

# TOROIDAL SUPPRESSION CORES

Toroidal suppression cores stand out as essential components in electronics and power systems, thanks to their unique toroidal geometry and the versatility of their use being rated for impedance. The toroidal shape of these cores allows for compact and efficient winding of wire around a closed loop core, minimizing electromagnetic interference and providing superior performance. This design ensures high impedance, low EMI radiation, extensive frequency range, and improving the overall system's signal integrity. Additionally, allowing the customer the versatility with increasing impedance per turn makes common mode chokes adaptable to a wide range of applications. By increasing the number of turns, customers can tailor the choke's impedance to meet specific requirements, making it an invaluable tool in mitigating common mode noise in diverse industries, such as telecommunications, automotive, and power electronics. Common mode chokes, with their toroidal geometry and adjustable impedance, are the go to solution for achieving optimal EMI suppression and enhancing system reliability.



Part comes as a bare core. Sector wound shown.

## APPLICATIONS

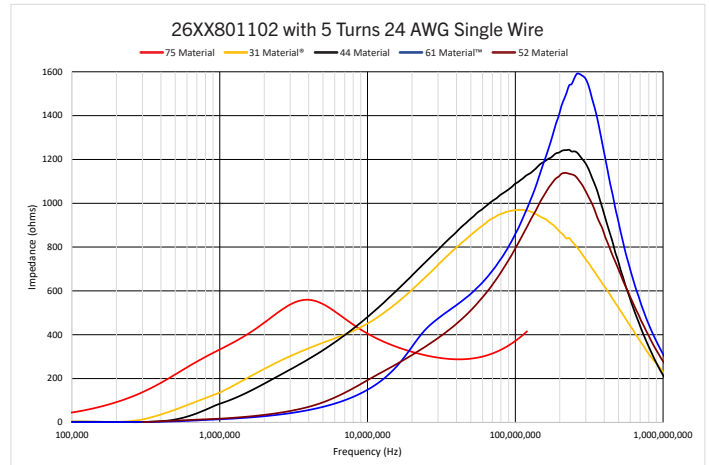
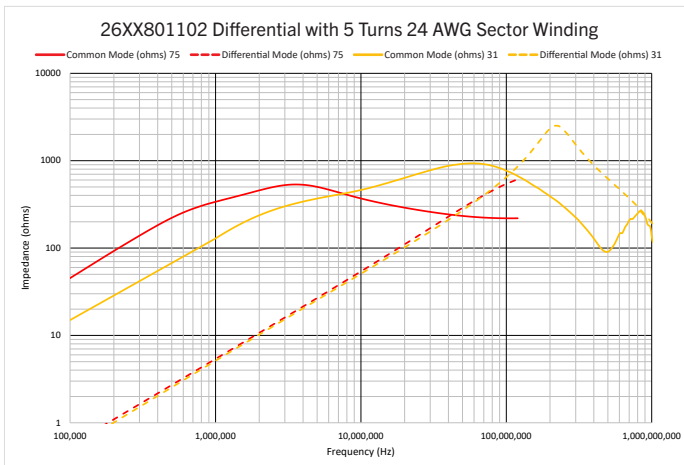
- Switch-mode power supplies
- AC/DC rectifiers
- Electrical ballasts
- Power inverters
- Variable frequency drives
- Digital data signals

## KEY BENEFITS

- Suppress noise on large current flow lines
- Protect signals from waveform distortion
- Extensive frequency range
- High impedance
- Low EMI-radiation

## VALUE ADDED SERVICES

- Custom Winding
- Coating
- Gapping
- Custom Core (as pressed or machined)



## 75 MATERIAL - OPTIMAL FREQUENCY: 100kHz - 30MHz

PART NUMBER	WT. (g)	H(Oe)	L <sub>o</sub> (mm)	A <sub>o</sub> (mm <sup>2</sup> )	TYPICAL SINGLE TURN IMPEDANCE (Ohms)		
					0.5 MHz	1.0 MHz	5.0 MHz
2675800102	0.14	0.97	13	2.06	2.3	3.2	7.1
2675800202	0.83	0.61	20.7	7.25	7.1	11.2	18.5
2675800302	2.00	0.43	29.5	12.9	8.1	13.3	18.6
2675801102	2.40	0.40	31.2	15	10.5	18	25
2675801802	7.20	0.23	54.2	26.1	10.5	17	15
2675801202	26	0.17	73.2	69.2	22	34	22
2675805302	39	0.14	89.1	95.9	23	34	19
2675828302	167	0.09	144	248	37	27.5	18.5

## DIMENSIONS

### 26--800102

A: 5.70/5.95 (0.230")  
 B: 2.95/3.15 (0.120")  
 C: 1.40/1.65 (0.060")

### 26--800202

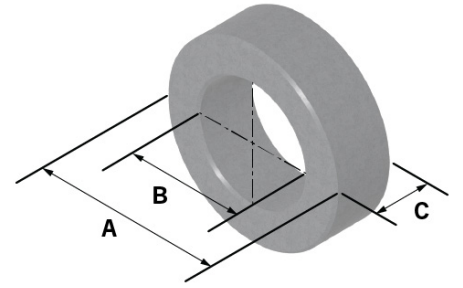
A: 9.30/9.70 (0.374")  
 B: 4.60/4.90 (0.187")  
 C: 3.05/3.30 (0.125")

