

Magnetics Competitive Quick Cross Reference

| Coiltronics | Sumida | Coilcraft | Pulse | Toko | Vishay |
|---|--------------------------|------------|---------|---------|-----------------|
| Shielded Drum Core | | | | | |
| DR1030 | CDRH103R | — | — | — | — |
| DR1040 | CDRH104R | MSS1038 | PF0560 | — | — |
| DR1050 | CDRH105R | — | — | 919AS | — |
| DR73 | CDRH73* | — | P1166 | 636CY* | — |
| DR74 | CDRH74* | — | P1167 | 646CY* | — |
| DR124 | CDRH124 | — | P1168 | 892NAS* | — |
| DR125 | CDRH125 | MSS1260(M) | P1170 | — | — |
| DR127 | CDRH127 | MSS1278(M) | P1172 | 931BS | — |
| DRQ73 | — | — | — | — | — |
| DRQ74 | — | — | — | — | — |
| DRQ125 | — | — | PF0552 | — | — |
| DRQ127 | — | MSD1278* | PF0553 | — | — |
| LDS0705 | CDR74B | — | — | — | — |
| SD20 | CDRH4D18C* | — | — | — | — |
| SD25 | CDRH4D22/HP CDRH4D28* | — | — | — | — |
| SD52 | — | — | — | A914BYW | — |
| SD53 | CDRH4D28C | — | — | A915AY | — |
| SDH3812 | — | — | — | 1001AS* | — |
| SD6020 | CDRH5D18 | — | — | — | — |
| SD6030 | CDRH5D28 | MSS6132* | — | — | — |
| SD7030 | CDRH6D28 | — | — | — | — |
| SD8328 | CDRH8D28 | — | — | — | — |
| SD8350 | CDRH8D43 | — | — | — | — |
| UP0.4SC | — | DS1608C | — | — | IDCS-2512 |
| UP2SC | — | DS3316P | — | — | IDCS-5020 |
| UP5S | — | DS5022P | — | — | — |
| High Current | | | | | |
| FP2(S) | — | — | P1681 | — | — |
| FP3 | — | — | — | — | IHLP-2525CZ-01* |
| FP4 | — | — | PA0511 | — | — |
| HC9 | — | — | PA0513* | — | — |
| FP1308 | — | — | PA0513 | — | — |
| High Current (Pressed Powder Iron) | | | | | |
| HCP0703 | — | — | — | FDV0603 | IHLP2525CZ-01 |
| HCP1104 | — | — | PG0255 | — | IHLP-4040DZ-51* |
| HCP1305 | — | — | PG0077* | — | IHLP-5050EZ-01 |
| Unshielded Drum Core | | | | | |
| LD1 | CD43 | — | — | — | IDCP-1813ER |
| LD2 | — | — | — | — | IDCP-3020ER |
| UP0.4UC | — | DO1608C | — | — | IDC-2512 |
| UP1B | — | DO1813H | PA0390* | — | — |
| UP2.8B | — | DO3308P | — | — | — |
| UP2UC | — | DO3316P | — | — | IDC-5020 |
| UP4B | — | DO5022H* | P1252* | — | — |
| UP5 | — | DO5022P | P0250 | — | — |

*Indicates similar cross; mechanical dimensions and performance characteristics may be different.

