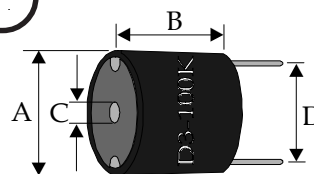


# HIGH CURRENT DRUM CORE INDUCTOR SERIES D

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## ELECTRICAL CHARACTERISTICS

- Inductance 1.0uH to 4700uH
- Tolerance  $\pm 20\%$  for values under 10uH  
 $\pm 10\%$  for values above 10uH
- Rated current Obtained when Lo drops 10% typical
- Testing procedures Quadtech LCR 1750 Meter @ 1KHz



## PHYSICAL CHARACTERISTICS

- Dielectric strength 500 volts RMS
- Operating temp. -25°C to +105°C
- Finish Varnish or covered with UL/CSA shrink tube
- Lead spec. Self-leaded. All leads are tinned within 1/8" of body, Lead length is 0.25" min.
- Marking Part number
- Packaging 100 pieces per board

## D1 & D2 SPECIFICATIONS

| Part Number | L (μH) | DCR Max (Ω) | Rated Current (Amps) | Lead Spacing D ± 0.05" |
|-------------|--------|-------------|----------------------|------------------------|
| D1-1R0M     | 1.0    | 0.003       | 9.0                  | 0.550"                 |
| D1-1R2M     | 1.2    | 0.003       | 9.0                  | 0.550"                 |
| D1-1R5M     | 1.5    | 0.004       | 9.0                  | 0.550"                 |
| D1-1R8M     | 1.8    | 0.004       | 9.0                  | 0.550"                 |
| D1-2R2M     | 2.2    | 0.005       | 9.0                  | 0.550"                 |
| D1-2R7M     | 2.7    | 0.005       | 9.0                  | 0.550"                 |
| D1-3R3M     | 3.3    | 0.005       | 9.0                  | 0.550"                 |
| D1-3R9M     | 3.9    | 0.006       | 9.0                  | 0.550"                 |
| D1-4R7M     | 4.7    | 0.007       | 9.0                  | 0.550"                 |
| D1-5R6M     | 5.6    | 0.007       | 9.0                  | 0.550"                 |
| D1-6R8M     | 6.8    | 0.008       | 9.0                  | 0.550"                 |
| D1-8R2M     | 8.2    | 0.009       | 9.0                  | 0.550"                 |
| D1-100K     | 10     | 0.010       | 9.0                  | 0.550"                 |
| D1-120K     | 12     | 0.011       | 9.0                  | 0.550"                 |
| D1-150K     | 15     | 0.015       | 7.2                  | 0.500"                 |
| D1-180K     | 18     | 0.016       | 7.2                  | 0.500"                 |
| D1-220K     | 22     | 0.025       | 5.5                  | 0.500"                 |
| D1-270K     | 27     | 0.030       | 4.5                  | 0.500"                 |
| D1-330K     | 33     | 0.040       | 4.0                  | 0.406"                 |
| D1-390K     | 39     | 0.046       | 4.0                  | 0.469"                 |
| D1-470K     | 47     | 0.062       | 2.8                  | 0.469"                 |
| D1-560K     | 56     | 0.069       | 2.8                  | 0.485"                 |
| D1-680K     | 68     | 0.077       | 2.8                  | 0.500"                 |
| D1-820K     | 82     | 0.083       | 2.8                  | 0.500"                 |
| D1-101K     | 100    | 0.095       | 2.8                  | 0.500"                 |
| D1-121K     | 120    | 0.127       | 2.0                  | 0.480"                 |
| D1-151K     | 150    | 0.181       | 1.6                  | 0.480"                 |
| D1-181K     | 180    | 0.217       | 1.6                  | 0.480"                 |
| D1-221K     | 220    | 0.240       | 1.6                  | 0.480"                 |
| D1-271K     | 270    | 0.300       | 1.6                  | 0.480"                 |
| D1-331K     | 330    | 0.336       | 1.3                  | 0.480"                 |
| D1-391K     | 390    | 0.460       | 1.0                  | 0.480"                 |
| D1-471K     | 470    | 0.636       | 0.8                  | 0.450"                 |
| D1-561K     | 560    | 0.696       | 0.8                  | 0.450"                 |

