



Eaton's multilayer and wire wound chip inductors provide new EMC options for RF wireless circuits

Eaton's line of chip inductors offers design flexibility for many RF applications in multilayer and wirewound configurations, with industry standard sizes from 0402 to 2012 (multilayer) and 2520 to 3225 (wire wound). MCL & WCL offer tight inductance tolerance, desirable Q characteristics, and current ratings.

Marketing description

Eaton's wide variety of chip inductors for high-frequency circuits and power circuits are suitable for RF matching, filtering and resonance setting applications in today's wireless communication equipment. Featuring general purpose multilayer inductors (MCL), and wire-wound type inductors (WCL), with high-Q, high-current with good attenuation characteristic needed in many sensitive RF/ wireless circuits.

The MCL and WCL families are ideal for customers designing electronic devices with wireless communication architectures. These are designed for consumer, computing, gaming and industrial products containing Wi-Fi, Bluetooth and RF receivers and transceivers.

Markets & applications

Consumer

- Gaming consoles, TVs, appliances, mobile phones, wearables

Computing

- PCs, IoT, servers, databases

Energy

- Smart meters, solar, wind

Medical

- Home care, hospital care, diagnostics

Industrial

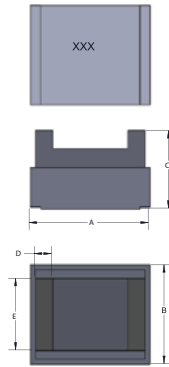
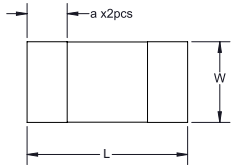
- Industrial connectivity, logistics, automation, remote monitoring, testing/data collection



Powering Business Worldwide

Product specifications

Family name	Inductance range (µH)	I Rated current range (mA)	DCR maximum range(Ω) @ +25 °C	Typical SRF range (MHz)	Size L x W x H maximum (mm)
Multilayer					
MCL1005	0.001 - 0.360	50 - 400	0.1 - 7.5	300 - 10000	1.15 x 0.65 x 0.65 (0402 [1005 metric])
MCL1608V1	0.047 - 12	60 - 150	0.12 - 1.25	15 - 260	1.8 x 1.0 x 1.0 (0603 [1608 metric])
MCL1608V2	0.001 - 0.470	150 - 500	0.05 - 3.6	250 - 10000	1.8 x 1.0 x 1.0 (0603 [1608 metric])
MCL2012V1	0.047 - 22	50 - 350	0.015 - 0.75	16 - 320	2.2 x 1.4 x 1.1 (0805 [2012 metric])
MCL2012V2	0.0015 - 0.47	300 - 500	0.1 - 2.0	200 - 6000	2.2 x 1.4 x 1.1 (0805 [2012 metric])
Wire wound					
WCL2520	0.12 - 220	20 - 800	0.15 - 18	2.5 - 850	2.92 x 2.792 x 2.10 (1008 [2520 metric])
WCL3225	0.12 - 560	30 - 450	0.2 - 28	1.5 - 850	3.5 x 2.9 x 2.25 (1210 [3225 metric])



Part Number	L	W	T	a
MCL1005-xxx-R	1.0 ±0.15	0.50 ±0.15	0.50 ±0.15	0.25 ±0.10
MCL1608V1-xxx-R	1.6 ±0.20	0.80 ±0.20	0.80 ±0.20	0.30 ±0.20
MCL1608V2-xxx-R	1.6 ±0.20	0.80 ±0.20	0.80 ±0.20	0.30 ±0.20
MCL2012V1-xxx-R	2.0 ±0.20	1.2 ±0.20	0.90 ±0.20	0.50 ±0.30
MCL2012V2-xxx-R	2.0 ±0.20	1.2 ±0.20	0.90 ±0.20	0.50 ±0.30

Part Number	A	B	C	D	E
WCL2520-xxx-R	2.92 max	2.79 max	2.10 max	0.50 ref	2.0 ref
WCL3225-xxx-R	3.5 max	2.9 max	2.25 max	0.50 ref	2.1 ref

Tools & resources

- [MCL Webpage](#)
- [WCL Webpage](#)
- [Parametric search tool](#)
- [Cross reference search tool](#)
- [Order a sample form](#)
- [Inventory search tool](#)
- [Contact us form](#)

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