Inductor Selector Guide

| Product Family | Maximum Current Rating (Amps) | | Maximum Inductance Rating (μ H) | | Winding Configuration (if applicable) | Product Size (mm) | | | Core Structure | EMI Rating ² | SMT/THT |
|--|-------------------------------|----------------------|--------------------------------------|----------------------|---------------------------------------|-------------------|-------|------|----------------|-------------------------|---------|
| | Inductance | Current ¹ | Inductance | Current ¹ | | L | W | H | | | |
| Shielded Drum Core | | | | | | | | | | | |
| DR1030 | 1.10 | 7.00 | 150.0 | 0.680 | - | 10.50 | 10.30 | 3.00 | Shld Drum | 2 | SMT |
| DR1040 | 1.50 | 6.50 | 330.0 | 0.520 | - | 10.50 | 10.30 | 4.00 | Shld Drum | 2 | SMT |
| DR1050 | 0.80 | 9.70 | 1000.0 | 0.430 | - | 10.50 | 10.30 | 5.00 | Shld Drum | 2 | SMT |
| DR73 | 0.33 | 6.21 | 1000.0 | 0.250 | - | 7.60 | 7.60 | 3.55 | Shld Drum | 2 | SMT |
| DR74 | 0.33 | 6.26 | 1000.0 | 0.270 | - | 7.60 | 7.60 | 4.35 | Shld Drum | 2 | SMT |
| DR124 | 0.47 | 16.00 | 1000.0 | 0.440 | - | 12.30 | 12.30 | 4.50 | Shld Drum | 2 | SMT |
| DR125 | 0.47 | 17.60 | 1000.0 | 0.570 | - | 12.50 | 12.50 | 6.00 | Shld Drum | 2 | SMT |
| DR127 | 0.47 | 17.90 | 1000.0 | 0.610 | - | 12.50 | 12.50 | 8.00 | Shld Drum | 2 | SMT |
| DRQ73 | 0.33 | 6.19 | 1000.0 | 0.250 | Parallel | 7.60 | 7.60 | 3.55 | Shld Drum | 2 | SMT |
| DRQ73 | 1.22 | 3.10 | 3980.0 | 0.128 | Series | 7.60 | 7.60 | 3.55 | Shld Drum | 2 | SMT |
| DRQ74 | 1.18 | 3.10 | 4036.0 | 0.135 | Series | 7.60 | 7.60 | 4.35 | Shld Drum | 2 | SMT |
| DRQ74 | 0.33 | 6.20 | 1000.0 | 0.270 | Parallel | 7.60 | 7.60 | 4.35 | Shld Drum | 2 | SMT |
| DRQ125 | 0.47 | 17.60 | 1000.0 | 0.570 | Parallel | 12.50 | 12.50 | 6.00 | Shld Drum | 2 | SMT |
| DRQ125 | 1.82 | 8.80 | 4032.0 | 0.283 | Series | 12.50 | 12.50 | 6.00 | Shld Drum | 2 | SMT |
| DRQ127 | 1.68 | 8.94 | 4020.0 | 0.307 | Series | 12.50 | 12.50 | 8.00 | Shld Drum | 2 | SMT |
| DRQ127 | 0.47 | 17.90 | 1000.0 | 0.610 | Parallel | 12.50 | 12.50 | 8.00 | Shld Drum | 2 | SMT |
| LDS0705 | 0.82 | 7.68 | 470.0 | 0.368 | - | 8.00 | 7.20 | 5.00 | Shld Drum | 2 | SMT |
| SD20 | 0.47 | 3.59 | 1000.0 | 0.088 | - | 5.20 | 5.20 | 2.00 | Shld Drum | 2 | SMT |
| SD25 | 0.47 | 3.88 | 1000.0 | 0.126 | - | 5.20 | 5.20 | 2.50 | Shld Drum | 2 | SMT |
| SD52 | 1.20 | 2.33 | 150.0 | 0.280 | - | 5.60 | 5.20 | 2.00 | Shld Drum | 2 | SMT |
| SD53 | 1.10 | 3.25 | 100.0 | 0.440 | - | 5.20 | 5.20 | 3.00 | Shld Drum | 2 | SMT |
| SDH3812 | 0.47 | 2.69 | 220.0 | 0.160 | - | 4.00 | 4.00 | 1.20 | Shld Drum | 2 | SMT |
| SD6020 | 3.90 | 1.95 | 100.0 | 0.360 | - | 6.00 | 6.00 | 2.00 | Shld Drum | 2 | SMT |
| SD6030 | 2.70 | 2.60 | 680.0 | 0.160 | - | 6.00 | 6.00 | 3.00 | Shld Drum | 2 | SMT |
