

Common Mode Line Chokes – CMT

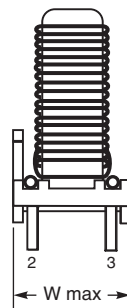
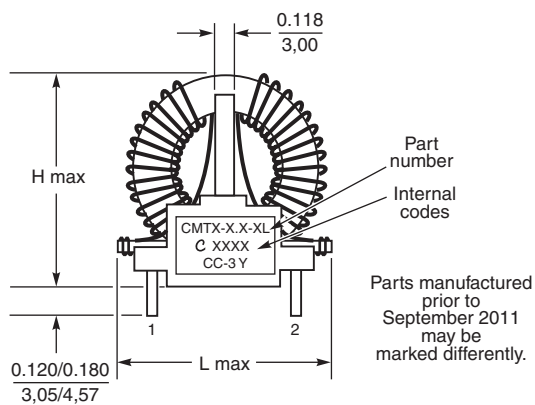


Coilcraft's CMT toroid style common mode chokes are designed to provide the highest common mode impedance over the widest frequency range. These parts are ideal for any application requiring a high DC current bias and are well suited for use in switch-mode power supplies.

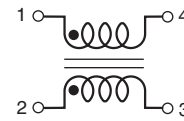
Common mode chokes are most effective in filtering supply and return conductors with in-phase signals of equal amplitude. Differential mode inductors are available for filtering out-of-phase or uneven amplitude signals.

CMTs feature inductance values up to 125 mH and Irms ratings as high as 15 Amps.

- 1250 Vrms, one minute isolation between windings
- Industry standard footprint.
- Creepage and clearance = 3.2 mm
- UL1446 Class B (130°C) Insulation System (UL File E83628)



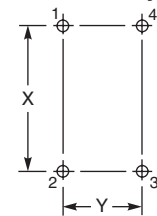
Schematic



Weights: CMT1: 13.3 – 25.5 g;
CMT2: 20.7 – 41.7 g;
CMT3: 42.5 – 77.2 g;
CMT4: 115 – 117 g

