

CORES FOR COMMON MODE CHOKES

Common mode choke 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

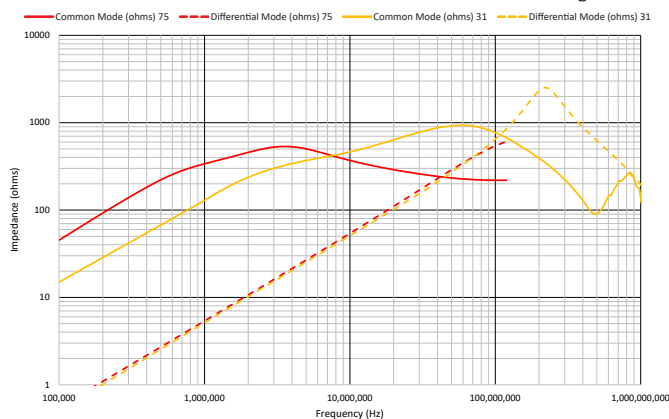
KEY BENEFITS

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

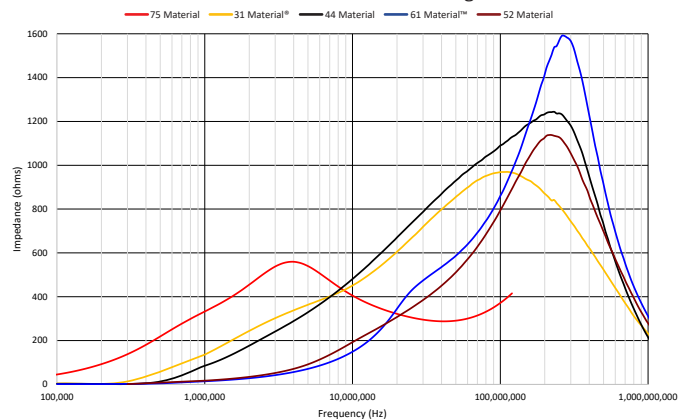
VALUE ADDED SERVICES

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

26XX801102 Differential with 5 Turns 24 AWG Sector Winding



26XX801102 with 5 Turns 24 AWG Single Wire



75 MATERIAL - OPTIMAL FREQUENCY: 100kHz - 30MHz

PART NUMBER	A	B	C	WT. [g]	H[Oe]	L _e [cm]	A _e [cm ²]	TYPICAL SINGLE TURN IMPEDANCE (Ohms)		
								0.5 MHz	1.0 MHz	5.0 MHz
2675800102	5.70/5.95 (0.230")	2.95/3.15 (0.120")	1.40/1.65 (0.060")	0.14	0.97	1.30	0.021	2.1	2.9	6.2
2675800202	9.30/9.70 (0.374")	4.60/4.90 (0.187")	3.05/3.30 (0.125")	0.83	0.61	2.07	0.073	6.3	9.9	14
2675800302	12.45/12.95 (0.500")	6.95/7.35 (0.281")	4.65/4.90 (0.188")	2.00	0.43	2.95	0.129	7.3	10.9	19
2675801102	12.45/12.95 (0.500")	7.70/8.10 (0.311")	6.10/6.60 (0.250")	2.40	0.40	3.12	0.150	8.6	13.4	22
2675801802	21.70/22.50 (0.870")	13.40/14.00 (0.539")	6.10/6.60 (0.250")	7.20	0.23	5.42	0.261	9.1	16.6	16.5

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

PART NUMBER	A	B	C	WT. [g]	H[Oe]	L _e [cm]	A _e [cm ²]	TYPICAL SINGLE TURN IMPEDANCE (Ohms)		
								10 MHz	25 MHz	100 MHz
2631800102	5.70/5.95 (0.230")	2.95/3.15 (0.120")	1.40/1.65 (0.060")	0.14	0.97	1.30	0.021	6.5	9.8	16.5
2631800202	9.30/9.70 (0.374")	4.60/4.90 (0.187")	3.05/3.30 (0.125")	0.83	0.61	2.07	0.073	13	20.5	33
2631800302	12.45/12.95 (0.500")	6.95/7.35 (0.281")	4.65/4.90 (0.188")	2.00	0.43	2.95	0.129	16.5	24.5	40.5
2631801102	12.45/12.95 (0.500")	7.70/8.10 (0.311")	6.10/6.60 (0.250")	2.40	0.40	3.12	0.150	19.3	28.7	46
2631801802	21.70/22.50 (0.870")	13.40/14.00 (0.539")	6.10/6.60 (0.250")	7.20	0.23	5.42	0.261	19.2	28.2	47.6

