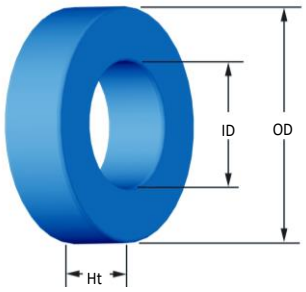
# 1.350 in./34.29 mm OD Toroid




| Typical Part Number: | MS - 135 125 - 2 |
|---|---|

Material Type
OD in 100th inches
Reference Permeability
Finish
Area for Special Height (in XX.Xmm)

## Physical Dimensions

| | | | |
|---|---|---|---|
| **OD** | Bare Core Nominal | 34.29 mm | 1.350 in |
| | Coated Core (max) | 35.1 mm | 1.382 in |
| **ID** | Bare Core Nominal | 23.37 mm | 0.920 in |
| | Coated Core (min) | 22.56 mm | 0.888 in |
| **Ht** | Bare Core Nominal | 8.89 mm | 0.350 in |
| | Coated Core (max) | 9.83 mm | 0.387 in |

## Magnetic Dimensions

| | | |
|---|---|---|
| **Ae** | Effective Magnetic Cross Section | 0.454 $cm^2$ |
| **Le** | Effective Magnetic Path Length | 8.95 cm |
| **Ve** | Effective Core Volume | 4.06 $cm^3$ |
| **WA** | Minimum Effective Window Area | 4.00 $cm^2$ |
| **SA** | Surface Area | 41.4 $cm^2$ |
| **MLT** | Mean Length Per Turn | 4.35 cm |

**Permeability** **Part Numbers**

| Reference Perm. | $A_L$ Value (nH/N²) | MS Sendust | SH High Frequency Sendust | MP Molypermalloy | Hi-Flux™ HF Nickel Iron | FluxSan™ FS Silicon Iron | Optilloy™ Material Series* OC Optimized Core Loss | OD Optimized DC Bias | OE Optimized Economy |
|---|---|---|---|---|---|---|---|---|---|
| 14µ | 9 | MS-135014-2 | | MP-135014-2 | HF-135014-2 | FS-135014-2 | | | |
| 26µ | 16 | MS-135026-2 | SH-135026-2 | MP-135026-2 | HF-135026-2 | FS-135026-2 | OC-135026-2 | OD-135026-2 | OE-135026-2 |
| 40µ | 25 | MS-135040-2 | | | | FS-135040-2 | | | |
| 60µ | 38 | MS-135060-2 | SH-135060-2 | MP-135060-2 | HF-135060-2 | FS-135060-2 | OC-135060-2 | OD-135060-2 | OE-135060-2 |
| 75µ | 47 | MS-135075-2 | | | | FS-135075-2 | | | |
| 90µ | 56 | MS-135090-2 | | | | FS-135090-2 | OC-135090-2 | OD-135090-2 | OE-135090-2 |
| 125µ | 79 | MS-135125-2 | SH-135125-2 | MP-135125-2 | HF-135125-2 | | OC-135125-2 | | |
| 147µ | 93 | MS-135147-2 | | MP-135147-2 | HF-135147-2 | | | | |
| 160µ | 101 | MS-135160-2 | | MP-135160-2 | HF-135160-2 | | | | |
| 173µ | 109 | | | MP-135173-2 | | | | | |
| 205µ | 130 | | | MP-135205-2 | | | | | |
| **Approx. Unit Weight:** | | 23 g | 23 g | 30 g | 28 g | 28 g | 27 g | 27 g | 27 g |

*OP Material is available, further details listed on website

## Test Conditions

| | |
|---|---|
| **Winding** | N=90, #22 AWG |
| **Frequency** | 10 kHz |
| **Voltage** | 0.18 V |
| **$A_L$ Tolerance** | ±8% |

## Coating/Packaging Information

| | |
|---|---|
| **Coating Type** | Blue Epoxy |
| **Voltage Breakdown** | 1000 Vrms |
| **Limit** | 0.1 mA, 5 s |
| **Package Quantity** | 441 Pcs/Box |

## Winding Table

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Wire Size** | AWG | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 28 |
| | mm | 3.150 | 2.500 | 2.000 | 1.600 | 1.250 | 1.000 | 0.800 | 0.630 | 0.500 | 0.400 | 0.315 |
| **Single Layer** | Turns | 16 | 21 | 27 | 34 | 43 | 54 | 68 | 85 | 107 | 134 | 167 |
| | Rdc(Ω) | 1.4 m | 3.0 m | 6.1 m | 12.2 m | 24.6 m | 49.1 m | 98.4 m | 195.6 m | 391.5 m | 779.8 m | 1.5 |
| **Full Winding** | Turns | 21 | 32 | 50 | 78 | 120 | 186 | 288 | 445 | 689 | 1,066 | 1,651 |
| | Rdc(Ω) | 1.9 m | 4.5 m | 11.3 m | 28.1 m | 68.6 m | 169.2 m | 416.6 m | 1.0 | 2.5 | 6.2 | 15.3 |