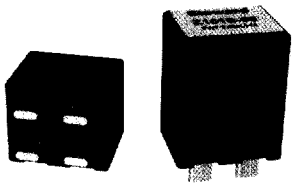


Ultra High Current Ferrite Common Mode Chokes

Steward's Ultra High Current Ferrite Common Mode Chokes provide small form factor, high performance, economical EMI filters for common mode noise in applications up to **55 amps** continuous operating current.

Protected by the following US Patent: 5,568,111

Features:

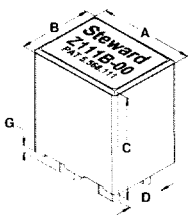
•UL 1950 compliant for creepage •The CM6241Z part series is designed to be UL1950 - 350 volt compliant •Very high current continuous operation capability •Small footprint •Low clearance height •Low cost •Parts available in broad band and high frequency materials •Lighter, smaller and less susceptible to vibration than older wire wound chokes

Applications:

•EMI suppression intended for use prior to a fusable link in conducted and radiated EMI applications in high and low-frequency power supplies (UL1950 certification pending) ·Excellent in telecommunications, automotive and appliance applications

Test Specifications:

•Agilent E4991A (1MHz - 3.0 GHz) •HP43961A Impedance Test Kit •HP16192A Test Fixture or Inter-Continental Microwave custom fixtures •HP16200A DC Bias Adapter •Philips PM2811 DC Power Supply
•Ambient Temperature 23.5°C + 2° •Bandwidth 3 kHz •Sweep Time 423 ms •Impedance is rated at + 25%@100MHz
•Maximum current ratings are determined by testing to a maximum temperature rise of 40°C with continuous current.
Part performance is shown with curves for Common, Open and Normal Mode impedances measured along two conductors.
Common Mode Impedance is the impedance of EMI noise conducted in the same direction along two conductors.
Open Circuit Impedance is the impedance measured across a single leg of the common mode choke.

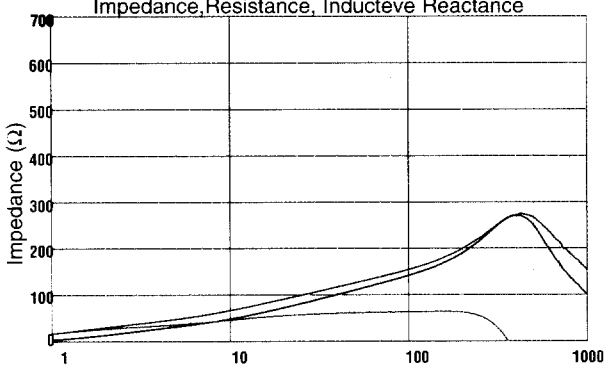


STEWARD PART NUMBERING SYSTEM						
CM	5441	Z	101	B	-	00
PRODUCT SERIES CODE	PART SIZE CODE	RATED CURRENT CODE	IMPEDANCE VALUE CODE	PACKAGING CODE		ADDITIONAL DESCRIPTION

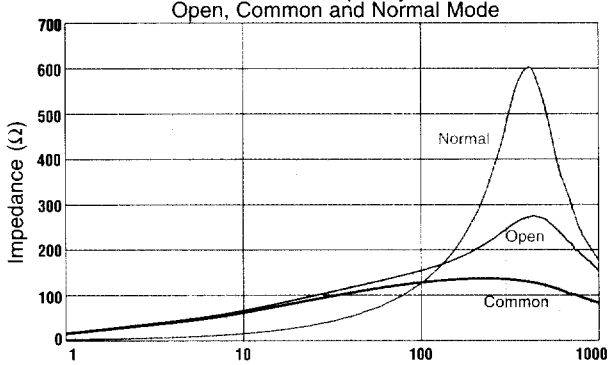
Ambient Operating Temperature Range: -55°C to +125°C @30Amps & +110°C @55 Amps

