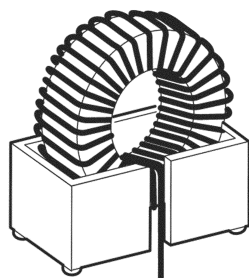


# Switchmode/High Frequency

## Toroidal Inductors



### :: Description

Triad toroidal inductors are specifically designed to minimize transients. These devices store energy, and therefore, condition the output signal by leveling out the current waveform providing a more stable current supply. Generally used in high frequency circuits, our standardized design provides an economical solution in differential mode applications or as an output inductor.

### :: Torodial Inductors

| Section | Type No. | Min. Inductance ( $\mu$ H) |         | Rated DC Amps | Max. DCR (mOhm) | Dimensions |       |       |       |       |       | Wt. Lbs. |
|---------|----------|----------------------------|---------|---------------|-----------------|------------|-------|-------|-------|-------|-------|----------|
|         |          | No Bias                    | At Bias |               |                 | A          | B     | C     | D     | E     | F     |          |
| A       | FIT44-1  | 18.85                      | 12.72   | 2.8           | 44.8            | 0.625      | 0.350 | 0.700 | 0.250 | 0.350 | 0.020 | .008     |
|         | FIT44-2  | 14.75                      | 9.82    | 3.4           | 30.7            |            |       |       |       |       | 0.022 |          |
|         | FIT44-3  | 12.30                      | 7.75    | 4.0           | 23.4            |            |       |       |       |       | 0.025 |          |
|         | FIT44-4  | 8.06                       | 5.22    | 4.8           | 15.9            |            |       |       |       |       | 0.028 |          |
| B       | FIT50-1  | 47.40                      | 29.00   | 2.8           | 78.9            | 0.700      | 0.475 | 0.750 | 0.300 | 0.474 | 0.020 | .012     |
|         | FIT50-2  | 35.48                      | 23.77   | 3.4           | 57.8            |            |       |       |       |       | 0.022 |          |
|         | FIT50-3  | 27.16                      | 16.13   | 4.0           | 40.1            |            |       |       |       |       | 0.025 |          |
|         | FIT50-4  | 21.65                      | 12.27   | 4.8           | 29.2            |            |       |       |       |       | 0.028 |          |
|         | FIT50-5  | 16.76                      | 9.50    | 5.7           | 20.0            |            |       |       |       |       | 0.032 |          |
|         | FIT50-6  | 12.50                      | 6.75    | 6.8           | 14.0            |            |       |       |       |       | 0.036 |          |
|         | FIT50-7  | 8.86                       | 4.80    | 8.1           | 11.0            |            |       |       |       |       | 0.040 |          |
| C       | FIT68-1  | 89.50                      | 57.99   | 2.8           | 108.0           | 0.875      | 0.475 | 0.950 | 0.300 | 0.474 | 0.020 | .026     |
|         | FIT68-2  | 71.10                      | 41.59   | 3.4           | 86.1            |            |       |       |       |       | 0.023 |          |
|         | FIT68-3  | 54.81                      | 33.05   | 4.0           | 59.9            |            |       |       |       |       | 0.026 |          |
|         | FIT68-4  | 43.30                      | 26.63   | 4.8           | 42.4            |            |       |       |       |       | 0.028 |          |
|         | FIT68-5  | 33.15                      | 18.79   | 5.7           | 28.8            |            |       |       |       |       | 0.032 |          |
|         | FIT68-6  | 24.31                      | 13.56   | 6.8           | 20.2            |            |       |       |       |       | 0.036 |          |
|         | FIT68-7  | 18.64                      | 10.23   | 8.1           | 14.8            |            |       |       |       |       | 0.040 |          |
| D       | FIT80-1  | 128.00                     | 74.04   | 4.0           | 95.2            | 0.975      | 0.625 | 1.100 | 0.450 | 0.624 | 0.026 | .045     |
|         | FIT80-2  | 107.50                     | 58.05   | 4.8           | 67.9            |            |       |       |       |       | 0.029 |          |
|         | FIT80-3  | 80.75                      | 42.00   | 5.7           | 44.8            |            |       |       |       |       | 0.032 |          |
|         | FIT80-4  | 65.04                      | 31.60   | 6.8           | 32.8            |            |       |       |       |       | 0.036 |          |
|         | FIT80-5  | 47.70                      | 22.79   | 8.1           | 22.5            |            |       |       |       |       | 0.040 |          |
|         | FIT80-6  | 38.07                      | 18.11   | 9.7           | 17.0            |            |       |       |       |       | 0.045 |          |
| E       | FIT106-1 | 253.00                     | 153.00  | 4.0           | 139.0           | 1.300      | 0.725 | 1.400 | 0.500 | 0.724 | 0.026 | .090     |
|         | FIT106-2 | 197.00                     | 113.00  | 4.8           | 106.0           |            |       |       |       |       | 0.029 |          |
|         | FIT106-3 | 154.00                     | 84.00   | 5.7           | 74.0            |            |       |       |       |       | 0.032 |          |
|         | FIT106-4 | 116.00                     | 61.90   | 6.8           | 48.5            |            |       |       |       |       | 0.036 |          |
|         | FIT106-5 | 93.00                      | 48.00   | 8.1           | 39.1            |            |       |       |       |       | 0.040 |          |
|         | FIT106-6 | 70.05                      | 35.30   | 9.7           | 24.0            |            |       |       |       |       | 0.045 |          |

A FIT-KIT is available which includes one of each of the above listed components.

### :: Outline Dimensions

#### Technical Notes

1. Nominal inductance values are typically 10% higher than minimal rating.
2. Biased inductance measured at rated DC amps.
3. Operation at rated current yields approximately 40°C temperature rise over 20°C ambient.

