



Metal Composite Inductors



Why Choose KEMET

KEMET Electronics Corporation is a leading global supplier of electronic components. We offer our customers the broadest selection of capacitor technologies in the industry, along with an expanding range of electromagnetic compatibility solutions and supercapacitors. Our vision is to be the preferred supplier of electronic component solutions for customers demanding the highest standards of quality, delivery and service.

Features & Benefits

- Improved power supply efficiency with composite metal core
- Metal cores reduce core losses and improve power supply efficiency at light loads
- Used as part of a filter or for energy storage
- High permeability for higher inductance with lower DC resistance
- Low losses at higher switching frequencies
- Molded metal structure reduces acoustic noise
- Higher current power and saturation in smaller packages
- Available in tape and reel

Product Checklist

- What is the inductance?
- What is the ripple current and frequency?
- What are the size constraints?
- What is the operating temperature range?

For more information, samples and engineering kits, please visit us at www.kemet.com or call 1.877.myKEMET.

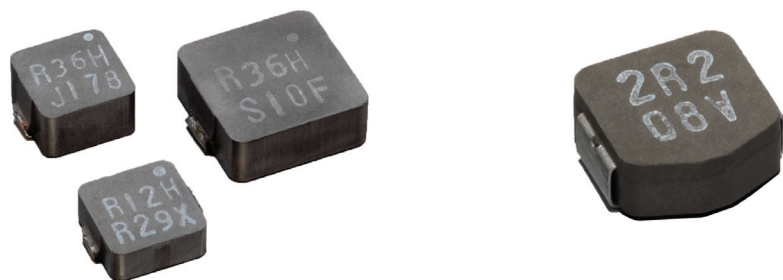
Applications

Applications include the following in the computer, consumer and telecommunications markets:

- Filtering for decoupling networks
- CPU, GPU and memory voltage regulator modules (VRMs)
- Laptops, tablets and servers
- HDTVs, game consoles and Blu-Ray players

Electrical/Physical Characteristics

Case Sizes	Materials	Operating Temperature Range	Current Options (Arms)	Inductance Values	Tolerances
Metal Composite Inductors					
12 x 12, 10 x 10, 7 x 7, 5 x 5 mm	G powder – low core losses H powder – lower DCR	-20°C to +120°C including self rise	3.1 A – 38 A	0.12 μH – 4.7 μH	20%



Ordering Information

Series Code	Dimension Code	Inductance Code	Inductance at 100 kHz (μH)	DC Resistance (mΩ)	Rated Current	
					A _{rms}	A _{sat}
MPCG	0740	LR12	0.12	0.70	33.0	30.0
MPCG	0740	LR42	0.42	1.55	22.0	20.0
MPCG	1040	LR36	0.36	1.05	25.0	30.0
MPCG	1040	LR45	0.45	1.10	25.0	27.0
MPCG	1040	LR56	0.56	1.30	23.0	25.0
MPCG	1040	LR88	0.88	2.30	17.0	19.0
MPCH	0730	LR12	0.12	0.65	31.0	32.0
MPCH	0730	LR24	0.24	1.20	23.0	19.0
MPCH	0740	LR15	0.15	0.93	29.0	31.0
MPCH	0740	LR24	0.24	1.00	27.0	20.0
MPCH	0740	LR26	0.26	1.00	25.0	20.0
MPCH	0740	LR36E	0.36	1.42	23.0	22.0
MPCH	1040	LR36	0.36	0.88	28.0	24.0
MPCH	1040	L1R0	1.0	2.30	17.0	17.0
MPCH	1055	L1R3	1.3	2.30	18.5	17.0
MPC	0730	LR20C	0.20	1.20	23.0	17.5
MPC	0740	LR42C	0.42	1.55	22.0	20.0
MPC	0750	LR60C	0.60	2.30	17.0	19.0
MPC	1040	LR36C	0.36	1.05	25.5	30.0
MPC	1040	LR45C	0.45	1.10	25.0	27.0
MPC	1040	LR56C	0.56	1.30	23.0	25.0
MPC	1040	LR88C	0.88	2.30	17.0	24.0
MPC	1055	LR36C	0.36	0.75	32.0	35.0
MPC	1055	L1R0C	1.00	2.30	18.5	21.0
MPC	1250	LR36C	0.36	0.65	38.0	40.0
MPC	1250	LR50C	0.50	0.80	35.0	40.0
MPLC	0730	L1R0	1.0	9.0	10.6	11.0
MPLC	0730	L1R5	1.5	15.0	8.6	8.8
MPLC	0730	L2R2	2.2	19.0	7.3	8.2
MPLC	0730	L3R3	3.3	30.0	5.7	6.5
MPLC	0730	L4R7	4.7	41.0	5.0	5.6
MPLC	1040	L1R0	1.0	5.5	14.3	16.2
MPLC	1040	L1R5	1.5	7.0	12.4	12.7
MPLC	1040	L2R2	2.2	10.0	10.5	11.0
MPLC	1040	L3R3	3.3	14.0	8.8	9.3
MPLC	1040	L4R7	4.7	19.0	7.6	8.0
MPLCG ²	0520	LR22	0.22	6.9	9.3	11.0
MPLCG ²	0520	LR33	0.33	8.7	8.3	10.1
MPLCG ²	0520	L1R0	1.0	27.8	4.6	4.9
MPLCG ²	0520	L2R2	2.2	49.4	3.5	4.0
MPLCG	0530	LR22	0.22	3.7	14.1	10.2
MPLCG	0530	LR33	0.33	7.3	10.3	8.9
MPLCG	0530	LR47	0.47	9.0	9.3	8.7
MPLCG	0530	L1R0	1.0	14.6	7.4	5.6
MPLCG	0530	L1R5	1.5	21.7	5.9	5.6
MPLCG	0530	L2R2	2.2	36.4	4.5	5.0
MPLCG	0530	L3R3	3.3	58.0	3.6	3.1
MPLCG	0530	L4R7	4.7	74.0	3.1	3.0
MPLCG ²	0618	LR22	0.22	4.3	15.0	12.9
MPLCG ²	0618	LR33	0.33	6.2	12.6	10.5
MPLCG ²	0618	L1R0	1.0	20.4	7.0	8.4
MPLCG ²	0618	L2R2	2.2	47.0	4.6	5.5
MPLCG	0630	LR22	0.22	2.7	21.4	17.9
MPLCG	0630	LR33	0.33	4.3	16.9	17.3
MPLCG	0630	LR47	0.47	5.0	15.8	15.6
MPLCG	0630	LR68	0.68	6.0	14.2	12.6
MPLCG	0630	LR82	0.82	7.0	13.1	11.8
MPLCG	0630	L1R0	1.0	9.0	11.9	11.3
MPLCG	0630	L1R5	1.5	15.0	9.9	8.3
MPLCG	0630	L2R2	2.2	19.0	8.2	7.8
MPLCG	0630	L3R3	3.3	30.0	6.5	6.3
MPLCG	0630	L4R7	4.7	41.0	5.5	5.4
MPLCH	0740	L1R0	1.0	6.0	13.6	13.4
MPLCH	0740	L1R5	1.5	9.0	11.1	10.8
MPLCH	0740	L2R2	2.2	13.0	9.3	9.0
MPLCH	0740	L3R3	3.3	19.0	7.8	7.0
MPLCH	0740	L4R7	4.7	33.0	5.8	6.5

² Under development