PART NUMBER	A mm (inches)	B mm (inches)	C mm (inches)	D mm (inches)	G mm (inches)	IMPEDANCE (Z) TYPICAL OHMS @ 100MHz	500MHz	1GHz	DCR MAX (Ω)	RATED I MAX mA @25° C TEMP RISE	RATED I MAX mA @40° C TEMP RISE
CM6241Z151B-00	15.75 + 0.25 (0.620 + 0.010)	10.41 + 0.15 (0.410 + 0.006)	15.24 + 0.25 (0.600 + 0.010)	5.33 + 0.08 (0.210 + 0.003)	3.18 + 0.33 (0.125 + 0.013)	150	310	150	0.0003	30,000	55,000
CM5441Z161B-00	13.72 + 0.25 (0.540 + 0.010)	10.41 + 0.15 (0.410 + 0.006)	15.24 + 0.25 (0.600 + 0.010)	4.06 + 0.13 (0.160 + 0.005)	3.18 + 0.33 (0.125 + 0.013)	160	200	143	0.0003	30,000	55,000
CM5441Z101B-00	13.72 + 0.25 (0.540 + 0.010)	10.41 + 0.15 (0.410 + 0.006)	10.52 + 0.25 (0.414 + 0.010)	4.06 + 0.13 (0.160 + 0.005)	3.18 + 0.33 (0.125 + 0.013)	100	190	180	0.0003	30,000	55,000
CM5441Z141B-00	13.72 + 0.25 (0.540 + 0.010)	10.41 + 0.15 (0.410 + 0.006)	10.52 + 0.25 (0.414 + 0.010)	4.06 + 0.13 (0.160 + 0.005)	3.18 + 0.33 (0.125 + 0.013)	140 @ 10MHz	-	-	0.0003	30,000	55,000

CM6241Z151B-00
Z,R,X_L vs. Frequency
Impedance,Resistance, Inducteve Reactance



CM6241Z151B-00
Z vs. Frequency
Open, Common and Normal Mode



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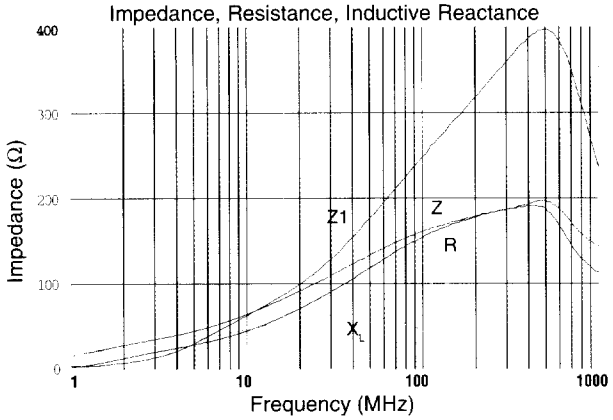
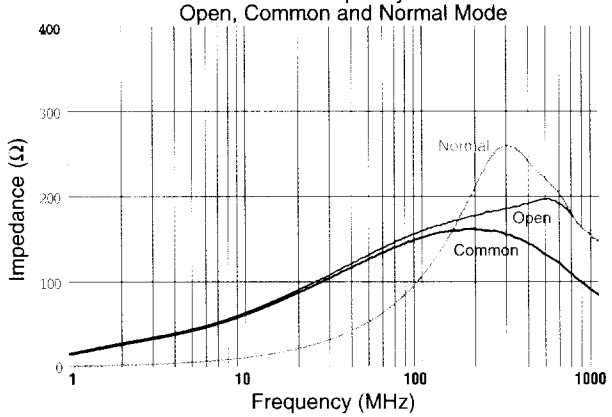
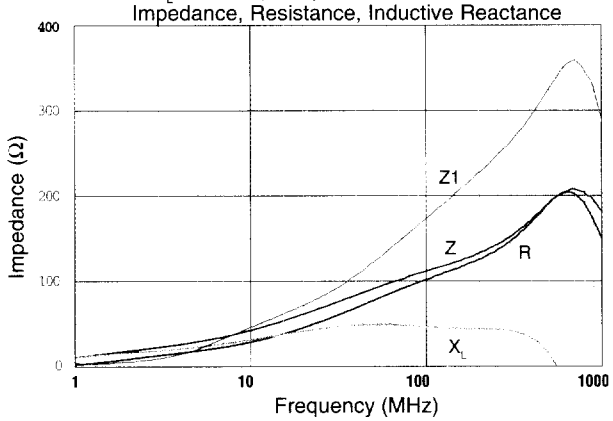
CM5441Z161B-00
Z, R, X_L, vs. Frequency - 1 turn (Z) / 2 turns (Z1)
Impedance, Resistance, Inductive Reactance



