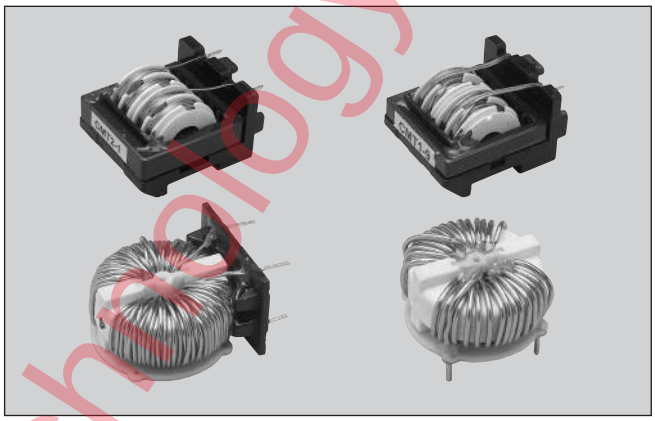
COOPER COILTRONICS®

COOPER Bussmann

CMT-SERIES
Common Mode Inductors (Through-Hole)

RoHS 2002/95/EC



Description

- Four sizes of through-hole off-line common mode inductors
- Inductance range from 0.53 - 66 mH
- Current range up to 6.5 Amps
- Noise attenuation up to 68 dB
- Frequency range up to 6 MHz
- Meets UL94V-0 flammability standard
- Ferrite core material

Applications

- Protects AC input from effects of switching regulators
- Off-line power supplies
- EMI filters
- DC-DC converters
- Computer, TV, VCR, audio and office equipment

Environmental Data

- Storage temperature range: -40°C to +125°C
- Operating ambient temperature range: -40°C to +85°C range is application specific. The internal "hot-spot" temperature defines the maximum allowable currents, which are limited to 130°C, including ambient.

Packaging

- Supplied in bulk packaging

Part Number	OCL (mH) min (1-2)	OCL (mH) min (4-3)	I rms. Amperes max	DCR (Ω) typ @ 20°C (1-2)	DCR (Ω) typ @ 20°C (4-3)
CMT1-1-R	66.0	66.0	0.74	1.20	1.20
CMT1-2-R	49.0	49.0	0.88	0.85	0.85
CMT1-3-R	28.0	28.0	1.13	0.50	0.50
CMT1-4-R	21	21	1.37	0.35	0.35
CMT1-5-R	13	13	1.76	0.20	0.20
CMT1-6-R	7.50	7.50	2.27	0.13	0.13
CMT1-7-R	4.20	4.20	2.89	0.08	0.08
CMT1-8-R	2.40	2.40	3.85	0.045	0.045
CMT1-9-R	1.85	1.85	4.53	0.033	0.033
CMT1-10-R	0.94	0.94	6.05	0.018	0.018
CMT2-1-R	30	30	1.50	0.350	0.350
CMT2-2-R	20	20	1.95	0.220	0.220
CMT2-3-R	12	12	2.45	0.135	0.135
CMT2-4-R	8.0	8.0	2.80	0.100	0.100
CMT2-5-R	6.0	6.0	3.40	0.070	0.070
CMT2-6-R	4.8	4.8	3.95	0.053	0.053
CMT2-7-R	3.2	3.2	4.40	0.042	0.042
CMT2-8-R	2.4	2.4	4.75	0.037	0.037
CMT2-9-R	2.0	2.0	5.45	0.028	0.028
CMT2-10-R	1.6	1.6	5.75	0.026	0.026
CMT3-1-R	5.4	5.4	2.0	0.12	0.12
CMT3-2-R	3.5	3.5	2.6	0.08	0.08
CMT3-3-R	2.7	2.7	3.0	0.055	0.055
CMT3-4-R	1.3	1.3	4.0	0.032	0.032
CMT3-5-R	0.92	0.92	5.0	0.021	0.021
CMT3-6-R	0.53	0.53	6.5	0.013	0.013
CMT4-1-R	5.4	5.4	2.0	0.12	0.12
CMT4-2-R	3.5	3.5	2.6	0.08	0.08
CMT4-3-R	2.7	2.7	3.0	0.055	0.055
CMT4-4-R	1.3	1.3	4.0	0.032	0.032
CMT4-5-R	0.92	0.92	5.0	0.021	0.021
CMT4-6-R	0.53	0.53	6.5	0.013	0.013

