

Inductors, Epoxy Conformal Coated, Axial Leaded

-00-

ELECTRICAL SPECIFICATIONS

Inductance Range: 0.1 μH to 1000 μH

Inductance Tolerance: $\pm~10~\%$ from 0.1 μH to 1000 μH

standard, ± 5 % optional

Operating Temperature Range: - 20 °C to + 105 °C

Dielectric Strength: 250 V_{RMS}

MECHANICAL SPECIFICATIONS

Terminal Strength: Pull = 5 pounds, twist = 360 °C x 3

Protection: Epoxy uniform roll coated

Leads: Tinned copper

ENVIRONMENTAL SPECIFICATIONS

Maximum Temperature Rise: + 20 °C

FEATURES

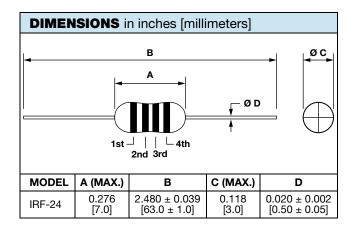
 High performance ferrite core is used in this epoxy conformally coated choke which allows for inductance values to 1000 μH



ROHS COMPLIANT HALOGEN

FREE

- Axial lead type, small lightweight design
- Special magnetic core structure contributes to high Q and self-resonant frequencies
- Treated with epoxy resin coating for humidity resistance to ensure long life
- Heat resistant adhesives
- Material categorization: For definitions of compliance please see <u>www.vishav.com/doc?99912</u>



| STANDARD ELECTRICAL SPECIFICATIONS | | | | | | | |
|------------------------------------|--------------|-------------------|-----------|-------------------------|-------------------|-----------------|-----------------------|
| MODEL | IND. (µH) | TOL. (%) | Q MIN. | TEST FREQUENCY (MHz) | SRF MIN. (MHz) | DCR MAX. (Ω) | RATED DC CURRENT (mA) |
| IRF-24 | 0.10 | ± 20 | 30 | 25.2 | 280 | 0.085 | 1400 |
| IRF-24 | 0.12 | ± 20 | 30 | 25.2 | 280 | 0.085 | 1350 |
| IRF-24 | 0.15 | ± 20 | 30 | 25.2 | 280 | 0.095 | 1270 |
| IRF-24 | 0.18 | ± 20 | 30 | 25.2 | 280 | 0.12 | 1200 |
| IRF-24 | 0.22 | ± 20 | 40 | 25.2 | 280 | 0.15 | 1150 |
| IRF-24 | 0.27 | ± 20 | 40 | 25.2 | 260 | 0.15 | 1110 |
| IRF-24 | 0.33 | ± 20 | 40 | 25.2 | 260 | 0.15 | 1110 |
| IRF-24 | 0.39 | ± 20 | 40 | 25.2 | 220 | 0.17 | 1000 |
| IRF-24 | 0.47 | ± 20 | 40 | 25.2 | 200 | 0.17 | 1000 |
| IRF-24 | 0.56 | ± 20 | 40 | 25.2 | 180 | 0.17 | 950 |
| IRF-24 | 0.68 | ± 20 | 40 | 25.2 | 160 | 0.18 | 900 |
| IRF-24 | 0.82 | ± 20 | 40 | 25.2 | 140 | 0.18 | 900 |
| IRF-24 | 1.0 | ± 5, ± 10 | 40 | 25.2 | 135 | 0.18 | 815 |
| IRF-24 | 1.2 | $\pm 5, \pm 10$ | 40 | 7.96 | 135 | 0.18 | 740 |
| IRF-24 | 1.5 | ± 5, ± 10 | 40 | 7.96 | 130 | 0.20 | 700 |
| IRF-24 | 1.8 | ± 5, ± 10 | 40 | 7.96 | 125 | 0.23 | 655 |
| IRF-24 | 2.2 | ± 5, ± 10 | 40 | 7.96 | 80 | 0.25 | 630 |
| IRF-24 | 2.7 | ± 5, ± 10 | 40 | 7.96 | 80 | 0.28 | 595 |
| IRF-24 | 3.3 | \pm 5, \pm 10 | 40 | 7.96 | 70 | 0.30 | 575 |
| IRF-24 | 3.9 | \pm 5, \pm 10 | 40 | 7.96 | 65 | 0.32 | 555 |
| IRF-24 | 4.7 | ± 5, ± 10 | 40 | 7.96 | 45 | 0.35 | 530 |
| IRF-24 | 5.6 | \pm 5, \pm 10 | 40 | 7.96 | 40 | 0.40 | 500 |
| IRF-24 | 6.8 | ± 5, ± 10 | 40 | 7.96 | 30 | 0.45 | 470 |
| IRF-24 | 8.2 | ± 5, ± 10 | 40 | 7.96 | 28 | 0.56 | 425 |



