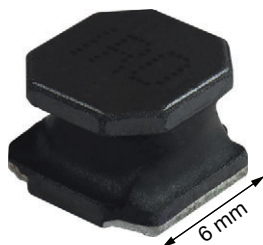


Semi-Shielded SMD Power Inductors



FEATURES

- 6.0 mm x 6.0 mm x 4.5 mm SMD package
- Semi-shielded, wirewound ferrite construction
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



RoHS
COMPLIANT
HALOGEN
FREE

ELECTRICAL SPECIFICATIONS

Operating temperature:

-40 °C to +125 °C (temperature rise included)

Resistance to solder heat:

260 °C for 10 s (3 times max. through reflow)

APPLICATIONS

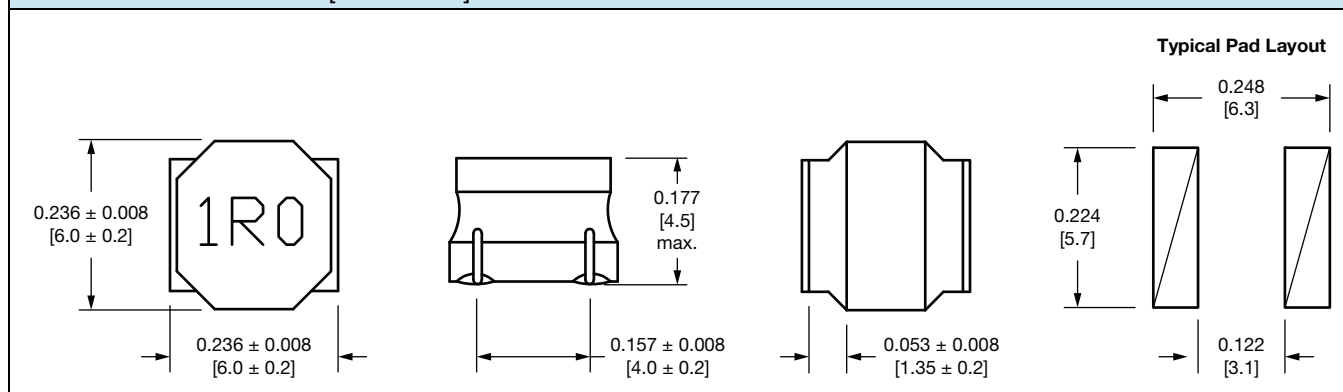
- DC/DC power supplies
- LCD displays
- Noise suppression and filtering
- Lighting drivers
- Battery powered devices

STANDARD ELECTRICAL SPECIFICATIONS

| PART NUMBER | INDUCTANCE AT 0 A (μ H) | IND. TOL. (%) | DCR \pm 30 % (m Ω) | HEAT RATING CURRENT DC (A) ⁽¹⁾ | SATURATION CURRENT DC (A) ⁽²⁾ | SRF TYP. (MHz) |
|--------------------|------------------------------------|------------------|---------------------------------|---|--|-------------------|
| IFSC2020DEER1R0N01 | 1.0 | 30 | 14 | 4.2 | 8.5 | 110 |
| IFSC2020DEER1R2N01 | 1.2 | 30 | 16 | 4.0 | 8.0 | 100 |
| IFSC2020DEER1R5N01 | 1.5 | 30 | 18 | 3.7 | 7.0 | 65 |
| IFSC2020DEER1R8N01 | 1.8 | 30 | 18 | 3.7 | 7.0 | 60 |
| IFSC2020DEER2R2N01 | 2.2 | 30 | 21 | 3.5 | 6.0 | 52 |
| IFSC2020DEER3R3N01 | 3.3 | 30 | 24 | 3.2 | 5.0 | 32 |
| IFSC2020DEER4R7M01 | 4.7 | 20 | 31 | 3.0 | 4.0 | 24 |
| IFSC2020DEER5R6M01 | 5.6 | 20 | 36 | 2.9 | 3.9 | 23 |
| IFSC2020DEER6R8M01 | 6.8 | 20 | 38 | 2.8 | 3.8 | 14 |
| IFSC2020DEER100M01 | 10 | 20 | 47 | 2.5 | 3.0 | 12 |
| IFSC2020DEER150M01 | 15 | 20 | 77 | 1.9 | 2.3 | 10 |
| IFSC2020DEER220M01 | 22 | 20 | 115 | 1.5 | 1.9 | 7 |
| IFSC2020DEER330M01 | 33 | 20 | 145 | 1.4 | 1.5 | 6 |
| IFSC2020DEER470M01 | 47 | 20 | 220 | 1.1 | 1.3 | 5 |
| IFSC2020DEER560M01 | 56 | 20 | 310 | 1.0 | 1.1 | 4.5 |
| IFSC2020DEER680M01 | 68 | 20 | 330 | 0.9 | 1.0 | 4 |
| IFSC2020DEER820M01 | 82 | 20 | 460 | 0.8 | 0.9 | 3.9 |
| IFSC2020DEER101M01 | 100 | 20 | 500 | 0.7 | 0.8 | 3 |
| IFSC2020DEER121M01 | 120 | 20 | 620 | 0.7 | 0.75 | 3 |
| IFSC2020DEER151M01 | 150 | 20 | 800 | 0.65 | 0.7 | 2.8 |
| IFSC2020DEER181M01 | 180 | 20 | 930 | 0.6 | 0.65 | 2.6 |
| IFSC2020DEER221M01 | 220 | 20 | 1200 | 0.5 | 0.6 | 2.4 |
| IFSC2020DEER331M01 | 330 | 20 | 1800 | 0.4 | 0.5 | 2.2 |
| IFSC2020DEER471M01 | 470 | 20 | 2000 | 0.35 | 0.4 | 2 |

Notes

- All test data is referenced to 25 °C ambient
- Test condition: 100 kHz, 1 V
- Storage condition: -40 °C to +125 °C (on board); less than 40°C and < 60 % RH (in component packaging)
- ⁽¹⁾ DC current (A) that will cause an approximate ΔT of +40 °C
- ⁽²⁾ DC current (A) that will cause L_0 to drop approximately 30 %

DIMENSIONS in inches [millimeters]

DESCRIPTION

| | | | | |
|-----------------------|------------------|----------------------|--------------|--------------------------------|
| IFSC-2020DE-01 | 10 µH | ± 20 % | ER | e3 |
| MODEL | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | PACKAGE CODE | JEDEC® LEAD (Pb)-FREE STANDARD |

GLOBAL PART NUMBER

| | | | | | |
|----------------|--------------------|-------------------------------------|------------------|--------------------------|------------|
| I F S C | 2 0 2 0 D E | E R | 1 0 0 | M | 0 1 |
| PRODUCT FAMILY | SIZE | PACKAGE CODE | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | SERIES |
| | | ER = tape and reel 1000 pcs/reel | 100 = 10 µH | M = ± 20 % N = ± 30 % | |



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