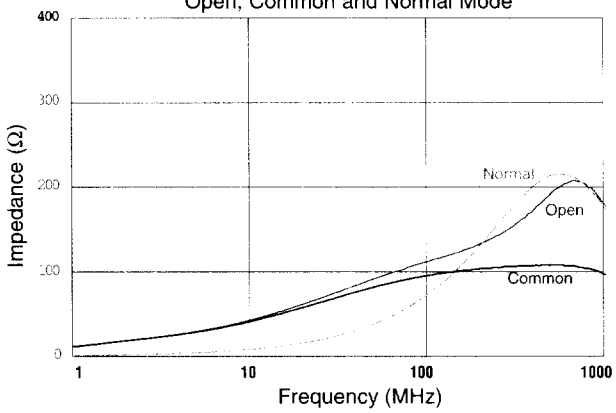
CM5441Z161B-00
Z vs. Frequency
Open, Common and Normal Mode



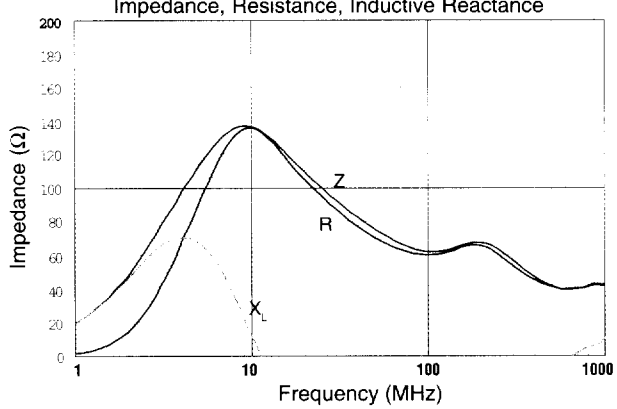
CM5441Z101B-00
Z, R, X_L, vs. Frequency - 1 turn (Z) / 2 turns (Z1)
Impedance, Resistance, Inductive Reactance



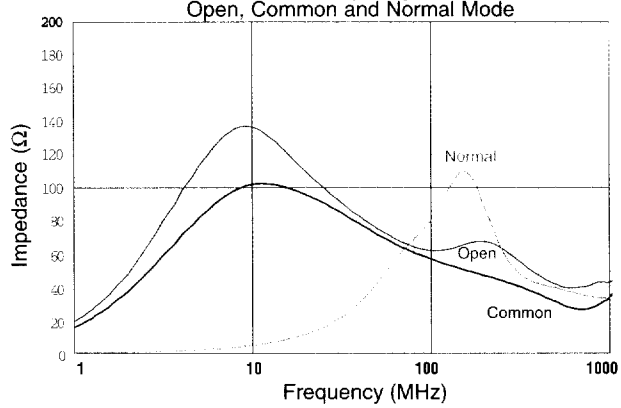
CM5441Z101B-00
Z vs. Frequency
Open, Common and Normal Mode



CM5441Z141B-00
Z, R, X_L, vs. Frequency
Impedance, Resistance, Inductive Reactance



CM5441Z141B-00
Z vs. Frequency
Open, Common and Normal Mode



Single Turn/Two Turn Equivalent Circuits

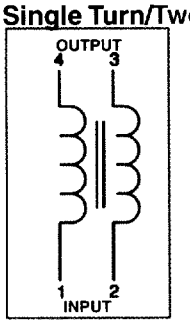


Figure 1

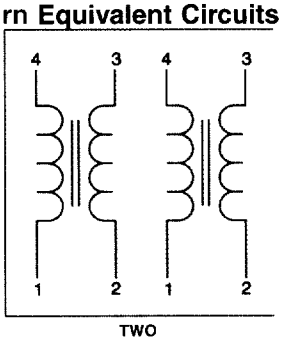
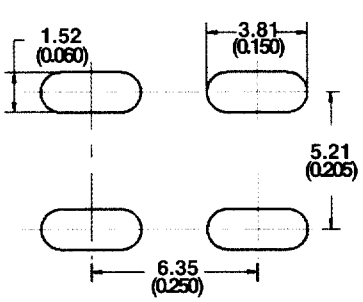
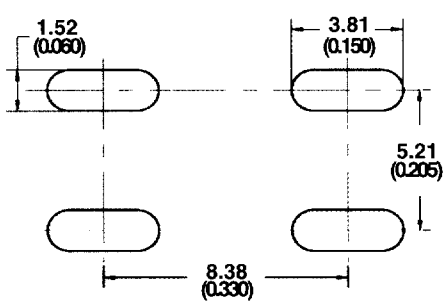


Figure 2

CM5441Z_ _ _B-00
Recommended Flow Pattern



CM6241Z151B-00
Recommended Flow Pattern



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