44 MATERIAL - OPTIMAL FREQUENCY: 10MHz - 300MHz

PART NUMBER	A	B	C	WT. [g]	H[Oe]	L _e [cm]	A _e [cm ²]	TYPICAL SINGLE TURN IMPEDANCE (Ohms)		
								10 MHz	25 MHz	100 MHz
2644800102	5.70/5.95 (0.230")	2.95/3.15 (0.120")	1.40/1.65 (0.060")	0.14	0.97	1.30	0.021	6.1	9.7	17
2644800202	9.30/9.70 (0.374")	4.60/4.90 (0.187")	3.05/3.30 (0.125")	0.83	0.61	2.07	0.073	14	21	33
2644800302	12.45/12.95 (0.500")	6.95/7.35 (0.281")	4.65/4.90 (0.188")	2.00	0.43	2.95	0.129	15	26	42
2644801102	12.45/12.95 (0.500")	7.70/8.10 (0.311")	6.10/6.60 (0.250")	2.40	0.40	3.12	0.150	16	29	42
2644801802	21.70/22.50 (0.870")	13.40/14.00 (0.539")	6.10/6.60 (0.250")	7.20	0.23	5.42	0.261	18	25	39

52 MATERIAL - OPTIMAL FREQUENCY: 30MHz - 500MHz

PART NUMBER	A	B	C	WT. [g]	H[Oe]	L _e [cm]	A _e [cm ²]	TYPICAL SINGLE TURN IMPEDANCE (Ohms)		
								50 MHz	100 MHz	250 MHz
2652800102	5.70/5.95 (0.230")	2.95/3.15 (0.120")	1.40/1.65 (0.060")	0.14	0.97	1.30	0.021	11.5	19	35
2652800202	9.30/9.70 (0.374")	4.60/4.90 (0.187")	3.05/3.30 (0.125")	0.83	0.61	2.07	0.073	19	29.5	47
2652800302	12.45/12.95 (0.500")	6.95/7.35 (0.281")	4.65/4.90 (0.188")	2.00	0.43	2.95	0.129	23	35.2	55.5
2652801102	12.45/12.95 (0.500")	7.70/8.10 (0.311")	6.10/6.60 (0.250")	2.40	0.40	3.12	0.150	25.5	36.5	57
2652801802	21.70/22.50 (0.870")	13.40/14.00 (0.539")	6.10/6.60 (0.250")	7.20	0.23	5.42	0.261	28	43.3	76

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

PART NUMBER	A	B	C	WT. [g]	H[Oe]	L _e [cm]	A _e [cm ²]	TYPICAL SINGLE TURN IMPEDANCE (Ohms)		
								100 MHz	250 MHz	500 MHz
2661800102	5.70/5.95 (0.230")	2.95/3.15 (0.120")	1.40/1.65 (0.060")	0.14	0.97	1.30	0.021	16	30	50
2661800202	9.30/9.70 (0.374")	4.60/4.90 (0.187")	3.05/3.30 (0.125")	0.83	0.61	2.07	0.073	28	49	78
2661800302	12.45/12.95 (0.500")	6.95/7.35 (0.281")	4.65/4.90 (0.188")	2.00	0.43	2.95	0.129	37	61	92
2661801102	12.45/12.95 (0.500")	7.70/8.10 (0.311")	6.10/6.60 (0.250")	2.40	0.40	3.12	0.150	35	59	95
2661801802	21.70/22.50 (0.870")	13.40/14.00 (0.539")	6.10/6.60 (0.250")	7.20	0.23	5.42	0.261	41	67	103

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.

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<u>2644801802</u>	<u>2675800102</u>	<u>2652801802</u>	<u>2675800202</u>	<u>2661801102</u>	<u>2644800102</u>	<u>2644800202</u>	<u>2675801102</u>
<u>2675801802</u>	<u>2631801802</u>	<u>2652800202</u>	<u>2644800302</u>	<u>2644801102</u>	<u>2652800302</u>	<u>2661800102</u>	<u>2675800302</u>
<u>2631801102</u>	<u>2631800302</u>	<u>2652801102</u>	<u>2631800102</u>	<u>2661800302</u>	<u>2631800202</u>	<u>2652800102</u>	<u>2661801802</u>
<u>2661800202</u>							