Terminations: Tin-silver over copper

Recommended PC Board Layout



CMT-1 Series

Part number	L min ¹ (mH)	Irms (A)	Leakage inductance ² max (μH)	DCR max ³ (Ohms)	H max	L max	W max	X ±0.01/0,25	Y ±0.01/0,25	Lead diameter nom	PC board hole diameter
CMT1-5.0-1L	5.0	1.0	80	0.207	1.100/27,9	1.210/30,7	0.625/15,9	0.80/20,3	0.40/10,2	0.054/1,37	0.091/2,32
CMT1-8.0-1L	8.0	1.0	125	0.270	1.100/27,9	1.210/30,7	0.625/15,9	0.80/20,3	0.40/10,2	0.054/1,37	0.091/2,32
CMT1-15.0-1L	15.0	1.0	233	0.430	1.155/29,4	1.300/33,0	0.625/15,9	0.80/20,3	0.40/10,2	0.054/1,37	0.091/2,32
CMT1-2.5-2L	2.5	2.0	42	0.090	1.100/27,9	1.210/30,7	0.625/15,9	0.80/20,3	0.40/10,2	0.054/1,37	0.091/2,32
CMT1-4.0-2L	4.0	2.0	70	0.095	1.050/26,7	1.210/30,7	0.625/15,9	0.80/20,3	0.40/10,2	0.054/1,37	0.091/2,32
CMT1-7.5-2L	7.5	2.0	74	0.108	1.155/29,4	1.300/33,0	0.625/15,9	0.80/20,3	0.40/10,2	0.054/1,37	0.091/2,32
CMT1-1.3-4L	1.3	4.0	20	0.029	1.100/27,9	1.210/30,7	0.625/15,9	0.80/20,3	0.40/10,2	0.054/1,37	0.091/2,32
CMT1-2.1-4L	2.1	4.0	36	0.040	1.100/27,9	1.210/30,7	0.625/15,9	0.80/20,3	0.40/10,2	0.054/1,37	0.091/2,32
CMT1-3.7-4L	3.7	4.0	40	0.036	1.125/28,6	1.300/33,0	0.625/15,9	0.80/20,3	0.40/10,2	0.054/1,37	0.091/2,32
CMT1-1.0-6L	1.0	6.0	19	0.022	1.100/27,9	1.210/30,7	0.625/15,9	0.80/20,3	0.40/10,2	0.054/1,37	0.091/2,32
CMT1-1.7-6L	1.7	6.0	34	0.032	1.155/29,4	1.300/33,0	0.625/15,9	0.80/20,3	0.40/10,2	0.054/1,37	0.091/2,32
CMT1-3.0-6L	3.0	6.0	35	0.027	1.200/30,5	1.210/30,7	0.625/15,9	0.80/20,3	0.40/10,2	0.054/1,37	0.091/2,32
CMT1-.6-9L	0.6	9.0	11	0.012	1.200/30,5	1.210/30,7	0.625/15,9	0.80/20,3	0.40/10,2	0.042/1,07	0.071/1,80
CMT1-1.1-9L	1.1	9.0	12	0.013	1.300/33,0	1.210/30,7	0.625/15,9	0.80/20,3	0.40/10,2	0.042/1,07	0.071/1,80
CMT1-1.9-9L	1.9	9.0	20	0.017	1.300/33,0	1.400/35,6	0.625/15,9	0.80/20,3	0.40/10,2	0.042/1,07	0.071/1,80
CMT1-.5-12L	0.5	12.0	9	0.008	1.200/30,5	1.210/30,7	0.650/16,5	0.80/20,3	0.40/10,2	0.048/1,22	0.081/2,06
CMT1-.8-12L	0.8	12.0	9	0.008	1.200/30,5	1.210/30,7	0.650/16,5	0.80/20,3	0.40/10,2	0.048/1,22	0.081/2,06
CMT1-1.4-12L	1.4	12.0	16	0.011	1.300/33,0	1.210/30,7	0.650/16,5	0.80/20,3	0.40/10,2	0.048/1,22	0.081/2,06
CMT1-.3-15L	0.3	15.0	6	0.005	1.300/33,0	1.210/30,7	0.625/15,9	0.80/20,3	0.40/10,2	0.054/1,37	0.091/2,32
CMT1-.6-15L	0.6	15.0	6.5	0.006	1.250/31,8	1.210/30,7	0.650/16,5	0.80/20,3	0.40/10,2	0.054/1,37	0.091/2,32
CMT1-1.1-15L	1.1	15.0	13.7	0.008	1.250/31,8	1.210/30,7	0.700/17,8	0.80/20,3	0.40/10,2	0.054/1,37	0.091/2,32

1. Inductance is per winding, tested at 15.75 kHz, 0 Adc.
2. Leakage inductance is measured from pin 1 to pin 4 with pins 2 and 3 shorted.
3. DCR is per winding.
4. Operating temperature range -40°C to +85°C.
5. Electrical specifications at 25°C.



www.coilcraft.com

US +1-847-639-6400 sales@coilcraft.com
 UK +44-1236-730595 sales@coilcraft-europe.com
 Taiwan +886-2-2264 3646 sales@coilcraft.com.tw
 China +86-21-6218 8074 sales@coilcraft.com.cn
 Singapore +65-6484 8412 sales@coilcraft.com.sg

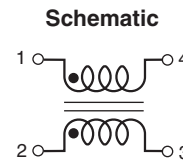
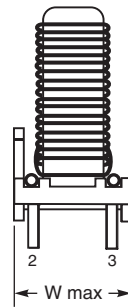
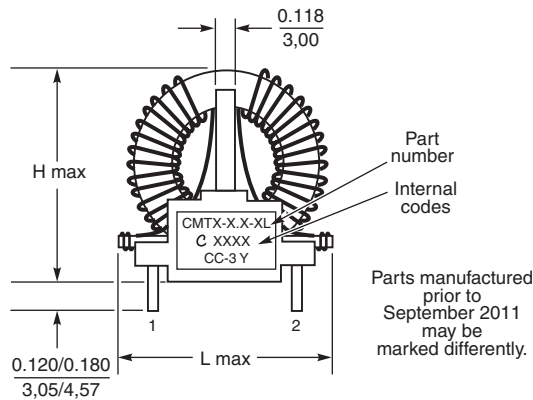
Document 326-1 Revised 05/21/12

© Coilcraft Inc. 2013

This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.



