

◆ **Features**

1. Magnetic Shielded surface mount inductor with high current rating.
2. Low resistance to keep power loss minimum.
3. The products contain no lead and also support lead-free soldering.



◆ **Applications**

Excellent for power line DC-DC conversion applications used in hard disk, notebook computers and other electronic equipment.



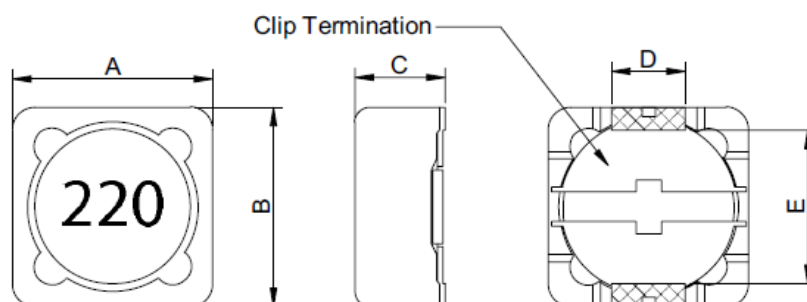
◆ **Lead Free Part Numbering**

**CMLH 1204 S 100 M T T**  
**(1) (2) (3) (4) (5) (6) (7)**

- (1) Series Type
- (2) Dimension: A X C
- (3) Material Code
- (4) Inductance: 2R2=2.2 $\mu$ H ;  
100=10 $\mu$ H; 101=100 $\mu$ H
- (5) Inductance Tolerance: M= $\pm$ 20%, Y= $\pm$ 30%
- (6) Company Code
- (7) Packaging : packed in embossed carrier

◆ **Dimensions**

Series	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)
<b>CMLH0703</b>	7.3 $\pm$ 0.3	7.3 $\pm$ 0.3	3.5 Max.	1.8 $\pm$ 0.2	5.0 $\pm$ 0.2
<b>CMLH0704</b>	7.3 $\pm$ 0.3	7.3 $\pm$ 0.3	4.5 Max.	1.8 $\pm$ 0.2	5.0 $\pm$ 0.2
<b>CMLH1204</b>	12.0 $\pm$ 0.3	12.0 $\pm$ 0.3	5.0 Max.	5.0 $\pm$ 0.2	7.6 $\pm$ 0.2
<b>CMLH1205</b>	12.0 $\pm$ 0.3	12.0 $\pm$ 0.3	6.0 Max.	5.0 $\pm$ 0.2	7.6 $\pm$ 0.2
<b>CMLH1207</b>	12.0 $\pm$ 0.3	12.0 $\pm$ 0.3	8.0 Max.	5.0 $\pm$ 0.2	7.6 $\pm$ 0.2



◆ Specification

Part Number	Inductance ( $\mu$ H)	Test Frequency (Hz)	DCR (m $\Omega$ ) max.	IDC (A) max.
<b>CMLH0703 Series</b>				
CMLH0703SR47MTT	0.47 $\pm$ 20%	0.25V/1K	17	10.50
CMLH0703S1R0MTT	1.0 $\pm$ 20%	0.25V/1K	17	7.00
CMLH0703S1R5MTT	1.5 $\pm$ 20%	0.25V/1K	17	6.00
CMLH0703S2R2MTT	2.2 $\pm$ 20%	0.25V/1K	25	4.50
CMLH0703S3R3MTT	3.3 $\pm$ 20%	0.25V/1K	25	4.20
CMLH0703S4R7MTT	4.7 $\pm$ 20%	0.25V/1K	58	3.65
CMLH0703S6R8MTT	6.8 $\pm$ 20%	0.25V/1K	58	3.00
CMLH0703S8R2MTT	8.2 $\pm$ 20%	0.25V/1K	63	2.50
CMLH0703S100MTT	10 $\pm$ 20%	0.25V/1K	69	2.30
CMLH0703S120MTT	12 $\pm$ 20%	0.25V/1K	83	2.20
CMLH0703S150MTT	15 $\pm$ 20%	0.25V/1K	108	2.00
CMLH0703S180MTT	18 $\pm$ 20%	0.25V/1K	125	1.80
CMLH0703S220MTT	22 $\pm$ 20%	0.25V/1K	158	1.50
CMLH0703S330MTT	33 $\pm$ 20%	0.25V/1K	232	1.20
CMLH0703S390MTT	39 $\pm$ 20%	0.25V/1K	282	0.90
CMLH0703S400MTT	40 $\pm$ 20%	0.25V/1K	291	0.90
CMLH0703S470MTT	47 $\pm$ 20%	0.25V/1K	374	0.80
CMLH0703S560MTT	56 $\pm$ 20%	0.25V/1K	415	0.70
CMLH0703S680MTT	68 $\pm$ 20%	0.25V/1K	432	0.61
CMLH0703S820MTT	82 $\pm$ 20%	0.25V/1K	573	0.55
CMLH0703S101MTT	100 $\pm$ 20%	0.25V/1K	656	0.50
CMLH0703S151MTT	150 $\pm$ 20%	0.25V/1K	830	0.46
CMLH0703S181MTT	180 $\pm$ 20%	0.25V/1K	913	0.39
CMLH0703S221MTT	220 $\pm$ 20%	0.25V/1K	1370	0.38
CMLH0703S271MTT	270 $\pm$ 20%	0.25V/1K	1917	0.36
CMLH0703S331MTT	330 $\pm$ 20%	0.25V/1K	2175	0.35
CMLH0703S471MTT	470 $\pm$ 20%	0.25V/1K	3469	0.32
CMLH0703S681MTT	680 $\pm$ 20%	0.25V/1K	4756	0.30
CMLH0703S821MTT	820 $\pm$ 20%	0.25V/1K	5810	0.28
CMLH0703S102MTT	1000 $\pm$ 20%	0.25V/1K	8018	0.26