## DIMENSIONS IN INCHES

| Size | Dia. A (Max) | Height B (Max) | Center Hole C (Nominal) |
|------|--------------|----------------|-------------------------|
| D1   | 0.600"       | 0.800"         | 0.198"                  |
| D2   | 0.810"       | 0.800"         | 0.178"                  |
| D3   | 1.050"       | 0.840"         | 0.178"                  |
| D4   | 1.450"       | 1.100"         | 0.230"                  |

| Part Number | L (μH) | DCR Max (Ω) | Rated Current (Amps) | Lead Spacing D ± 0.05" |
|-------------|--------|-------------|----------------------|------------------------|
| D2-1R0M     | 1.0    | 0.003       | 11.4                 | 0.620"                 |
| D2-1R2M     | 1.2    | 0.003       | 11.4                 | 0.620"                 |
| D2-1R5M     | 1.5    | 0.003       | 11.4                 | 0.620"                 |
| D2-1R8M     | 1.8    | 0.003       | 11.4                 | 0.620"                 |
| D2-2R2M     | 2.2    | 0.004       | 11.4                 | 0.620"                 |
| D2-2R7M     | 2.7    | 0.005       | 11.4                 | 0.620"                 |
| D2-3R3M     | 3.3    | 0.005       | 11.4                 | 0.620"                 |
| D2-3R9M     | 3.9    | 0.005       | 11.4                 | 0.620"                 |
| D2-4R7M     | 4.7    | 0.005       | 11.4                 | 0.620"                 |
| D2-5R6M     | 5.6    | 0.006       | 11.4                 | 0.620"                 |
| D2-6R8M     | 6.8    | 0.007       | 11.4                 | 0.620"                 |
| D2-8R2M     | 8.2    | 0.007       | 11.4                 | 0.620"                 |
| D2-100K     | 10     | 0.009       | 11.4                 | 0.620"                 |
| D2-120K     | 12     | 0.009       | 11.4                 | 0.620"                 |
| D2-150K     | 15     | 0.013       | 9.0                  | 0.625"                 |
| D2-180K     | 18     | 0.018       | 7.2                  | 0.630"                 |
| D2-220K     | 22     | 0.019       | 7.2                  | 0.630"                 |
| D2-270K     | 27     | 0.026       | 5.5                  | 0.546"                 |
| D2-330K     | 33     | 0.029       | 5.5                  | 0.546"                 |
| D2-390K     | 39     | 0.030       | 5.5                  | 0.594"                 |
| D2-470K     | 47     | 0.035       | 5.5                  | 0.625"                 |
| D2-560K     | 56     | 0.039       | 5.5                  | 0.625"                 |
| D2-680K     | 68     | 0.053       | 4.8                  | 0.656"                 |
| D2-820K     | 82     | 0.060       | 4.8                  | 0.656"                 |
| D2-101K     | 100    | 0.080       | 4.0                  | 0.593"                 |
| D2-121K     | 120    | 0.090       | 4.0                  | 0.593"                 |
| D2-151K     | 150    | 0.098       | 4.0                  | 0.593"                 |
| D2-181K     | 180    | 0.110       | 4.0                  | 0.671"                 |
| D2-221K     | 220    | 0.150       | 2.8                  | 0.593"                 |
| D2-271K     | 270    | 0.213       | 2.0                  | 0.562"                 |
| D2-331K     | 330    | 0.305       | 1.6                  | 0.590"                 |
| D2-391K     | 390    | 0.320       | 1.6                  | 0.590"                 |
| D2-471K     | 470    | 0.355       | 1.6                  | 0.590"                 |
| D2-561K     | 560    | 0.388       | 1.6                  | 0.590"                 |
| D2-681K     | 680    | 0.430       | 1.6                  | 0.590"                 |
| D2-821K     | 820    | 0.590       | 1.3                  | 0.590"                 |
| D2-102K     | 1000   | 0.818       | 1.0                  | 0.590"                 |
| D2-122K     | 1200   | 1.140       | 0.8                  | 0.590"                 |
| D2-152K     | 1500   | 1.260       | 0.8                  | 0.590"                 |
| D2-182K     | 1800   | 1.390       | 0.8                  | 0.590"                 |
| D2-222K     | 2200   | 1.540       | 0.8                  | 0.590"                 |

