



CORNERS:
0.031 Approx.
Radius (Typical)

Dimensions

| | Outside Diameter | Inside Diameter | Height |
|-------------------------------|--------------------------------|--------------------------------|-------------------------------|
| Before Coating Nominal | 0.800 in 20.32 mm | 0.500 in 12.70 mm | 0.250 in 6.35 mm |
| After Coating (Blue Epoxy) | 0.830 in Max. 21.08 mm Max. | 0.475 in Min. 12.07 mm Min. | 0.280 in Max. 7.11 mm Max. |

Physical Specifications

| Effective Cross Sectional Area of Magnetic Path, A_e (Reference) | Effective Magnetic Path Length, l_e (Reference) | Effective Core Volume, V_e (Reference) | Minimum Window Area (Reference) | Approximate Weight of Finished 125 μ Core | Approximate Mean Length of Turn for Full Winding (Half of I.D. Remaining) |
|--|---|---|--|---|---|
| 0.035 in ² 0.226 cm ² | 2.010 in 5.093 cm | 0.07035 in ³ 1.1510 cm ³ | 0.1772 in ² 1.1433 cm ² 225,625 cmil | MPP 10.100g HF 10.100g SMSS 7.400g | 0.90 in 2.29 cm |

Electrical Specifications

| Nominal Permeability | Inductance Factor, mH +/- 8% for 1000 turns | Approximate Ratio of DC Resistance to Inductance for Full Winding (Half of I.D. Remaining), Ω /mH | Part Numbers | | |
|----------------------|---|--|-----------------|----------------|--------------------------|
| | | | Molypermalloy | HI-FLUX | SUPER-MSS |
| 14 μ | 7.8 | 1.1 | NEW MP-080014-2 | OLD A-057008-2 | HF-080014-2 MS-080014-2 |
| 26 μ | 14 | 0.60 | MP-080026-2 | A-511014-2 | HF-080026-2 MS-080026-2 |
| 60 μ | 32 | 0.26 | MP-080060-2 | A-848032-2 | HF-080060-2 MS-080060-2 |
| 75 μ | 41 | 0.21 | — | — | — MS-080075-2 |
| 90 μ | 49 | 0.17 | — | — | — MS-080090-2 |
| 125 μ | 68 | 0.12 | MP-080125-2 | A-206068-2 | HF-080125-2 MS-080125-2 |
| 147 μ | 81 | 0.10 | MP-080147-2 | A-144081-2 | HF-080147-2 *MS-080147-2 |
| 150 μ | 83 | 0.10 | MP-080150-2 | A-241083-2 | — |
| 160 μ | 87 | 0.096 | MP-080160-2 | A-271087-2 | HF-080160-2 |
| 173 μ | 96 | 0.088 | MP-080173-2 | A-173096-2 | — |
| 205 μ | 113 | 0.074 | MP-080205-2 | A-207113-2 | — |
| 250 μ | 136 | 0.062 | MP-080250-2 | A-371136-2 | — |
| 300 μ | 163 | 0.052 | MP-080300-2 | A-393163-2 | — |

Heavy Film Magnet Wire Winding Data (Approximate)

| AWG | mm | Full Winding (Half of I.D. Remaining) | | Single Layer Winding | | |
|-----|-------|---------------------------------------|-------------------|----------------------|-------------------|-----------|
| | | Turns | R_{dc} Ω | Turns | R_{dc} Ω | l_w ft. |
| 12 | 2.000 | 18 | 0.00254 | 13 | 0.00221 | 1.39 |
| 13 | 1.800 | 22 | 0.00395 | 15 | 0.00307 | 1.53 |
| 14 | 1.600 | 28 | 0.00614 | 17 | 0.00424 | 1.68 |
| 15 | 1.400 | 34 | 0.00954 | 19 | 0.00590 | 1.85 |
| 16 | 1.250 | 43 | 0.01488 | 22 | 0.00822 | 2.04 |
| 17 | 1.112 | 54 | 0.0230 | 25 | 0.0114 | 2.26 |
| 18 | 1.000 | 67 | 0.0358 | 28 | 0.0159 | 2.49 |
| 19 | 0.900 | 84 | 0.0556 | 32 | 0.0222 | 2.75 |
| 20 | 0.800 | 104 | 0.0860 | 35 | 0.0308 | 3.04 |
| 21 | 0.710 | 130 | 0.1337 | 40 | 0.0430 | 3.36 |
| 22 | 0.630 | 163 | 0.210 | 45 | 0.0604 | 3.73 |
| 23 | 0.560 | 201 | 0.323 | 50 | 0.0834 | 4.11 |
| 24 | 0.500 | 251 | 0.504 | 56 | 0.117 | 4.55 |
| 25 | 0.450 | 312 | 0.784 | 63 | 0.164 | 5.05 |
| 26 | 0.400 | 389 | 1.230 | 71 | 0.230 | 5.60 |

| AWG | mm | Full Winding (Half of I.D. Remaining) | | Single Layer Winding | | |
|-----|-------|---------------------------------------|-------------------|----------------------|-------------------|-----------|
| | | Turns | R_{dc} Ω | Turns | R_{dc} Ω | l_w ft. |
| 27 | 0.355 | 481 | 1.894 | 79 | 0.318 | 6.18 |
| 28 | 0.315 | 602 | 2.99 | 89 | 0.448 | 6.87 |
| 29 | 0.280 | 738 | 4.53 | 98 | 0.614 | 7.56 |
| 30 | 0.250 | 927 | 7.23 | 110 | 0.872 | 8.41 |
| 31 | 0.224 | 1154 | 11.29 | 122 | 1.21 | 9.24 |
| 32 | 0.200 | 1412 | 17.04 | 134 | 1.64 | 10.2 |
| 33 | 0.180 | 1768 | 27.0 | 150 | 2.32 | 11.3 |
| 34 | 0.160 | 2218 | 42.8 | 169 | 3.31 | 12.7 |
| 35 | 0.140 | 2779 | 67.7 | 189 | 4.66 | 14.1 |
| 36 | 0.125 | 3466 | 105.5 | 210 | 6.48 | 15.6 |
| 37 | 0.112 | 4279 | 160.4 | 233 | 8.82 | 17.2 |
| 38 | 0.100 | 5415 | 256.0 | 261 | 12.5 | 19.2 |
| 39 | 0.090 | 7073 | 436.0 | 296 | 18.4 | 21.7 |
| 40 | 0.080 | 8641 | 678.0 | 333 | 26.4 | 24.4 |
| 41 | 0.070 | 10793 | 1036.0 | 370 | 35.9 | 27.1 |

Remarks: * = New part no.