◆ Specification

Part Number	Inductance ( $\mu$ H)	Test Frequency (Hz)	DCR (m $\Omega$ ) max.	IDC (A) max.
<b>CMLH0704 Series</b>				
CMLH0704S1R0MTT	1.0 $\pm$ 20%	0.25V/1K	12	9.00
CMLH0704S1R2MTT	1.2 $\pm$ 20%	0.25V/1K	21	8.00
CMLH0704S1R5MTT	1.5 $\pm$ 20%	0.25V/1K	25	8.00
CMLH0704S1R8MTT	1.8 $\pm$ 20%	0.25V/1K	27	7.00
CMLH0704S2R2MTT	2.2 $\pm$ 20%	0.25V/1K	29	6.20
CMLH0704S2R7MTT	2.7 $\pm$ 20%	0.25V/1K	33	5.50
CMLH0704S3R3MTT	3.3 $\pm$ 20%	0.25V/1K	37	4.70
CMLH0704S4R7MTT	4.7 $\pm$ 20%	0.25V/1K	39	3.50
CMLH0704S6R2MTT	6.2 $\pm$ 20%	0.25V/1K	42	3.40
CMLH0704S6R8MTT	6.8 $\pm$ 20%	0.25V/1K	42	3.40
CMLH0704S8R2MTT	8.2 $\pm$ 20%	0.25V/1K	44	3.10
CMLH0704S100MTT	10 $\pm$ 20%	0.25V/1K	46	3.00
CMLH0704S150MTT	15 $\pm$ 20%	0.25V/1K	67	2.50
CMLH0704S180MTT	18 $\pm$ 20%	0.25V/1K	83	2.00
CMLH0704S220MTT	22 $\pm$ 20%	0.25V/1K	91	1.95
CMLH0704S270MTT	27 $\pm$ 20%	0.25V/1K	106	1.50
CMLH0704S330MTT	33 $\pm$ 20%	0.25V/1K	208	1.20
CMLH0704S390MTT	39 $\pm$ 20%	0.25V/1K	249	1.10
CMLH0704S470MTT	47 $\pm$ 20%	0.25V/1K	266	1.00
CMLH0704S560MTT	56 $\pm$ 20%	0.25V/1K	291	1.00
CMLH0704S680MTT	68 $\pm$ 20%	0.25V/1K	315	0.90
CMLH0704S101MTT	100 $\pm$ 20%	0.25V/1K	506	0.85
CMLH0704S121MTT	120 $\pm$ 20%	0.25V/1K	540	0.85
CMLH0704S151MTT	150 $\pm$ 20%	0.25V/1K	730	0.75
CMLH0704S171MTT	170 $\pm$ 20%	0.25V/1K	1079	0.74
CMLH0704S181MTT	180 $\pm$ 20%	0.25V/1K	1121	0.70
CMLH0704S221MTT	220 $\pm$ 20%	0.25V/1K	1162	0.62
CMLH0704S271MTT	270 $\pm$ 20%	0.25V/1K	1245	0.55
CMLH0704S331MTT	330 $\pm$ 20%	0.25V/1K	1245	0.50
CMLH0704S391MTT	390 $\pm$ 20%	0.25V/1K	1494	0.48
CMLH0704S471MTT	470 $\pm$ 20%	0.25V/1K	2158	0.40