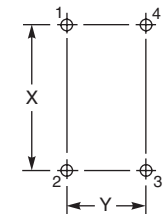
Common Mode Line Chokes – CMT Series



Weights:
 CMT1: 13.3 – 25.5 g;
 CMT2: 20.7 – 41.7 g;
 CMT3: 42.5 – 77.2 g;
 CMT4: 115 – 117 g

Terminations: Tin-silver over copper

Recommended PC Board Layout



CMT-2 Series

Part number	L min ¹ (mH)	Irms (A)	Leakage inductance ² max (µH)	DCR max ³ (Ohms)	H max	L max	W max	X ±0.01/0,25	Y ±0.01/0,25	Lead diameter nom	PC board hole diameter
CMT2-7.5-1L	7.5	1.0	90	0.270	1.100/27,9	1.310/33,3	0.825/21,0	0.90/22,9	0.60/15,2	0.054/1,37	0.091/2,32
CMT2-13-1L	13.0	1.0	190	0.415	1.300/33,0	1.310/33,3	0.825/21,0	0.90/22,9	0.60/15,2	0.054/1,37	0.091/2,32
CMT2-3.8-2L	3.8	2.0	48	0.106	1.100/27,9	1.310/33,3	0.825/21,0	0.90/22,9	0.60/15,2	0.054/1,37	0.091/2,32
CMT2-6.5-2L	6.5	2.0	98	0.145	1.300/33,0	1.310/33,3	0.825/21,0	0.90/22,9	0.60/15,2	0.054/1,37	0.091/2,32
CMT2-1.9-4L	1.9	4.0	26	0.038	1.100/27,9	1.310/33,3	0.825/21,0	0.90/22,9	0.60/15,2	0.054/1,37	0.091/2,32
CMT2-3.3-4L	3.3	4.0	45	0.055	1.300/33,0	1.310/33,3	0.825/21,0	0.90/22,9	0.60/15,2	0.054/1,37	0.091/2,32
CMT2-1.5-6L	1.5	6.0	21	0.029	1.100/27,9	1.310/33,3	0.825/21,0	0.90/22,9	0.60/15,2	0.054/1,37	0.091/2,32
CMT2-2.6-6L	2.6	6.0	41	0.040	1.400/35,6	1.400/35,6	0.900/22,9	0.90/22,9	0.60/15,2	0.054/1,37	0.091/2,32
CMT2-.9-9L	0.9	9.0	17	0.014	1.200/30,5	1.310/33,3	0.825/21,0	0.90/22,9	0.60/15,2	0.042/1,07	0.071/1,80
CMT2-1.5-9L	1.5	9.0	15	0.013	1.250/31,8	1.250/31,8	0.825/21,0	0.90/22,9	0.60/15,2	0.042/1,07	0.071/1,80
CMT2-.7-12L	0.7	12.0	14	0.011	1.200/30,5	1.250/31,8	0.825/21,0	0.90/22,9	0.60/15,2	0.048/1,22	0.081/2,06
CMT2-1.2-12L	1.2	12.0	14	0.011	1.200/30,5	1.250/31,8	0.825/21,0	0.90/22,9	0.60/15,2	0.048/1,22	0.081/2,06
CMT2-.5-15L	0.5	15.0	8.7	0.007	1.300/33,0	1.300/33,0	0.825/21,0	0.90/22,9	0.60/15,2	0.054/1,37	0.091/2,32
CMT2-.8-15L	0.8	15.0	10	0.007	1.200/30,5	1.250/31,8	0.825/21,0	0.90/22,9	0.60/15,2	0.054/1,37	0.091/2,32

1. Inductance is per winding, tested at 15.75 kHz, 0 Adc.
2. Leakage inductance is measured from pin 1 to pin 4 with pins 2 and 3 shorted.
3. DCR is per winding.
4. Operating temperature range –40°C to +85°C.
5. Electrical specifications at 25°C.