Definitions:
OCL = Open Circuit Inductance
DCR = Direct Current Resistance
Irms = rms current for 40°C max temperature rise at worst case ambient temperature of 85°C

Electrical Characteristics:
OCL (1-2) 0.10Vrms, 10kHz, 0.0Adc: (See Chart)
OCL (4-3) 0.10Vrms, 10kHz, 0.0Adc: (See Chart)
DCR (1-2) typ @ 20°C: (See Chart)
DCR (4-3) typ @ 20°C: (See Chart)
Hipot rating: winding to winding: 2400 Vac for 1 second.
Turns Ratio: (1-2):(4-3) 1:1

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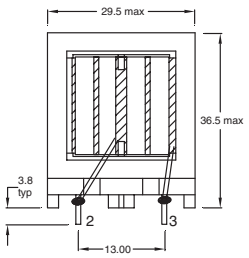
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CMT-SERIES
Common Mode Inductors (Through-Hole)

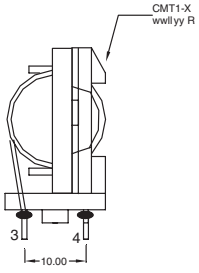
Mechanical Diagrams

CMT1 Series

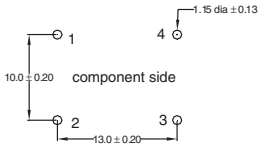
FRONT VIEW



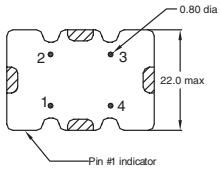
SIDE VIEW



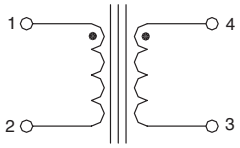
RECOMMENDED PCB LAYOUT



BOTTOM VIEW

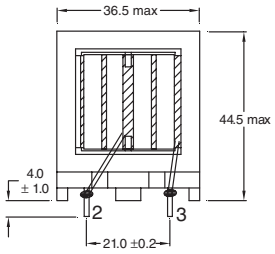


SCHEMATIC

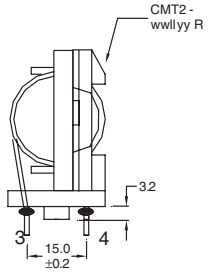


CMT2 Series

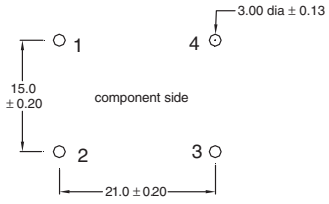
FRONT VIEW



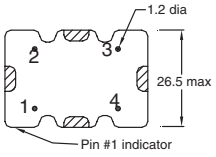
SIDE VIEW



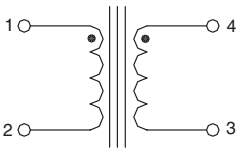
RECOMMENDED PCB LAYOUT



BOTTOM VIEW

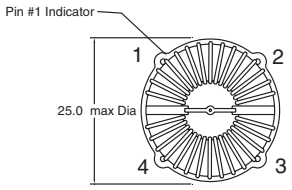


SCHEMATIC

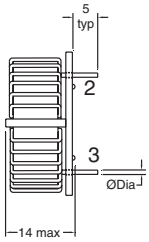


CMT3 Series

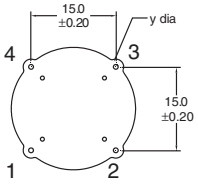
TOP VIEW



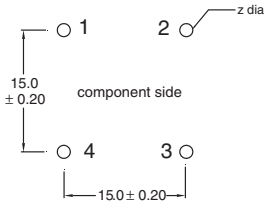
SIDE VIEW



BOTTOM VIEW



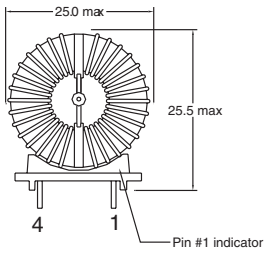
RECOMMENDED PCB LAYOUT



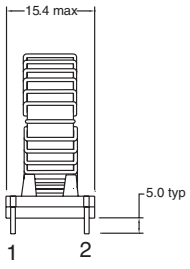
	"Y" Dia ref	"Z" Dia ref
CMT3-1	0.58	0.83
CMT3-2	0.64	0.90
CMT3-3	0.71	0.97
CMT3-4	0.80	1.06
CMT3-5	0.89	1.15
CMT3-6	0.99	1.25

