

Inductors, Epoxy Conformal Coated, Axial Leaded



ELECTRICAL SPECIFICATIONS

Inductance Range: 1000 μ H to 39 000 μ H

Inductance Tolerance: $\pm 10\%$ standard, $\pm 5\%$ optional

Operating Temperature Range: $-20\text{ }^{\circ}\text{C}$ to $+105\text{ }^{\circ}\text{C}$

Dielectric Strength: 250 V_{RMS}

MECHANICAL SPECIFICATIONS

Terminal Strength: pull = 5 pounds, twist = $360\text{ }^{\circ}\text{C} \times 3$

Protection: epoxy uniform roll coated

Leads: tinned copper

ENVIRONMENTAL SPECIFICATIONS

Maximum Temperature Rise: $+20\text{ }^{\circ}\text{C}$

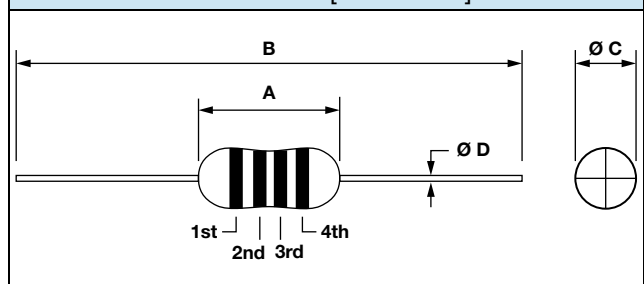
FEATURES

- 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 and special structural design for effective open circuit measurement
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



RoHS
COMPLIANT
HALOGEN
FREE

DIMENSIONS in inches [millimeters]



| MODEL | A (MAX.) | B | C (MAX.) | D |
|--------|-----------------|---------------------------------------|----------------|--|
| IRF-46 | 0.394 [10.0] | 2.480 \pm 0.039 [63.0 \pm 1.0] | 0.205 [5.2] | 0.026 \pm 0.002 [0.65 \pm 0.05] |

STANDARD ELECTRICAL SPECIFICATIONS

| MODEL | IND. (μ H) | TOL. (%) | Q MIN. | TEST FREQUENCY (MHz) | DCR MAX. (Ω) | SRF MIN. (MHz) | RATED DC CURRENT (mA) |
|--------|-----------------|-----------------|--------|----------------------|-----------------------|----------------|-----------------------|
| IRF-46 | 1000 | $\pm 5, \pm 10$ | 80 | 2.52 | 8 | 1.7 | 200 |
| IRF-46 | 1200 | $\pm 5, \pm 10$ | 80 | 2.52 | 9 | 1.5 | 180 |
| IRF-46 | 1500 | $\pm 5, \pm 10$ | 80 | 2.52 | 10 | 1.4 | 160 |
| IRF-46 | 1800 | $\pm 5, \pm 10$ | 80 | 2.52 | 11 | 1.3 | 150 |
| IRF-46 | 2200 | $\pm 5, \pm 10$ | 80 | 2.52 | 14 | 1.2 | 120 |
| IRF-46 | 2700 | $\pm 5, \pm 10$ | 80 | 2.52 | 18 | 1.0 | 110 |
| IRF-46 | 3300 | $\pm 5, \pm 10$ | 80 | 2.52 | 22 | 0.9 | 105 |
| IRF-46 | 3900 | $\pm 5, \pm 10$ | 80 | 2.52 | 26 | 0.8 | 100 |
| IRF-46 | 4700 | $\pm 5, \pm 10$ | 80 | 2.52 | 30 | 0.7 | 95 |
| IRF-46 | 5600 | $\pm 5, \pm 10$ | 60 | 2.52 | 34 | 0.7 | 80 |
| IRF-46 | 6800 | $\pm 5, \pm 10$ | 60 | 2.52 | 48 | 0.5 | 75 |
| IRF-46 | 8200 | $\pm 5, \pm 10$ | 60 | 2.52 | 62 | 0.5 | 70 |
| IRF-46 | 10 000 | $\pm 5, \pm 10$ | 60 | 0.0796 | 74 | 0.5 | 65 |
| IRF-46 | 12 000 | $\pm 5, \pm 10$ | 50 | 0.0796 | 88 | 0.4 | 60 |
| IRF-46 | 15 000 | $\pm 5, \pm 10$ | 50 | 0.0796 | 102 | 0.4 | 55 |
| IRF-46 | 18 000 | $\pm 5, \pm 10$ | 40 | 0.0796 | 150 | 0.3 | 50 |
| IRF-46 | 22 000 | $\pm 5, \pm 10$ | 40 | 0.0796 | 180 | 0.3 | 45 |
| IRF-46 | 27 000 | $\pm 5, \pm 10$ | 40 | 0.0796 | 210 | 0.3 | 40 |
| IRF-46 | 30 000 | $\pm 5, \pm 10$ | 40 | 0.0796 | 240 | 0.3 | 35 |
| IRF-46 | 33 000 | $\pm 5, \pm 10$ | 40 | 0.0796 | 250 | 0.2 | 30 |
| IRF-46 | 39 000 | $\pm 5, \pm 10$ | 40 | 0.0796 | 270 | 0.2 | 25 |



| ORDERING INFORMATION | | | | |
|----------------------|------------------|----------------------|--------------|--------------------------------|
| IRF-46 | 15 000 μ H | $\pm 10 \%$ | ER | e3 |
| MODEL | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | PACKAGE CODE | JEDEC® LEAD (Pb)-FREE STANDARD |

| GLOBAL PART NUMBER | | | | | | | | | | | | | | |
|--|---|---|---|---|---|--|---|---|---|---|---|---|---|---|
| <table border="1"> <tr> <td>I</td> <td>R</td> <td>F</td> <td>4</td> <td>6</td> </tr> </table> MODEL | I | R | F | 4 | 6 | <table border="1"> <tr> <td>E</td> <td>R</td> </tr> </table> PACKAGE CODE | E | R | <table border="1"> <tr> <td>1</td> <td>5</td> <td>3</td> </tr> </table> INDUCTANCE VALUE | 1 | 5 | 3 | <table border="1"> <tr> <td>K</td> </tr> </table> INDUCTANCE TOLERANCE | K |
| I | R | F | 4 | 6 | | | | | | | | | | |
| E | R | | | | | | | | | | | | | |
| 1 | 5 | 3 | | | | | | | | | | | | |
| K | | | | | | | | | | | | | | |



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