CMT-3 Series

Part number	L min ¹ (mH)	Irms (A)	Leakage inductance ² max (µH)	DCR max ³ (Ohms)	H max	L max	W max	X ±0.01/0,25	Y ±0.01/0,25	Lead diameter nom	PC board hole diameter
CMT3-32-1L	32.0	1.0	485	0.650	1.400/35,6	1.650/41,9	0.925/23,5	1.20/30,5	0.70/17,8	0.054/1,37	0.091/2,32
CMT3-56-1L	56.0	1.0	780	0.900	1.650/41,9	1.650/41,9	0.925/23,5	1.20/30,5	0.70/17,8	0.054/1,37	0.091/2,32
CMT3-16-2L	16.0	2.0	210	0.240	1.400/35,6	1.650/41,9	0.925/23,5	1.20/30,5	0.70/17,8	0.054/1,37	0.091/2,32
CMT3-28-2L	28.0	2.0	410	0.330	1.650/41,9	1.650/41,9	0.925/23,5	1.20/30,5	0.70/17,8	0.054/1,37	0.091/2,32
CMT3-8-4L	8.0	4.0	57.5	0.061	1.350/34,3	1.650/41,9	0.925/23,5	1.20/30,5	0.70/17,8	0.054/1,37	0.091/2,32
CMT3-14-4L	14.0	4.0	180	0.120	1.700/43,2	1.650/41,9	0.950/24,1	1.20/30,5	0.70/17,8	0.054/1,37	0.091/2,32
CMT3-6.6-6L	6.6	6.0	49	0.048	1.400/35,6	1.600/40,6	0.925/23,5	1.20/30,5	0.70/17,8	0.054/1,37	0.091/2,32
CMT3-11.5-6L	11.5	6.0	140	0.088	1.700/43,2	1.650/41,9	0.925/23,5	1.20/30,5	0.70/17,8	0.054/1,37	0.091/2,32
CMT3-4-9L	4.0	9.0	37	0.026	1.400/35,6	1.450/36,8	0.925/23,5	1.20/30,5	0.70/17,8	0.042/1,07	0.071/1,80
CMT3-7-9L	7.0	9.0	104	0.045	1.760/44,7	1.760/44,7	0.975/24,8	1.20/30,5	0.70/17,8	0.042/1,07	0.071/1,80
CMT3-3-12L	3.0	12.0	40	0.022	1.700/43,2	1.700/43,2	0.950/24,1	1.20/30,5	0.70/17,8	0.048/1,22	0.081/2,06
CMT3-5.2-12L	5.2	12.0	47	0.025	1.700/43,2	1.700/43,2	1.000/25,4	1.20/30,5	0.70/17,8	0.048/1,22	0.081/2,06
CMT3-2.5-15L	2.5	15.0	42	0.019	1.750/44,5	1.750/44,5	1.000/25,4	1.20/30,5	0.70/17,8	0.054/1,37	0.091/2,32
CMT3-4.4-15L	4.4	15.0	48	0.017	1.700/43,2	1.700/43,2	1.000/25,4	1.20/30,5	0.70/17,8	0.054/1,37	0.091/2,32

1. Inductance is per winding, tested at 15.75 kHz, 0 Adc.
2. Leakage inductance is measured from pin 1 to pin 4 with pins 2 and 3 shorted.
3. DCR is per winding.
4. Operating temperature range –40°C to +85°C.
5. Electrical specifications at 25°C.



www.coilcraft.com

US +1-847-639-6400 sales@coilcraft.com
UK +44-1236-730595 sales@coilcraft-europe.com
Taiwan +886-2-2264 3646 sales@coilcraft.com.tw
China +86-21-6218 8074 sales@coilcraft.com.cn
Singapore +65-6484 8412 sales@coilcraft.com.sg