CMT4 Series

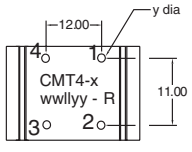
FRONT VIEW



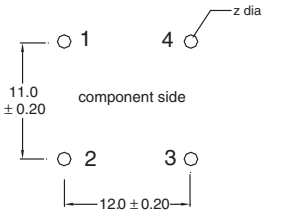
SIDE VIEW



BOTTOM VIEW



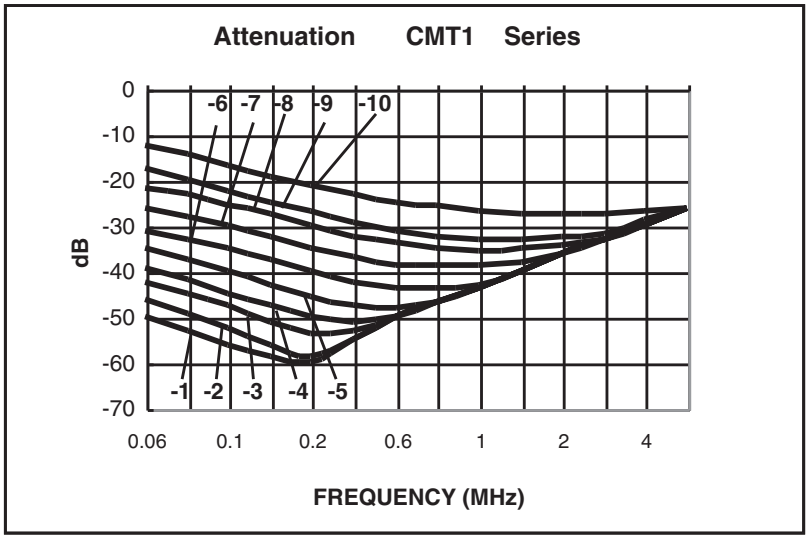
RECOMMENDED PCB LAYOUT

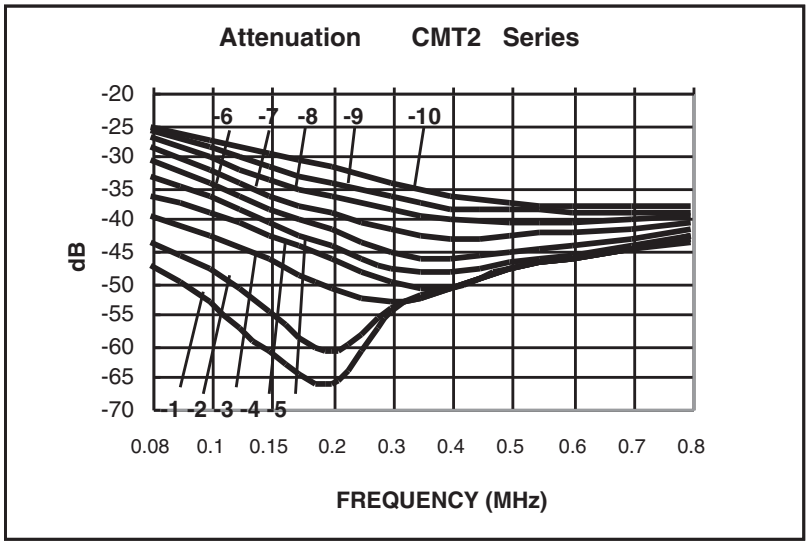


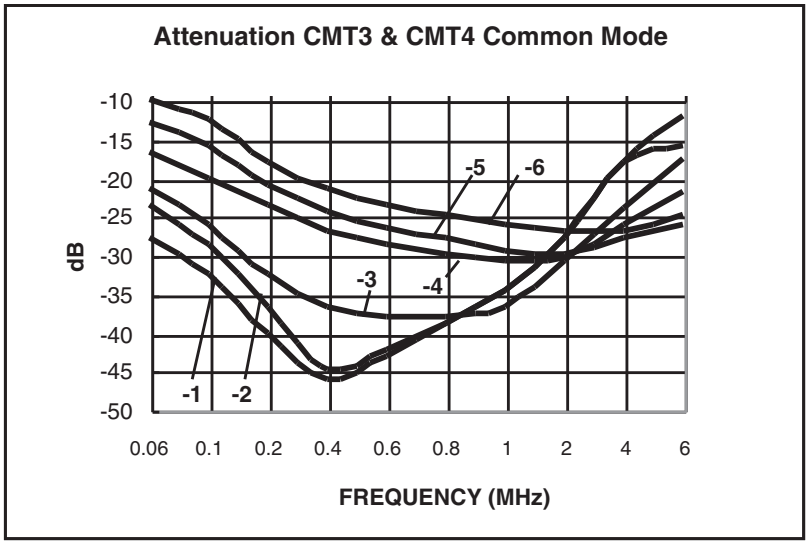
	"Y" Dia ref	"Z" Dia ref
CMT4-1	0.58	0.83
CMT4-2	0.64	0.90
CMT4-3	0.71	0.97
CMT4-4	0.80	1.06
CMT4-5	0.89	1.15
CMT4-6	0.99	1.25

(1) All Dimensions are in millimeters unless otherwise specified
(2) Tolerances are +/- 0.20mm unless stated otherwise.
(3) wwllyy = (Date Code) R = (Revision Level)
Schematic is the same for all the series