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|------------------------------------|--------------|-------------|-----------|-------------------------|-------------------|-----------------|-----------------------|
| MODEL | IND. (µH) | TOL. (%) | Q MIN. | TEST FREQUENCY (MHz) | SRF MIN. (MHz) | DCR MAX. (Ω) | RATED DC CURRENT (mA) |
| IRF-24 | 10 | ± 5, ± 10 | 40 | 7.96 | 22 | 0.72 | 370 |
| IRF-24 | 12 | ± 5, ± 10 | 40 | 2.52 | 20 | 0.80 | 350 |
| IRF-24 | 15 | ± 5, ± 10 | 40 | 2.52 | 16 | 0.88 | 335 |
| IRF-24 | 18 | ± 5, ± 10 | 40 | 2.52 | 15 | 1.0 | 315 |
| IRF-24 | 22 | ± 5, ± 10 | 40 | 2.52 | 13 | 1.2 | 285 |
| IRF-24 | 27 | ± 5, ± 10 | 40 | 2.52 | 11 | 1.35 | 270 |
| IRF-24 | 33 | ± 5, ± 10 | 40 | 2.52 | 10 | 1.5 | 255 |
| IRF-24 | 39 | ± 5, ± 10 | 40 | 2.52 | 9.5 | 1.7 | 240 |
| IRF-24 | 47 | ± 5, ± 10 | 50 | 2.52 | 8.5 | 2.3 | 205 |
| IRF-24 | 56 | ± 5, ± 10 | 50 | 2.52 | 7.5 | 2.6 | 195 |
| IRF-24 | 68 | ± 5, ± 10 | 50 | 2.52 | 6.5 | 2.9 | 185 |
| IRF-24 | 82 | ± 5, ± 10 | 50 | 2.52 | 6.0 | 3.2 | 175 |
| IRF-24 | 100 | ± 5, ± 10 | 50 | 2.52 | 5.5 | 3.7 | 165 |
| IRF-24 | 120 | ± 5, ± 10 | 60 | 0.796 | 5.4 | 3.8 | 160 |
| IRF-24 | 150 | ± 5, ± 10 | 60 | 0.796 | 4.75 | 4.9 | 150 |
| IRF-24 | 180 | ± 5, ± 10 | 60 | 0.796 | 4.35 | 5.5 | 140 |
| IRF-24 | 220 | ± 5, ± 10 | 60 | 0.796 | 4.0 | 6.5 | 130 |
| IRF-24 | 270 | ± 5, ± 10 | 60 | 0.796 | 3.7 | 7.5 | 120 |
| IRF-24 | 330 | ± 5, ± 10 | 60 | 0.796 | 3.4 | 9.5 | 100 |
| IRF-24 | 390 | ± 5, ± 10 | 60 | 0.796 | 2.8 | 10.5 | 95 |
| IRF-24 | 470 | ± 5, ± 10 | 60 | 0.796 | 2.56 | 17.5 | 90 |
| IRF-24 | 560 | ± 5, ± 10 | 60 | 0.796 | 2.35 | 19.5 | 85 |
| IRF-24 | 680 | ± 5, ± 10 | 60 | 0.796 | 2.0 | 20.0 | 75 |
| IRF-24 | 820 | ± 5, ± 10 | 60 | 0.796 | 1.60 | 23.7 | 65 |
| IRF-24 | 1000 | ± 5, ± 10 | 50 | 0.796 | 1.15 | 30.0 | 60 |

| ORDERING INFORMATION | | | | | | | | |
|----------------------|------------------|----------------------|--------------|-------------------------------|--|--|--|--|
| IRF-24 | 6.8 µH | ± 10 % | ER | e3 | | | | |
| MODEL | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | PACKAGE CODE | JEDEC LEAD (Pb)-FREE STANDARD | | | | |

| GLOBAL PART NUMBER | | | | | | |
|--------------------|-----------------|---------------------|-------------------------|--|--|--|
| I R F 2 4 | E R | 6 R 8 | К | | | |
| MODEL | PACKAGE CODE | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | | | |



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