| SD7030 | 3.30 | 3.00 | 680.0 | 0.210 | - | 7.00 | 7.00 | 3.00 | Shld Drum | 2 | SMT |
| SD8328 | 2.50 | 4.50 | 100.0 | 0.800 | - | 9.50 | 8.30 | 3.00 | Shld Drum | 2 | SMT |
| SD8350 | 1.80 | 5.50 | 100.0 | 0.800 | - | 9.50 | 8.30 | 4.50 | Shld Drum | 2 | SMT |
| UP0.4SC | 1.00 | 3.00 | 1000.0 | 0.020 | - | 6.60 | 4.45 | 2.92 | Shld Drum | 2 | SMT |
| UP2SC | 1.00 | 11.00 | 390.0 | 0.330 | - | 12.90 | 10.20 | 5.20 | Shld Drum | 2 | SMT |
| UP5S | 10.00 | 7.36 | 1000.0 | 0.550 | - | 18.70 | 15.30 | 7.50 | Shld Drum | 2 | SMT |
| High Current | | | | | | | | | | | |
| FLAT-PAC Single (FP2-S ₁) | 0.047 | 39.00 | 0.120 | 18.00 | - | 7.20 | 6.70 | 3.00 | UI | 2 | SMT |
| FLAT-PAC Single (FP3-S) | 0.100 | 19.00 | 15.0 | 2.00 | - | 7.25 | 6.50 | 3.00 | EI | 1 | SMT |
| FLAT-PAC Single (FP4-S ₁) | 0.100 | 40.00 | 0.200 | 30.00 | - | 6.80 | 10.20 | 5.00 | UI | 2 | SMT |
| HC9 | 0.200 | 46.70 | 47.000 | 3.65 | - | 13.80 | 13.10 | 7.50 | EI | 2 | SMT |
| FLAT-PAC (FP1308) | 0.110 | 68.00 | 0.440 | 32.00 | - | 13.70 | 12.95 | 8.00 | UI | 2 | SMT |
| High Current (Pressed Power Iron) | | | | | | | | | | | |
| HCP0703 | 0.150 | 26.00 | 10.000 | 3.00 | - | 7.30 | 7.00 | 3.00 | EI | 1 | SMT |
| HCP1104 | 0.200 | 32.00 | 0.900 | 22.00 | - | 11.50 | 10.25 | 4.00 | EI | 1 | SMT |
| HCP1305 | 0.470 | 38.00 | 2.200 | 20.00 | - | 13.80 | 12.90 | 5.00 | EI | 1 | SMT |
| Unshielded Drum Core | | | | | | | | | | | |
| LD1 | 1.00 | 2.60 | 68.0 | 0.460 | - | 4.50 | 4.00 | 3.20 | Drum | 3 | SMT |
| LD2 | 10.00 | 3.45 | 470.0 | 0.550 | - | 7.80 | 7.00 | 5.00 | Drum | 3 | SMT |
| UNI-PAC 0.4UC (UP0.4UC) | 1.00 | 2.90 | 1000.0 | 0.070 | - | 6.60 | 4.45 | 2.92 | Drum | 3 | SMT |
| UNI-PAC 1B (UP1B) | 0.47 | 6.00 | 330.0 | 0.280 | - | 8.89 | 6.10 | 5.00 | Drum | 3 | SMT |
| UNI-PAC 2.8B (UP2.8B) | 1.00 | 3.60 | 150.0 | 0.620 | - | 12.90 | 9.40 | 2.80 | Drum | 3 | SMT |
| UNI-PAC 2UC (UP2UC) | 1.00 | 9.00 | 1000.0 | 0.300 | - | 12.90 | 9.50 | 5.21 | Drum | 3 | SMT |
| UNI-PAC 4B (UP4B) | 0.47 | 19.20 | 470.0 | 0.914 | - | 22.10 | 15.00 | 7.87 | Drum | 3 | SMT |
| UNI-PAC 5 (UP5) | 1.00 | 20.00 | 1000.0 | 0.560 | - | 18.70 | 15.30 | 7.50 | Drum | 3 | SMT |

Note 1 = Current ratings listed are the lower value of the I_{sat} and I_{rms} ratings

Note 2 = EMI Rating: 1) Closed magnetic path - best EMI shield;
2) Small gap, or external shield - some EMI fringing;
3) No shield - Highest EMI

General information needed to select proper inductor:

I. Inductance and Current requirements
II. Mounting style (surface mount or thru hole) and size constraints

III. Frequency of operation (switching frequency)

IV. Circuit susceptibility to EMI
V. Consider using two parts in series for lower profiles, higher current ratings or higher inductance values

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