## D3 SPECIFICATIONS

| Part Number | L (μH) | DCR Max. (Ω) | Rated Current Max. (Amps) | Lead Spacing D ± 0.05" |
|-------------|--------|--------------|---------------------------|------------------------|
| D3-1R0M     | 1.0    | 0.003        | 21                        | 0.800"                 |
| D3-1R2M     | 1.2    | 0.003        | 21                        | 0.800"                 |
| D3-1R5M     | 1.5    | 0.003        | 21                        | 0.800"                 |
| D3-1R8M     | 1.8    | 0.003        | 21                        | 0.800"                 |
| D3-2R2M     | 2.2    | 0.003        | 21                        | 0.800"                 |
| D3-2R7M     | 2.7    | 0.003        | 21                        | 0.800"                 |
| D3-3R3M     | 3.3    | 0.003        | 21                        | 0.800"                 |
| D3-3R9M     | 3.9    | 0.003        | 21                        | 0.800"                 |
| D3-4R7M     | 4.7    | 0.003        | 21                        | 0.800"                 |
| D3-5R6M     | 5.6    | 0.003        | 21                        | 0.800"                 |
| D3-6R8M     | 6.8    | 0.004        | 21                        | 0.800"                 |
| D3-8R2M     | 8.2    | 0.004        | 21                        | 0.800"                 |
| D3-100K     | 10.0   | 0.006        | 17                        | 0.700"                 |
| D3-120K     | 12     | 0.008        | 13.5                      | 0.690"                 |
| D3-150K     | 15     | 0.009        | 13.5                      | 0.690"                 |
| D3-180K     | 18     | 0.010        | 13.5                      | 0.690"                 |
| D3-220K     | 22     | 0.011        | 13.5                      | 0.790"                 |
| D3-270K     | 27     | 0.012        | 13.5                      | 0.790"                 |
| D3-330K     | 33     | 0.017        | 13.5                      | 0.790"                 |
| D3-390K     | 39     | 0.022        | 11.4                      | 0.790"                 |
| D3-470K     | 47     | 0.024        | 9.0                       | 0.750"                 |
| D3-560K     | 56     | 0.026        | 9.0                       | 0.750"                 |
| D3-680K     | 68     | 0.029        | 9.0                       | 0.750"                 |
| D3-820K     | 82     | 0.032        | 9.0                       | 0.750"                 |
| D3-101K     | 100    | 0.034        | 9.0                       | 0.781"                 |
| D3-121K     | 120    | 0.046        | 7.2                       | 0.750"                 |
| D3-151K     | 150    | 0.064        | 5.5                       | 0.781"                 |
| D3-181K     | 180    | 0.072        | 5.5                       | 0.781"                 |
| D3-221K     | 220    | 0.080        | 5.5                       | 0.781"                 |
| D3-271K     | 270    | 0.110        | 4.5                       | 0.750"                 |
| D3-331K     | 330    | 0.122        | 4.5                       | 0.812"                 |
| D3-391K     | 390    | 0.169        | 4.0                       | 0.750"                 |
| D3-471K     | 470    | 0.187        | 4.0                       | 0.750"                 |
| D3-561K     | 560    | 0.205        | 4.0                       | 0.750"                 |
| D3-681K     | 680    | 0.256        | 2.8                       | 0.718"                 |
| D3-821K     | 820    | 0.288        | 2.8                       | 0.843"                 |
| D3-102K     | 1000   | 0.426        | 2.0                       | 0.750"                 |
| D3-122K     | 1200   | 0.462        | 2.0                       | 0.750"                 |
| D3-152K     | 1500   | 0.518        | 2.0                       | 0.750"                 |
| D3-182K     | 1800   | 0.705        | 1.6                       | 0.770"                 |
| D3-222K     | 2200   | 1.020        | 1.3                       | 0.770"                 |
| D3-272K     | 2700   | 1.140        | 1.3                       | 0.770"                 |
| D3-312K     | 3100   | 1.300        | 1.0                       | 0.780"                 |

