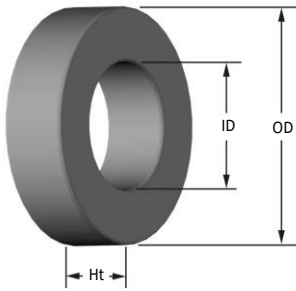


## 0.140 in./3.56 mm OD Toroid



Typical Part Number: **MS - 014 125 - 8**

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

### Physical Dimensions

OD	Bare Core Nominal	3.56 mm	0.140 in
	Coated Core (max)	3.76 mm	0.148 in
ID	Bare Core Nominal	1.78 mm	0.070 in
	Coated Core (min)	1.52 mm	0.060 in
Ht	Bare Core Nominal	1.52 mm	0.060 in
	Coated Core (max)	1.73 mm	0.068 in

### Magnetic Dimensions

<b>Ae</b>	Effective Magnetic Cross Section	0.0137 cm <sup>2</sup>
<b>Le</b>	Effective Magnetic Path Length	0.817 cm
<b>Ve</b>	Effective Core Volume	0.0107 cm <sup>3</sup>
<b>WA</b>	Minimum Effective Window Area	0.0182 cm <sup>2</sup>
<b>SA</b>	Surface Area	0.523 cm <sup>2</sup>
<b>MLT</b>	Mean Length Per Turn	0.646 cm

### Permeability

### Part Numbers

Reference Permeability	A <sub>L</sub> Value (nH/N <sup>2</sup> )	MS Sendust	SH High Freq. Sendust	MPP Molypermalloy	Hi-Flux™ Nickel Iron	FluxSan™ Silicon Iron	Optilloy™ Optimized Alloy
14μ	3	MS-014014-8		MP-014014-8	HF-014014-8	FS-014014-8	OP-014014-8
26μ	5.5	MS-014026-8	SH-014026-8	MP-014026-8	HF-014026-8	FS-014026-8	OP-014026-8
40μ	9	MS-014040-8				FS-014040-8	OP-014040-8
60μ	13	MS-014060-8	SH-014060-8	MP-014060-8	HF-014060-8	FS-014060-8	OP-014060-8
75μ	16	MS-014075-8				FS-014075-8	OP-014075-8
90μ	19	MS-014090-8				FS-014090-8	OP-014090-8
125μ	26	MS-014125-8	SH-014125-8	MP-014125-8	HF-014125-8		OP-014125-8
147μ	31	MS-014147-8		MP-014147-8	HF-014147-8		
160μ	33	MS-014160-8		MP-014160-8	HF-014160-8		
173μ	36			MP-014173-8			
205μ	43			MP-014205-8			
250μ	52						
Approx. Unit Weight:		0.06 g	0.06 g	0.08 g	0.07 g	0.07 g	0.07 g

### Test Conditions

<b>Winding</b>	N=30, #36 AWG
<b>Frequency</b>	10 kHz
<b>Voltage</b>	0.002 V
<b>A<sub>L</sub> Tolerance</b>	±8% (±15% Super-MSS)

### Coating/Packaging Information

<b>Coating Type</b>	Parylene N
<b>Voltage Breakdown</b>	500 Vrms
<b>Limit</b>	0.1 mA, 5 s
<b>Package Quantity</b>	36,000 Pcs/Box

### Winding Table

Wire Size	AWG	30	32	34	36	38	40	42	44	-	-	-
	mm	0.250	0.200	0.160	0.125	0.100	0.080	0.063	0.050	-	-	-
Single Layer	Turns	11	15	19	25	31	40	50	63	-	-	-
	Rdc(Ω)	24.1 m	52.2 m	105.1 m	219.9 m	433.7 m	890.0 m	1.8	3.5	-	-	-
Full Winding	Turns	12	18	28	43	67	103	159	247	-	-	-
	Rdc(Ω)	26.2 m	62.6 m	154.9 m	378.3 m	937.3 m	2.3	5.6	13.9	-	-	-