◆ Specification

Part Number	Inductance ( $\mu$ H)	Test Frequency (Hz)	DCR (m $\Omega$ ) max.	IDC (A) max.
<b>CMLH1204 Series</b>				
CMLH1204S3R3MTT	3.3 $\pm$ 20%	0.25V/1K	15	6.50
CMLH1204S4R7MTT	4.7 $\pm$ 20%	0.25V/1K	18	5.70
CMLH1204S6R8MTT	6.8 $\pm$ 20%	0.25V/1K	23	4.90
CMLH1204S8R2MTT	8.2 $\pm$ 20%	0.25V/1K	26	4.60
CMLH1204S100MTT	10 $\pm$ 20%	0.25V/1K	28	4.50
CMLH1204S120MTT	12 $\pm$ 20%	0.25V/1K	38	4.10
CMLH1204S150MTT	15 $\pm$ 20%	0.25V/1K	50	3.20
CMLH1204S180MTT	18 $\pm$ 20%	0.25V/1K	57	3.10
CMLH1204S220MTT	22 $\pm$ 20%	0.25V/1K	66	2.90
CMLH1204S270MTT	27 $\pm$ 20%	0.25V/1K	80	2.80
CMLH1204S330MTT	33 $\pm$ 20%	0.25V/1K	97	2.70
CMLH1204S390MTT	39 $\pm$ 20%	0.25V/1K	132	2.10
CMLH1204S470MTT	47 $\pm$ 20%	0.25V/1K	160	1.90
CMLH1204S560MTT	56 $\pm$ 20%	0.25V/1K	190	1.80
CMLH1204S680MTT	68 $\pm$ 20%	0.25V/1K	220	1.50
CMLH1204S820MTT	82 $\pm$ 20%	0.25V/1K	260	1.30
CMLH1204S101MTT	100 $\pm$ 20%	0.25V/1K	308	1.20
CMLH1204S121MTT	120 $\pm$ 20%	0.25V/1K	380	1.10
CMLH1204S151MTT	150 $\pm$ 20%	0.25V/1K	530	0.95
CMLH1204S181MTT	180 $\pm$ 20%	0.25V/1K	620	0.85
CMLH1204S221MTT	220 $\pm$ 20%	0.25V/1K	700	0.80
CMLH1204S271MTT	270 $\pm$ 20%	0.25V/1K	870	0.60
CMLH1204S331MTT	330 $\pm$ 20%	0.25V/1K	990	0.50

◆ Specification

Part Number	Inductance ( $\mu$ H)	Test Frequency (Hz)	DCR (m $\Omega$ ) max.	IDC (A) max.
<b>CMLH1205 Series</b>				
CMLH1205S1R5MTT	1.5 $\pm$ 20%	0.25V/7.96M	12	8.00
CMLH1205S2R2MTT	2.2 $\pm$ 20%	0.25V/7.96M	14	7.00
CMLH1205S3R3MTT	3.3 $\pm$ 20%	0.25V/7.96M	17	6.00
CMLH1205S4R7MTT	4.7 $\pm$ 20%	0.25V/7.96M	20	5.00
CMLH1205S6R8MTT	6.8 $\pm$ 20%	0.25V/7.96M	21	4.50
CMLH1205S7R5MTT	7.5 $\pm$ 20%	0.25V/7.96M	24	4.30
CMLH1205S100MTT	10 $\pm$ 20%	0.25V/1K	25	4.00
CMLH1205S120MTT	12 $\pm$ 20%	0.25V/1K	27	3.50
CMLH1205S150MTT	15 $\pm$ 20%	0.25V/1K	30	3.30
CMLH1205S180MTT	18 $\pm$ 20%	0.25V/1K	34	3.00
CMLH1205S220MTT	22 $\pm$ 20%	0.25V/1K	36	2.80
CMLH1205S270MTT	27 $\pm$ 20%	0.25V/1K	51	2.30
CMLH1205S330MTT	33 $\pm$ 20%	0.25V/1K	57	2.10
CMLH1205S390MTT	39 $\pm$ 20%	0.25V/1K	68	2.00
CMLH1205S470MTT	47 $\pm$ 20%	0.25V/1K	75	1.80
CMLH1205S560MTT	56 $\pm$ 20%	0.25V/1K	110	1.70
CMLH1205S680MTT	68 $\pm$ 20%	0.25V/1K	120	1.50
CMLH1205S820MTT	82 $\pm$ 20%	0.25V/1K	140	1.40
CMLH1205S101MTT	100 $\pm$ 20%	0.25V/1K	160	1.30
CMLH1205S121MTT	120 $\pm$ 20%	0.25V/1K	170	1.10
CMLH1205S151MTT	150 $\pm$ 20%	0.25V/1K	230	1.00
CMLH1205S181MTT	180 $\pm$ 20%	0.25V/1K	290	0.90
CMLH1205S221MTT	220 $\pm$ 20%	0.25V/1K	400	0.80
CMLH1205S271MTT	270 $\pm$ 20%	0.25V/1K	460	0.75
CMLH1205S331MTT	330 $\pm$ 20%	0.25V/1K	510	0.68
CMLH1205S391MTT	390 $\pm$ 20%	0.25V/1K	690	0.65
CMLH1205S471MTT	470 $\pm$ 20%	0.25V/1K	770	0.58
CMLH1205S561MTT	560 $\pm$ 20%	0.25V/1K	860	0.54
CMLH1205S681MTT	680 $\pm$ 20%	0.25V/1K	1200	0.48
CMLH1205S821MTT	820 $\pm$ 20%	0.25V/1K	1340	0.43
CMLH1205S102MTT	1000 $\pm$ 20%	0.25V/1K	1530	0.4