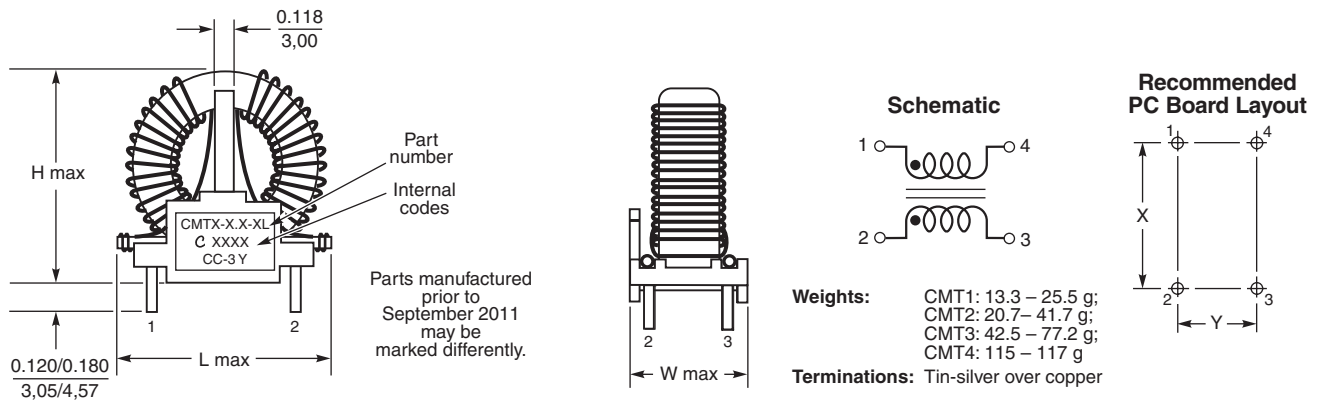
Document 326-2 Revised 05/21/12

© Coilcraft Inc. 2013

This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.



Common Mode Line Chokes – CMT Series



CMT-4 Series

Part number	L min ¹ (mH)	I _{rms} (A)	Leakage inductance ² max (μH)	DCR max ³ (Ohms)	H max	L max	W max	X ±0.01/0,25	Y ±0.01/0,25	Lead diameter nom	PC board hole diameter
CMT4-72-1L	72.0	1.0	1400	1.150	2.100/53,3	2.100/53,3	1.130/28,7	1.50/38,1	0.90/22,9	0.054/1,37	0.091/2,32
CMT4-125-1L	125.0	1.0	1400	1.150	2.200/55,9	2.150/54,6	1.130/28,7	1.50/38,1	0.90/22,9	0.054/1,37	0.091/2,32
CMT4-36-2L	36.0	2.0	680	0.415	2.215/56,3	2.150/54,6	1.130/28,7	1.50/38,1	0.90/22,9	0.054/1,37	0.091/2,32
CMT4-62-2L	62.0	2.0	750	0.415	2.200/55,9	2.150/54,6	1.130/28,7	1.50/38,1	0.90/22,9	0.054/1,37	0.091/2,32
CMT4-19-4L	19.0	4.0	350	0.150	2.200/55,9	2.180/55,4	1.130/28,7	1.50/38,1	0.90/22,9	0.054/1,37	0.091/2,32
CMT4-32-4L	32.0	4.0	370	0.158	2.200/55,9	2.180/55,4	1.130/28,7	1.50/38,1	0.90/22,9	0.054/1,37	0.091/2,32
CMT4-15-6L	15.0	6.0	275	0.114	2.200/55,9	2.180/55,4	1.130/28,7	1.50/38,1	0.90/22,9	0.054/1,37	0.091/2,32
CMT4-26-6L	26.0	6.0	320	0.115	2.225/56,5	2.180/55,4	1.130/28,7	1.50/38,1	0.90/22,9	0.054/1,37	0.091/2,32
CMT4-10-9L	10.0	9.0	190	0.057	2.200/55,9	2.180/55,4	1.130/28,7	1.50/38,1	0.90/22,9	0.042/1,07	0.071/1,80
CMT4-17-9L	17.0	9.0	220	0.062	2.280/57,9	2.250/57,2	1.150/29,2	1.50/38,1	0.90/22,9	0.042/1,07	0.071/1,80
CMT4-7.5-12L	7.5	12.0	140	0.042	2.200/55,9	2.250/57,2	1.130/28,7	1.50/38,1	0.90/22,9	0.048/1,22	0.081/2,06
CMT4-13-12L	13.0	12.0	155	0.043	2.250/57,2	2.300/58,4	1.130/28,7	1.50/38,1	0.90/22,9	0.048/1,22	0.081/2,06
CMT4-6-15L	6.0	15.0	111	0.030	2.250/57,2	2.250/57,2	1.150/29,2	1.50/38,1	0.90/22,9	0.054/1,37	0.091/2,32
CMT4-10-15L	10.0	15.0	122	0.029	2.280/57,9	2.300/58,4	1.130/28,7	1.50/38,1	0.90/22,9	0.054/1,37	0.091/2,32