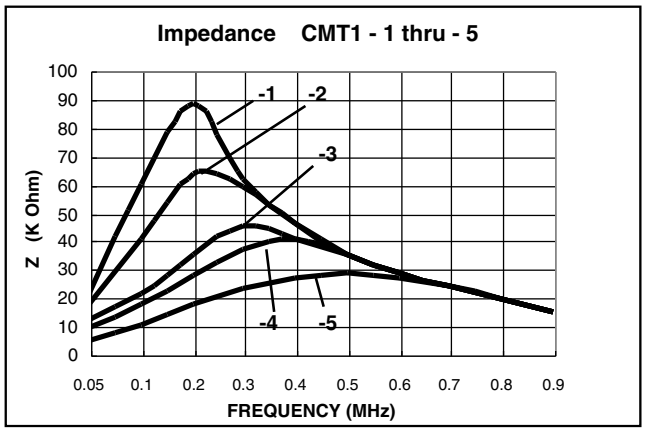
Attenuation Curves

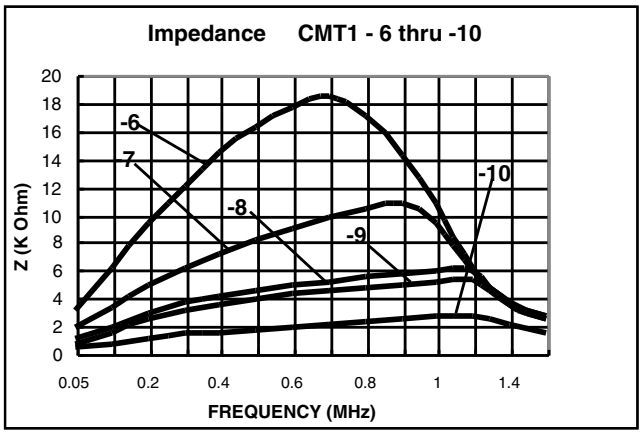


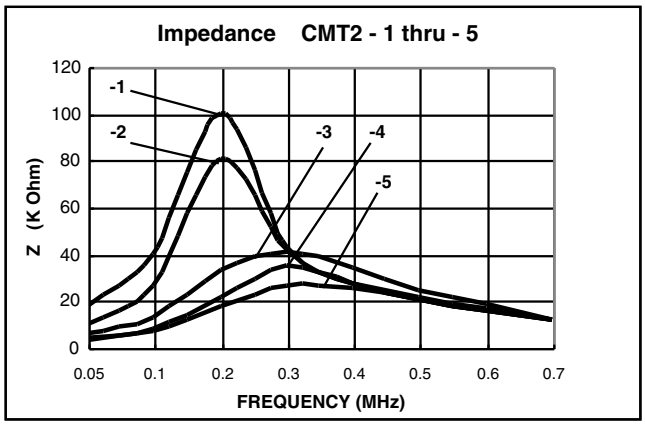


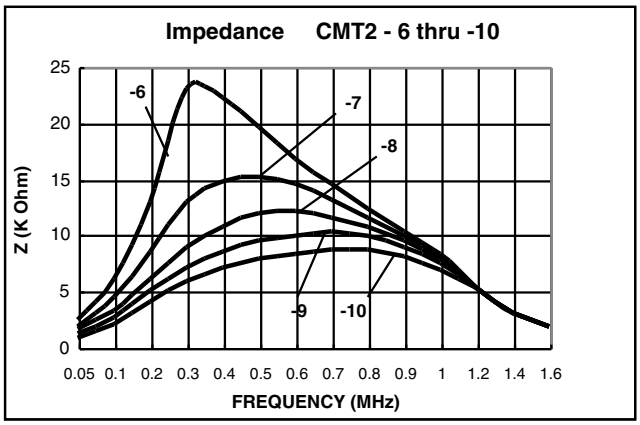