◆ **Specification**

Part Number	Inductance ( $\mu$ H)	Test Frequency (Hz)	DCR (m $\Omega$ ) max.	IDC (A) max.
<b>CMLH1207 Series</b>				
CMLH1207S1R5MTT	1.5 $\pm$ 20%	0.25V/1K	7.0	10.00
CMLH1207S2R2MTT	2.2 $\pm$ 20%	0.25V/1K	11.5	8.00
CMLH1207S3R3MTT	3.3 $\pm$ 20%	0.25V/1K	13.5	7.50
CMLH1207S3R9MTT	3.9 $\pm$ 20%	0.25V/1K	14.5	7.00
CMLH1207S4R7MTT	4.7 $\pm$ 20%	0.25V/1K	15.8	6.80
CMLH1207S6R8MTT	6.8 $\pm$ 20%	0.25V/1K	17.6	6.60
CMLH1207S100MTT	10 $\pm$ 20%	0.25V/1K	21.6	5.40
CMLH1207S120MTT	12 $\pm$ 20%	0.25V/1K	24.3	4.90
CMLH1207S150MTT	15 $\pm$ 20%	0.25V/1K	27.0	4.60
CMLH1207S180MTT	18 $\pm$ 20%	0.25V/1K	39.2	3.90
CMLH1207S220MTT	22 $\pm$ 20%	0.25V/1K	43.2	3.60
CMLH1207S270MTT	27 $\pm$ 20%	0.25V/1K	45.9	3.40
CMLH1207S330MTT	33 $\pm$ 20%	0.25V/1K	64.8	3.00
CMLH1207S390MTT	39 $\pm$ 20%	0.25V/1K	72.9	2.75
CMLH1207S470MTT	47 $\pm$ 20%	0.25V/1K	100	2.50
CMLH1207S560MTT	56 $\pm$ 20%	0.25V/1K	110	2.35
CMLH1207S680MTT	68 $\pm$ 20%	0.25V/1K	140	2.10
CMLH1207S820MTT	82 $\pm$ 20%	0.25V/1K	160	1.95
CMLH1207S101MTT	100 $\pm$ 20%	0.25V/1K	220	1.70
CMLH1207S121MTT	120 $\pm$ 20%	0.25V/1K	250	1.60
CMLH1207S151MTT	150 $\pm$ 20%	0.25V/1K	280	1.42
CMLH1207S181MTT	180 $\pm$ 20%	0.25V/1K	350	1.30
CMLH1207S221MTT	220 $\pm$ 20%	0.25V/1K	390	1.16
CMLH1207S271MTT	270 $\pm$ 20%	0.25V/1K	560	1.06
CMLH1207S331MTT	330 $\pm$ 20%	0.25V/1K	640	0.95
CMLH1207S391MTT	390 $\pm$ 20%	0.25V/1K	700	0.88
CMLH1207S471MTT	470 $\pm$ 20%	0.25V/1K	980	0.79
CMLH1207S561MTT	560 $\pm$ 20%	0.25V/1K	1070	0.73
CMLH1207S681MTT	680 $\pm$ 20%	0.25V/1K	1460	0.67
CMLH1207S821MTT	820 $\pm$ 20%	0.25V/1K	1640	0.60
CMLH1207S102MTT	1000 $\pm$ 20%	0.25V/1K	1820	0.55

◆ **Note**

1. Inductance measured by LCR Meter HP 4284A or equivalent.
2. DCR measured by Milliohm meter HP 4338B or equivalent.
3. Rated current is measured by LCR-meter 3260B (WK) & DC Bias 3265B(WK).
4. Maximum allowable DC current is that which causes a 25% inductance reduction from the initial value, or coil temperature to rise by 40°C, whichever is smaller. (Reference ambient temperature 25°C).