.2 μ 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 0 2 0 C Z | E R | 2 R 2 | N |
| PRODUCT FAMILY | SIZE | PACKAGE CODE | INDUCTANCE VALUE | INDUCTANCE TOLERANCE |
| | | ER = tape and reel | 2R2 = 2.2 μ H | M = $\pm 20\%$ N = $\pm 30\%$ |



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