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!

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Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

2 Line Ferrite Common Mode Power Chokes

Steward's common mode power/data filter products provide the most economical EMI filtering available for common mode noise. They provide EMI suppression for conductors such as power traces (tracks), 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 capability (10 amps continuous operation) •Up to 170 ohms impedance @100MHz or 300 ohms @1GHz •Parts available in both thru-hole (B) and surface mount (R) versions •Parts available in broad band and high frequency materials •Economical common mode EMI filtering •Compact size

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** 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. **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

PART NUMBERING SYSTEM

CM	2545	X	111	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

	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
*	CM2545X111B-00	1	6.30 ± 0.25 (0.248 ± 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)	110	260	175	0.003	10,000
*	CM2545X111R-00	2	6.30 ± 0.25 (0.248 ± 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)	110	260	175	0.003	10,000
	CM2545X171B-00	1	6.30 ± 0.25 (0.248 ± 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)	170	235	320	0.003	10,000
	CM2545X171R-00	2	6.30 ± 0.25 (0.248 ± 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)	170	235	320	0.003	10,000

* High Frequency Material

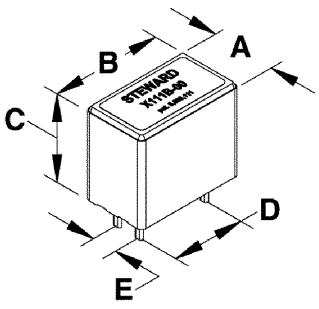


Figure 1

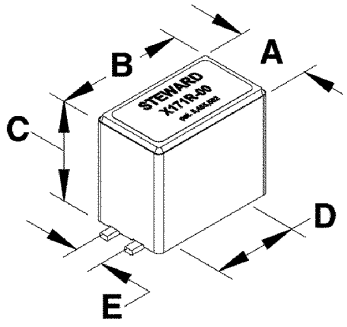
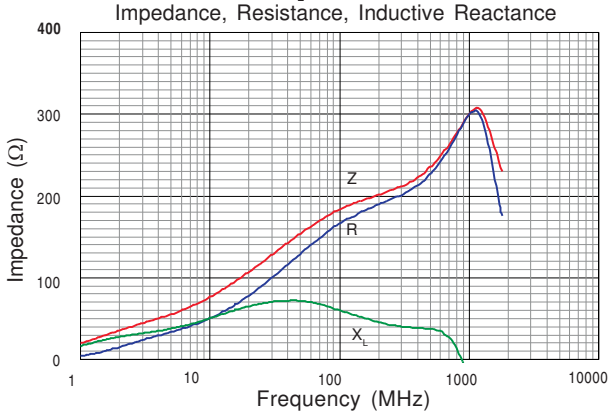


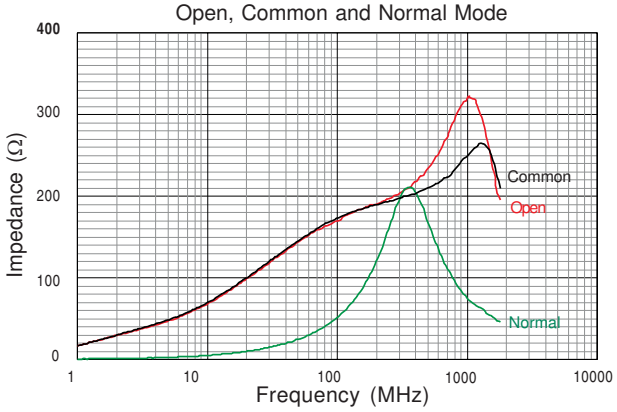
Figure 2

STEWARD - U.S.A. • Telephone: 423/867-4100 • Fax 423/867-4102 • Internet: http://www.steward.com
SCOTLAND • Telephone: 44-(0)1-506-414200 • Fax 44-(0)1-506-410694
SINGAPORE • Telephone: (65)337-9667 • Fax (65)337-9686

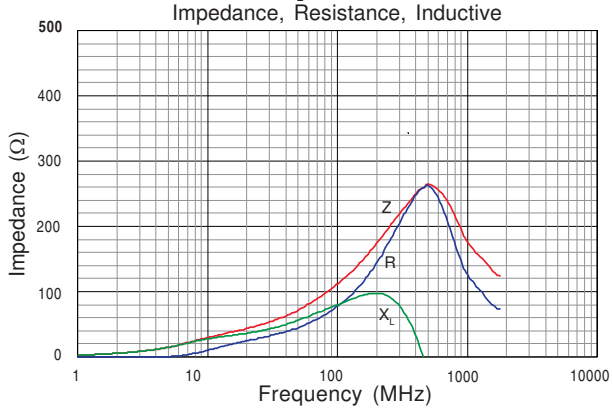
CM2545X171B&R-00
Z, R, X_L vs. Frequency
Impedance, Resistance, Inductive Reactance



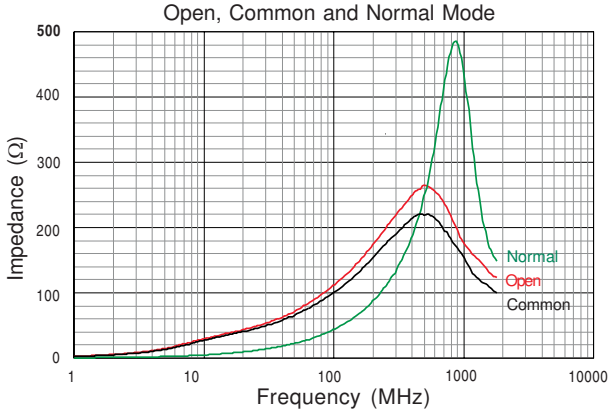
CM2545X171B&R-00
Z vs. Frequency
Open, Common and Normal Mode



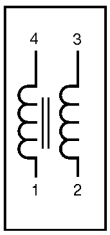
CM2545X111B&R-00
Z, R, X_L vs. Frequency
Impedance, Resistance, Inductive



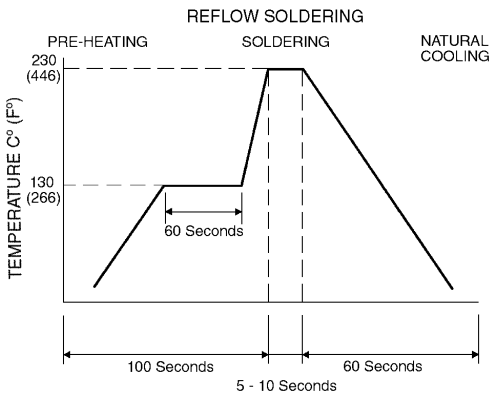
CM2545X111B&R-00
Z vs. Frequency
Open, Common and Normal Mode



Equivalent Circuts



Recommended Soldering Conditions



Wave soldering will require additional pre-heat time.

Land Patterns for Reflow Soldering

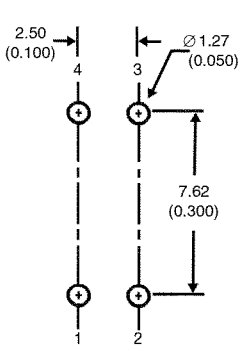


Figure 1

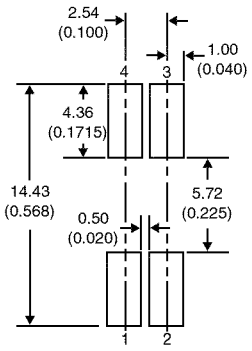


Figure 2