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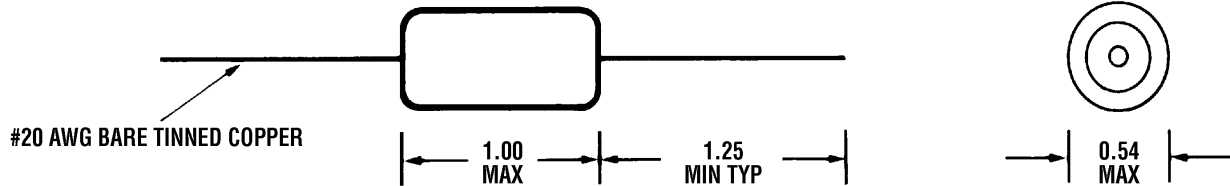
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258 East Second Street

Mineola, New York 11501-3508

SHIELDED HIGH CURRENT CHOKES

TYPE 7500 10µH - 1.0mH 10% Tolerance



LOW EMI – HIGH SATURATION CURRENT

Proprietary core design reduces radiated electromagnetic interference by over 99% compared to equivalent unshielded chokes (k typically 0.2% versus 40% using method 4.8.8.4 of MIL-C-

15305), while maintaining higher saturation current (INCR I) than comparable shielded chokes. Ideal for switching regulator and filter applications where EMI must be kept to a minimum.

NOTES:

1. INDUCTANCE measured on QuadTech/GenRad 1659 RLC Digibridge at 1.0 KHz.
2. THE CURRENT RATING (Rated IDC) is based on 0.5 watt power dissipation for an approximate 20°C temperature rise. Depending on the application, these units may be operated at higher currents.
3. INCREMENTAL CURRENT (INCR I) is the approximate current at which the inductance will be decreased by 5% from its initial (ZERO DC) value because of saturation.

4. DIELECTRIC WITHSTANDING VOLTAGE: 1000 VRMS
5. OPERATING TEMPERATURE RANGE: -55° to +105°C.
6. Marking: Printed with Caddell-Burns Part Number.
7. Materials:

Coil and Shield: Ferrite
 Magnet Wire: Per FED SPEC J-W-001177/9
 Encapsulation: Epoxy
 Jacket: Per MIL-I-23053/5, Class 1.
 Flame Retardant IAW UL 224, Class 1.

STANDARD VALUES: (Other values are available on special order.)