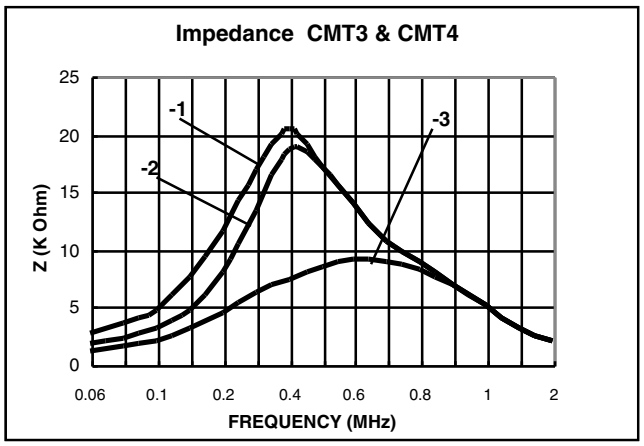
Impedance Curves

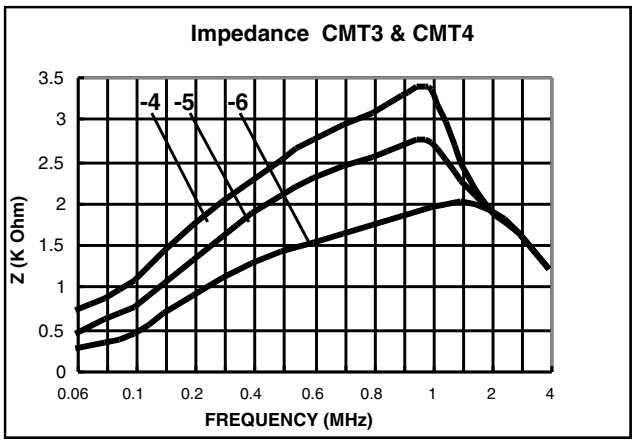












PM-4312 3/07

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