1. Inductance is per winding, tested at 15.75 kHz, 0 Adc.
2. Leakage inductance is measured from pin 1 to pin 4 with pins 2 and 3 shorted.
3. DCR is per winding.
4. Operating temperature range –40°C to +85°C.
5. Electrical specifications at 25°C.



www.coilcraft.com

US +1-847-639-6400 sales@coilcraft.com
UK +44-1236-730595 sales@coilcraft-europe.com
Taiwan +886-2-2264 3646 sales@coilcraft.com.tw
China +86-21-6218 8074 sales@coilcraft.com.cn
Singapore + 65-6484 8412 sales@coilcraft.com.sg

Document 326-3 Revised 05/21/12

© Coilcraft Inc. 2013

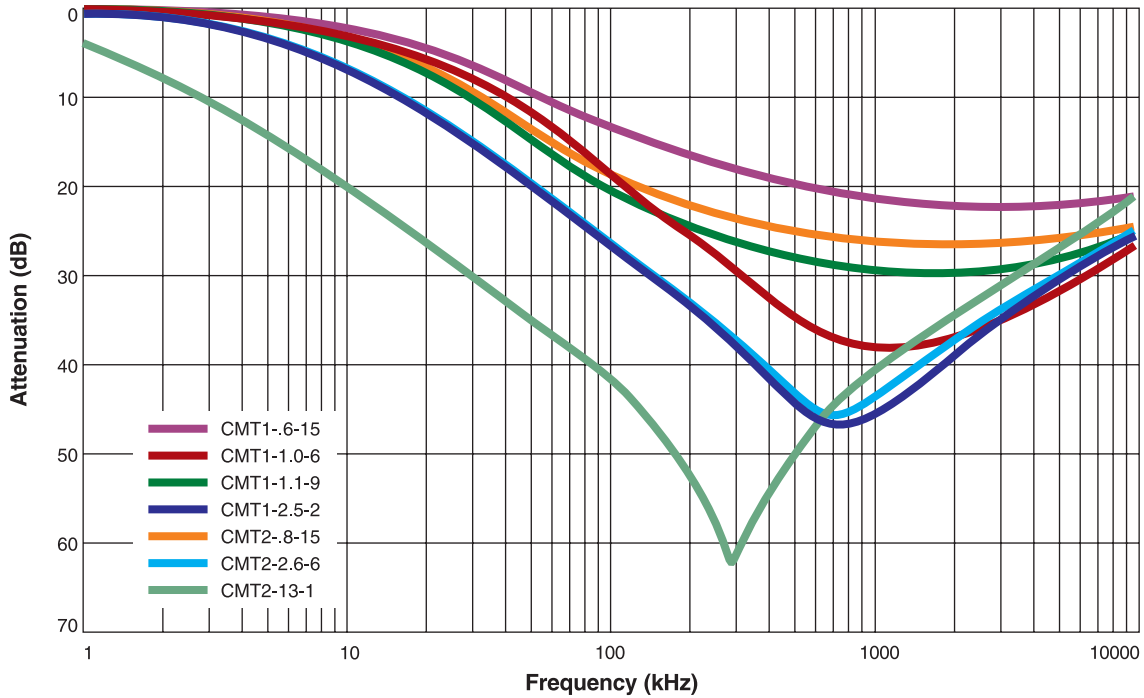
This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.