## D4 SPECIFICATIONS

| Part Number | L (μH) | DCR Max. (Ω) | Rated Current Max. (Amps) | Lead Spacing D ± 0.05" |
|-------------|--------|--------------|---------------------------|------------------------|
| D4-1R8M     | 1.8    | 0.002        | 27                        | 0.90"                  |
| D4-2R2M     | 2.2    | 0.002        | 27                        | 0.90"                  |
| D4-2R7M     | 2.7    | 0.003        | 27                        | 0.90"                  |
| D4-3R3M     | 3.3    | 0.003        | 27                        | 0.90"                  |
| D4-3R9M     | 3.9    | 0.003        | 27                        | 0.90"                  |
| D4-4R7M     | 4.7    | 0.003        | 27                        | 0.90"                  |
| D4-5R6M     | 5.6    | 0.004        | 27                        | 0.90"                  |
| D4-6R8M     | 6.8    | 0.004        | 27                        | 0.90"                  |
| D4-8R2M     | 8.2    | 0.004        | 27                        | 0.90"                  |
| D4-100K     | 10.0   | 0.005        | 27                        | 0.90"                  |
| D4-120K     | 12     | 0.005        | 27.0                      | 0.90"                  |
| D4-150K     | 15     | 0.006        | 27.0                      | 0.90"                  |
| D4-180K     | 18     | 0.008        | 27.0                      | 0.90"                  |
| D4-220K     | 22     | 0.009        | 21.0                      | 0.90"                  |
| D4-270K     | 27     | 0.010        | 21.0                      | 1.00"                  |
| D4-330K     | 33     | 0.011        | 21.0                      | 1.00"                  |
| D4-390K     | 39     | 0.012        | 21.0                      | 1.00"                  |
| D4-470K     | 47     | 0.018        | 14.4                      | 1.00"                  |
| D4-560K     | 56     | 0.019        | 14.4                      | 1.00"                  |
| D4-680K     | 68     | 0.021        | 14.4                      | 1.00"                  |
| D4-820K     | 82     | 0.023        | 14.4                      | 1.00"                  |
| D4-101K     | 100    | 0.025        | 14.4                      | 1.00"                  |
| D4-121K     | 120    | 0.028        | 14.4                      | 1.00"                  |
| D4-151K     | 150    | 0.040        | 11.4                      | 0.95"                  |
| D4-181K     | 180    | 0.045        | 11.4                      | 0.95"                  |
| D4-221K     | 220    | 0.050        | 11.4                      | 0.95"                  |
| D4-271K     | 270    | 0.056        | 11.4                      | 0.95"                  |
| D4-331K     | 330    | 0.074        | 11.4                      | 0.95"                  |
| D4-391K     | 390    | 0.082        | 9.0                       | 1.05"                  |
| D4-471K     | 470    | 0.114        | 7.2                       | 1.05"                  |
| D4-561K     | 560    | 0.125        | 7.2                       | 1.05"                  |
| D4-681K     | 680    | 0.139        | 7.2                       | 0.98"                  |
| D4-821K     | 820    | 0.154        | 7.2                       | 0.98"                  |
| D4-102K     | 1000   | 0.216        | 5.5                       | 0.96"                  |
| D4-122K     | 1200   | 0.232        | 5.5                       | 0.96"                  |
| D4-152K     | 1500   | 0.324        | 4.5                       | 1.00"                  |
| D4-182K     | 1800   | 0.360        | 4.5                       | 1.00"                  |
| D4-222K     | 2200   | 0.494        | 4.0                       | 1.05"                  |
| D4-272K     | 2700   | 0.555        | 4.0                       | 1.05"                  |
| D4-332K     | 3300   | 0.773        | 2.8                       | 1.05"                  |
| D4-392K     | 3900   | 0.845        | 2.8                       | 1.05"                  |
| D4-472K     | 4700   | 1.140        | 2.0                       | 1.05"                  |

1. All lead spacing is in inches and is measured at the bottom, close to the core
2. Other values are available by special order
3. If smaller or larger sizes are required, please contact our Sales Department