| Part No. | Nominal Inductance | DCR ±20% Ohms | Min. SRF MHz | Rated IDC Amps | INCR I Amps | Part No. | Nominal Inductance | DCR ±20% Ohms | Min. SRF MHz | Rated IDC Amps | INCR I Amps |
|----------|--------------------|---------------|--------------|----------------|-------------|----------|--------------------|---------------|--------------|----------------|-------------|
| 7500-01 | 10 µH | 0.015 | 23 | 5.8 | 12 | 7500-32 | 3.9 mH | 4.7 | 0.31 | 0.33 | 0.55 |
| 7500-02 | 12 | 0.017 | 14 | 5.4 | 10 | 7500-33 | 4.7 | 5.2 | 0.30 | 0.31 | 0.50 |
| 7500-03 | 15 | 0.018 | 10 | 5.3 | 9.6 | 7500-34 | 5.6 | 6.9 | 0.27 | 0.27 | 0.46 |
| 7500-04 | 18 | 0.024 | 8.6 | 4.6 | 8.4 | 7500-35 | 6.8 | 7.6 | 0.26 | 0.26 | 0.42 |
| 7500-05 | 22 | 0.028 | 7.8 | 4.2 | 7.6 | 7500-36 | 8.2 | 8.6 | 0.24 | 0.24 | 0.38 |
| 7500-06 | 27 | 0.040 | 5.2 | 3.5 | 6.8 | 7500-37 | 10 | 12 | 0.20 | 0.20 | 0.34 |
| 7500-07 | 33 | 0.047 | 4.4 | 3.3 | 6.0 | 7500-38 | 12 | 13 | 0.19 | 0.19 | 0.32 |
| 7500-08 | 39 | 0.051 | 4.1 | 3.1 | 5.7 | 7500-39 | 15 | 18 | 0.17 | 0.17 | 0.28 |
| 7500-09 | 47 | 0.057 | 3.8 | 3.0 | 5.2 | 7550-40 | 18 | 20 | 0.14 | 0.16 | 0.26 |
| 7500-10 | 56 | 0.064 | 3.5 | 2.8 | 4.7 | 7500-41 | 22 | 28 | 0.13 | 0.13 | 0.24 |
| 7500-11 | 68 | 0.088 | 3.0 | 2.4 | 4.2 | 7500-42 | 27 | 32 | 0.12 | 0.12 | 0.21 |
| 7500-12 | 82 | 0.10 | 2.4 | 2.2 | 3.8 | 7500-43 | 33 | 42 | 0.10 | 0.11 | 0.19 |
| 7500-13 | 100 | 0.13 | 2.1 | 2.0 | 3.5 | 7500-44 | 39 | 46 | 0.098 | 0.10 | 0.17 |
| 7500-14 | 120 | 0.19 | 2.0 | 1.6 | 3.1 | 7500-45 | 47 | 64 | 0.092 | 0.088 | 0.16 |
| 7500-15 | 150 | 0.21 | 1.8 | 1.5 | 2.8 | 7500-46 | 56 | 70 | 0.080 | 0.084 | 0.15 |
| 7500-16 | 180 | 0.23 | 1.7 | 1.5 | 2.6 | 7500-47 | 68 | 95 | 0.072 | 0.072 | 0.13 |
| 7500-17 | 220 | 0.25 | 1.6 | 1.4 | 2.4 | 7500-48 | 82 | 110 | 0.059 | 0.068 | 0.12 |
| 7500-18 | 270 | 0.31 | 1.5 | 1.3 | 2.1 | 7500-49 | 100 | 140 | 0.052 | 0.059 | 0.11 |
| 7500-19 | 330 | 0.35 | 1.3 | 1.2 | 1.9 | 7500-50 | 120 | 160 | 0.048 | 0.055 | 0.100 |
| 7500-20 | 390 | 0.47 | 1.1 | 1.0 | 1.7 | 7500-51 | 150 | 220 | 0.040 | 0.048 | 0.090 |
| 7500-21 | 470 | 0.63 | 0.96 | 0.89 | 1.6 | 7500-52 | 180 | 240 | 0.036 | 0.045 | 0.082 |
| 7500-22 | 560 | 0.69 | 0.92 | 0.85 | 1.5 | 7500-53 | 220 | 320 | 0.032 | 0.039 | 0.075 |
| 7500-23 | 680 | 0.94 | 0.78 | 0.73 | 1.3 | 7500-54 | 270 | 370 | 0.031 | 0.036 | 0.067 |
| 7500-24 | 820 | 1.0 | 0.74 | 0.69 | 1.2 | 7500-55 | 330 | 530 | 0.027 | 0.030 | 0.060 |
| 7500-25 | 1.0 mH | 1.2 | 0.68 | 0.66 | 1.1 | 7500-56 | 390 | 570 | 0.024 | 0.029 | 0.055 |
| 7500-26 | 1.2 | 1.3 | 0.60 | 0.62 | 1.0 | 7500-57 | 470 | 740 | 0.019 | 0.026 | 0.050 |
| 7500-27 | 1.5 | 1.8 | 0.58 | 0.53 | 0.89 | 7500-58 | 560 | 820 | 0.018 | 0.024 | 0.046 |
| 7500-28 | 1.8 | 2.0 | 0.52 | 0.50 | 0.81 | 7500-59 | 680 | 910 | 0.016 | 0.023 | 0.042 |
| 7500-29 | 2.2 | 2.7 | 0.44 | 0.43 | 0.75 | 7500-60 | 820 | 1,000 | 0.015 | 0.021 | 0.038 |
| 7500-30 | 2.7 | 3.1 | 0.38 | 0.40 | 0.66 | 7500-61 | 1.0 H | 1,100 | 0.013 | 0.020 | 0.035 |
| 7500-31 | 3.3 | 3.5 | 0.36 | 0.38 | 0.60 | | | | | | |

INDUCTOR SELECTION KITS FOR DESIGN ENGINEERS

Type 7500 Shielded High current Chokes are available in kits to assist the designer of switching regulators, power supplies, and filters in selecting the optimal inductor for a given application. Part No. 7500 - KIT contains two each of the following inductor

values: 10 µH, 15 µH, 22 µH, 33 µH, 47 µH, 68 µH, 100 µH, 150 µH, 220 µH, 330 µH, 470 µH, 1.0 mH. FREE REFILL order forms are included, to replace parts as they are used, or to obtain samples of values not included with kits.

SEND YOUR REQUIREMENTS. PROMPT QUOTES.