### 26--800302

A: 12.45/12.95 (0.500")  
 B: 6.95/7.35 (0.281")  
 C: 4.65/4.90 (0.188")

### 26--801102

A: 12.45/12.95 (0.500")  
 B: 7.70/8.10 (0.311")  
 C: 6.10/6.60 (0.250")



### 26--801802

A: 21.70/22.50 (0.870")  
 B: 13.40/14.00 (0.539")  
 C: 6.10/6.60 (0.250")

### 26--801202

A: 28.35/29.65 (1.14")  
 B: 18.95/19.50 (0.748")  
 C: 13.55/14.15 (0.545")

### 26--805302

A: 34.80/36.30 (1.40")  
 B: 22.45/23.55 (0.906")  
 C: 14.60/15.40 (0.591")

### 26--828302

A: 59.70/62.30 (2.42")  
 B: 34.70/36.40 (1.40")  
 C: 19.95/20.50 (787")

## 31 MATERIAL® - OPTIMAL FREQUENCY: 1MHz - 300MHz

PART NUMBER	WT. (g)	H(Oe)	L <sub>o</sub> (mm)	A <sub>o</sub> (mm <sup>2</sup> )	TYPICAL SINGLE TURN IMPEDANCE (Ohms)		
					10 MHz	25 MHz	100 MHz
2631800102	0.14	0.97	13	2.06	5.3	8.1	13.9
2631800202	0.83	0.61	20.7	7.25	12	18	29.5
2631800302	2.00	0.43	29.5	12.9	15.8	24	37
2631801102	2.40	0.40	31.2	15	17	26	42
2631801802	7.20	0.23	54.2	26.1	16.5	26	48
2631801202	26	0.17	73.2	69.2	33	50	85
2631805302	39	0.14	89.1	95.9	37	55	91
2631828302	167	0.09	144	248	64	96	163

## 52 MATERIAL - OPTIMAL FREQUENCY: 30MHz - 500MHz

PART NUMBER	WT. (g)	H(Oe)	L <sub>o</sub> (cm)	A <sub>o</sub> (cm <sup>2</sup> )	TYPICAL SINGLE TURN IMPEDANCE (Ohms)		
					50 MHz	100 MHz	250 MHz
2652800102	0.14	0.97	13	2.06	8.3	12.8	20.5
2652800202	0.83	0.61	20.7	7.25	19	29.9	49
2652800302	2.00	0.43	29.5	12.9	23.5	36	58
2652801102	2.40	0.40	31.2	15	26	36	56.5
2652801802	7.20	0.23	54.2	26.1	27	40.5	66
2652801202	26	0.17	73.2	69.2	52	79	125
2652805302	39	0.14	89.1	95.9	58	91	151
2652828302	167	0.09	144	248	102	164	283

## 44 MATERIAL - OPTIMAL FREQUENCY: 10MHz - 300MHz

PART NUMBER	WT. (g)	H(Oe)	L <sub>o</sub> (mm)	A <sub>o</sub> (mm <sup>2</sup> )	TYPICAL SINGLE TURN IMPEDANCE (Ohms)		
					25 MHz	100 MHz	250 MHz
2644800102	0.14	0.97	13	2.06	9.3	14.8	19
2644800202	0.83	0.61	20.7	7.25	21	33.4	42
2644800302	2.00	0.43	29.5	12.9	23.8	35.8	46
2644801102	2.40	0.40	31.2	15	25.5	40	53
2644801802	7.20	0.23	54.2	26.1	25	40	59
2644801202	26	0.17	73.2	69.2	50	79	112
2644805302	39	0.14	89.1	95.9	57	91	130
2644828302	167	0.09	144	248	94	155	235

## 61 MATERIAL™ - OPTIMAL FREQUENCY: 100MHz - 1000MHz

PART NUMBER	WT. (g)	H(Oe)	L <sub>o</sub> (cm)	A <sub>o</sub> (cm <sup>2</sup> )	TYPICAL SINGLE TURN IMPEDANCE (Ohms)		
					100 MHz	250 MHz	500 MHz
2661800102	0.14	0.97	1.30	0.021	12.8	18.8	26
2661800202	0.83	0.61	2.07	0.073	26	42	63
2661800302	2.00	0.43	2.95	0.129	36	59	93
2661801102	2.40	0.40	3.12	0.150	35	54	78
2661801802	7.20	0.23	5.42	0.261	39	68	110
2661801202	26	0.17	7.32	0.692	74	122	190
2661805302	39	0.14	8.91	0.959	86	145	235
2661828302	167	0.09	1.44	0.248	150	260	470

Single turn impedance measured with the shortest practical wire length. Impedance measured on E4991A / TF 16092A for 31 Material®, 44 material, 52 material and 61 Material™. Impedance measured on E4990A / TF 16047E for 75 material. The value H (Oe) represents the Field Intensity developed when operating at 1 Adc with a single turn. All data displayed is preliminary.