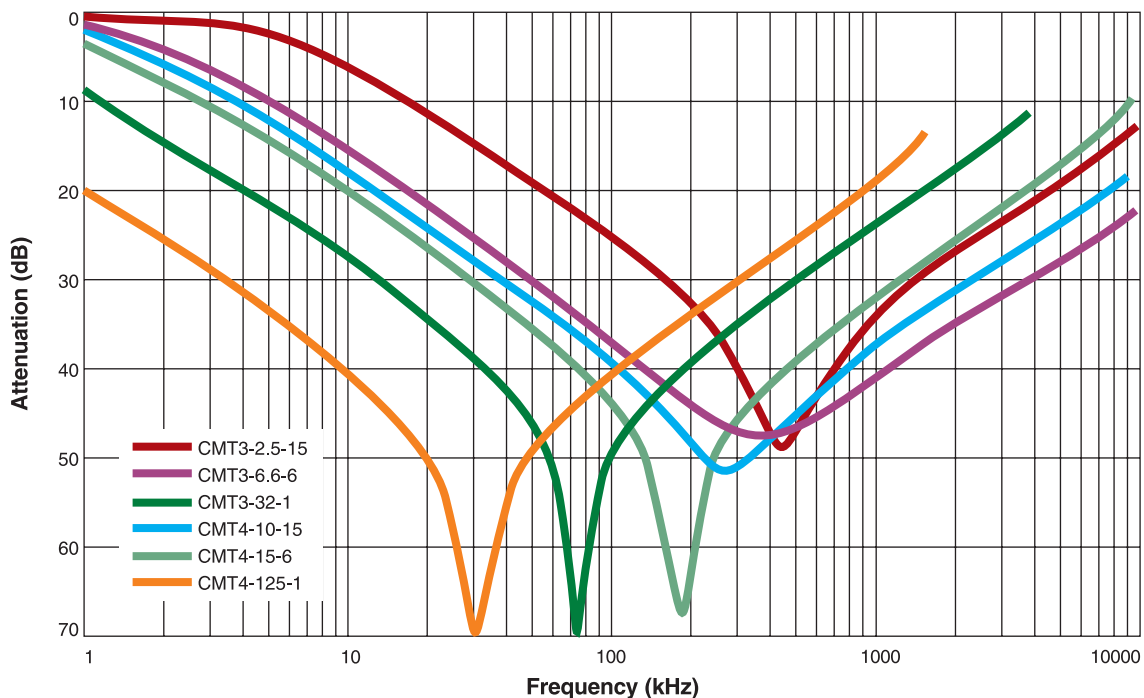
Common Mode Line Chokes – CMT Series

Typical Common Mode Attenuation (Ref: 50 Ohms)

CMT1 and CMT2



CMT3 and CMT4



US +1-847-639-6400 sales@coilcraft.com
UK +44-1236-730595 sales@coilcraft-europe.com
Taiwan +886-2-2264 3646 sales@coilcraft.com.tw
China +86-21-6218 8074 sales@coilcraft.com.cn
Singapore + 65-6484 8412 sales@coilcraft.com.sg

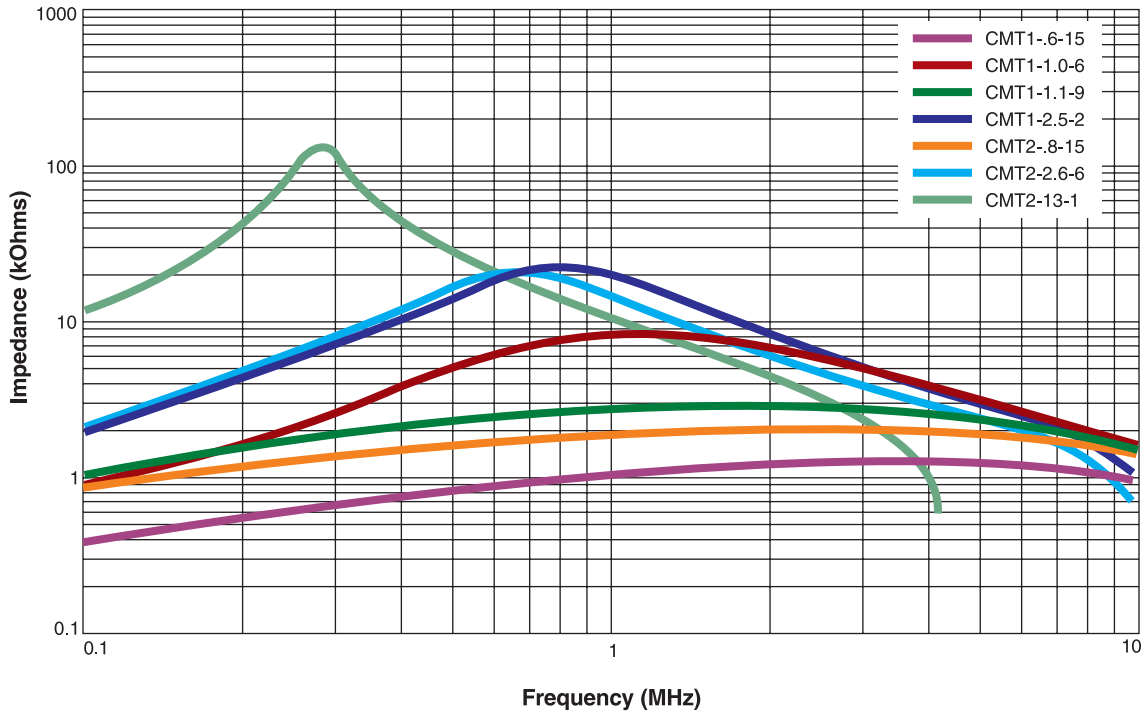
Document 326-4 Revised 05/21/12
 © Coilcraft Inc. 2013
 This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.



