# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

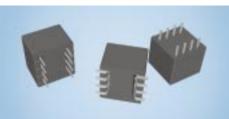
We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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## **4 Line Ferrite Common Mode Power Chokes**

Steward's multi-line ferrite common mode power / data filter products provide the most economical EMI filtering available for common mode noise. They provide EMI suppres sion for groups of conductors such as power traces, and for high speed input/output circuitry (including network and storage subsystems). They exhibit high frequency impedance essentially independent of DC bias current.

Protected by one or more of the following US Patents: 5,455,552 and 5,568,111

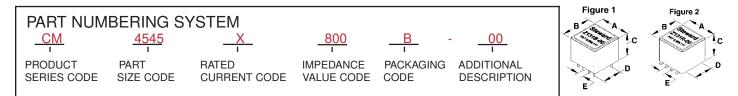
#### Features:

•High current carrying capability (10 amps continuous operation) •Can be used as multi-turn device to multiply impedance •With two turns, up to 800 ohms impedance at 300 MHz. •Available in both thru-hole (B) and surface mount (R) versions •The most economical common mode filter available for filtering groups of signals •Parts available in broad band and high frequency materials

### Applications:

•Filtering DC power on PC boards, especially in applications of greater than 3.0 amperes •Filtering common mode EMI on high speed differential lines such as network and SCSI subsystems •Cost sensitive designs •Applications where low DCR is needed. Part & Test Specifications:

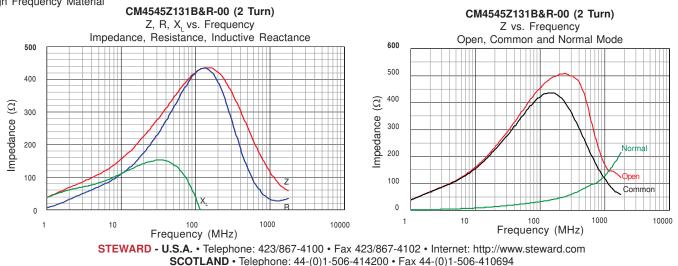
•Maximum current ratings (I MAX) are determined by testing to a maximum temperature rise of 40°C with continuous operating current. •Board level components are rated up to a maximum of 75 volts •Part performance is shown with curves for Common, Open and Normal Mode impedances measured along two conductors. Common Mode limpedance 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. Normal Mode Impedance is the total impedance to the differential circuit (both out and back). Tested with: •HP4396A (100KHz - 1.8 GHz) or HP8753 (to 6 GHz) Network/Spectrum analyzer •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



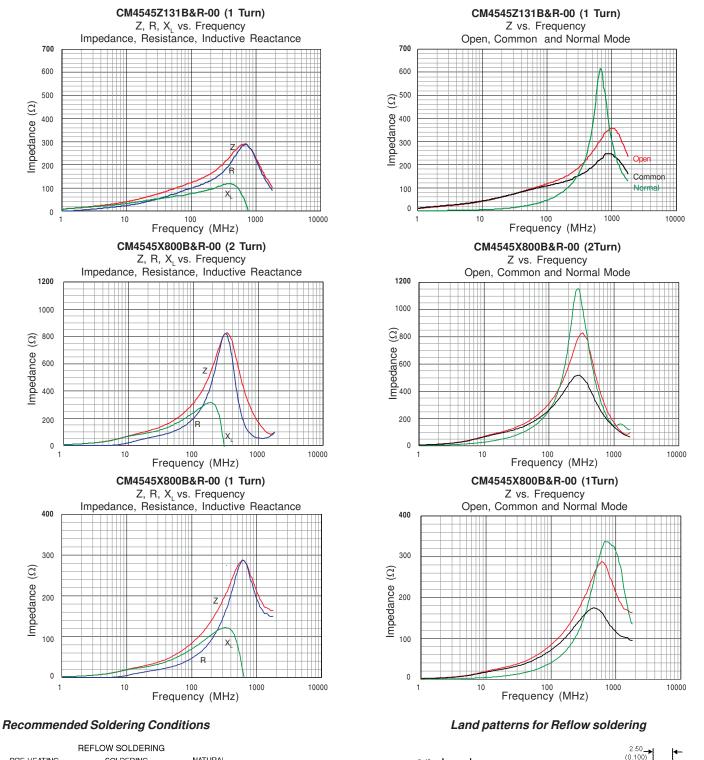
Ambient Operating Temperature Range: -55° C to +125° C

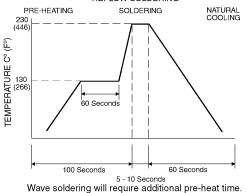
	PART NUMBER	Fig #	A mm (inches)	B mm (inches)	C mm (inches)	D mm (inches)	E mm (inches)	IMPEDANCE (Z) TYPICAL OHMS @ 100MHz 500MHz 1GHz			DCR MAX OHMS	RATED I MAX ( continuous ) mA
	CM4545Z131B-00	1	11.38 ± 0.25 (0.448 ± 0.010)	11.38 ± 0.25 (0.448 ± 0.010)	9.32 ± 0.25 (0.367 ± 0.010)	7.62 ± 0.10 (0.300 ± 0.004)	2.54 ± 0.10 (0.100 ± 0.004)	130	270	230	0.003	10,000
	CM4545Z131R-00	2	11.38 ± 0.25 (0.448 ± 0.010)	11.38 ± 0.25 (0.448 ± 0.010)	9.32 ± 0.25 (0.367 ± 0.010)	7.62 ± 0.10 (0.300 ± 0.004)	2.54 ± 0.25 (0.100 ± 0.010)	130	270	230	0.003	10,000
*	CM4545X800B-00	1	11.38 ± 0.25 (0.448 ± 0.010)	11.38 <u>+</u> 0.25 (0.448 <u>+</u> 0.010)	9.32 ± 0.25 (0.367 ± 0.010)	7.62 ± 0.10 (0.300 ± 0.004)	2.54 ± 0.10 (0.100 ± 0.004)	80	270	210	0.003	10,000
*	CM4545X800R-00	2	11.38 ± 0.25 (0.448 ± 0.010)	11.38 <u>+</u> 0.25 (0.448 <u>+</u> 0.010)	9.32 ± 0.25 (0.367 ± 0.010)	7.62 ± 0.10 (0.300 ± 0.004)	2.54 ± 0.25 (0.100 ± 0.010)	80	270	210	0.003	10,000

\* High Frequency Material



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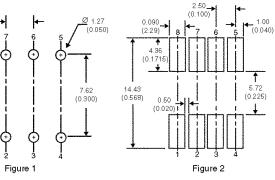




One Turn / Two Turn Equivalent Circuits  $\begin{bmatrix} 8 & 7 & 6 & 5 \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & &$ 

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