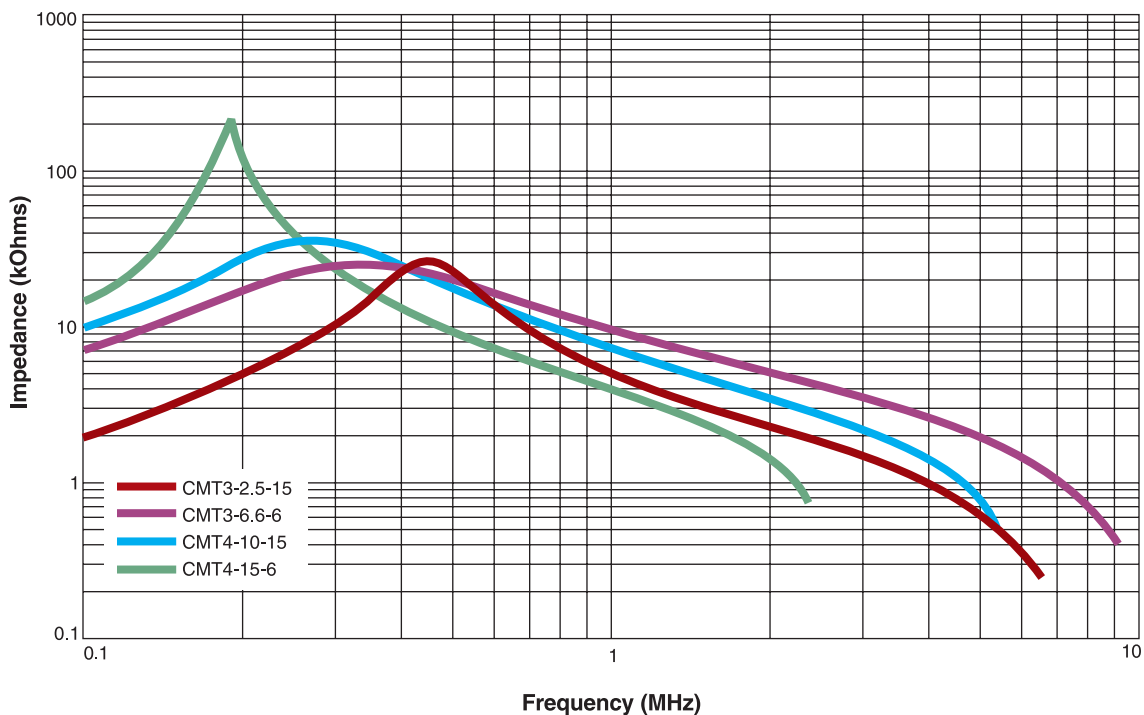
Common Mode Line Chokes – CMT Series

Typical Impedance

CMT1 and CMT2



CMT3 and CMT4



US +1-847-639-6400 sales@coilcraft.com
UK +44-1236-730595 sales@coilcraft-europe.com
Taiwan +886-2-2264 3646 sales@coilcraft.com.tw
China +86-21-6218 8074 sales@coilcraft.com.cn
Singapore + 65-6484 8412 sales@coilcraft.com.sg

Document 326-5 Revised 05/21/12
 © Coilcraft Inc. 2013
 This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.