

## Molding power Inductors

### Features:

- High performance (Isat) realized by metal bust core.
- Shielded construction.
- Ultra Low buzz noise due to composite construction.
- Closed magnetic circuit design reduces leakage flux and Electro Magnetic Interference (EMI).
- RoHS compliant.
- Operating temperature range: -40°C ~+125°C (Including self-heating)

### Applications:

- LED Lighting
- Flat-screen TVs, blue-ray disc recorders, set top box, movie cameras, smart phones
- Notebooks, desktop computers, servers, graphic cards
- Portable gaming devices, personal navigation systems, personal multimedia devices
- Telecomm base stations
- VRM for servers

### Product Identification:

①	②	③		④	⑤	⑥		⑦
LML	0420A	A	-	1R0	M	R	-	06

①	Type
LML	Molding Power inductors

②	(L×W×H) [mm] External Dimensions
0420A	4.4x4.2x2.0
0530A	5.4x5.2x3.0
0630A	7.1x6.6x3.0

③	Application Code
A	General use
E	Automotive use

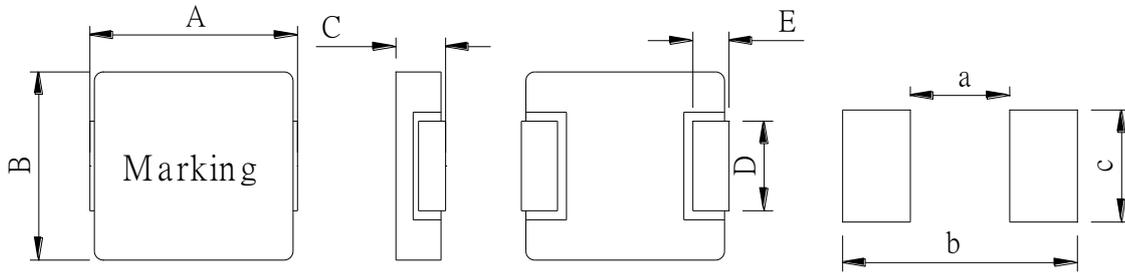
④	Nominal Inductance
1R0	1.0μH
100	10.0μH

⑤	Inductance Tolerance
K	±10%
M	±20%
N	±30%

⑥	Packing
Standard	Tape Reel Package

⑦	Internal code
01	XXX
06	

**Shape And Dimensions [Unit: mm]**



SUGGESTED PCB LAYOUT

Series	A	B	C	D	E	a (Typ.)	b (Typ.)	c (Typ.)
LML0420AA	4.4±0.4	4.2±0.3	2.0 Max.	2.0±0.3	0.8±0.3	2.2	5.2	2.5
LML0530AA	5.4±0.3	5.2±0.2	3.0 Max.	2.2±0.5	1.2±0.5	3.0	7.0	2.5
LML0630AA	7.1±0.3	6.6±0.2	3.0 Max.	3.0±0.5	1.6±0.5	3.7	8.4	3.5

## Electrical Characteristics

<b>LML0420AA Series</b>						
P/N	Inductance (uH)	Test Freq. (KHz/1V)	Tolerance (+/-%)	DCR (mΩ) Max.	Isat (A) Typ.	Idc (A) Typ.
LML0420AA-R10MR-06	0.1	100	20	4.0	22.0	13.0
LML0420AA-R22MR-06	0.22	100	20	6.6	12.5	9.0
LML0420AA-R33MR-06	0.33	100	20	11.0	12.0	8.0
LML0420AA-R47MR-06	0.47	100	20	14.0	9.5	7.0
LML0420AA-R56MR-06	0.56	100	20	16.0	9.0	6.2
LML0420AA-R68MR-06	0.68	100	20	18.0	9.0	6.0
LML0420AA-1R0MR-06	1.0	100	20	27.0	7.0	4.8
LML0420AA-1R2MR-06	1.2	100	20	27.0	7.0	4.8
LML0420AA-1R5MR-06	1.5	100	20	46.0	6.0	3.5
LML0420AA-2R2MR-06	2.2	100	20	58.0	5.0	3.2
LML0420AA-3R3MR-06	3.3	100	20	87.0	4.0	2.6
LML0420AA-4R7MR-06	4.7	100	20	105.0	3.0	2.4
LML0420AA-6R8MR-06	6.8	100	20	135.0	2.5	2.1
LML0420AA-100MR-06	10.0	100	20	258.0	2.0	1.5

<b>LML0530AA Series</b>						
P/N	Inductance (uH)	Test Freq. (KHz/1V)	Tolerance (+/-%)	DCR (mΩ) Max.	Isat (A) Typ.	Idc (A) Typ.
LML0530AA-R22MR-06	0.22	100	20	4.5	17.0	14.5
LML0530AA-R47MR-06	0.47	100	20	8.5	15.0	11.0
LML0530AA-R68MR-06	0.68	100	20	12.0	13.0	9.6
LML0530AA-1R0MR-06	1.0	100	20	14.0	11.0	8.6
LML0530AA-1R2MR-06	1.2	100	20	16.0	11.0	8.0
LML0530AA-1R5MR-06	1.5	100	20	25.0	8.5	6.6
LML0530AA-2R2MR-06	2.2	100	20	29.0	7.5	6.0
LML0530AA-3R3MR-06	3.3	100	20	38.0	6.0	5.3
LML0530AA-4R7MR-06	4.7	100	20	60.0	5.0	4.2
LML0530AA-6R8MR-06	6.8	100	20	90.0	4.0	3.4
LML0530AA-100MR-06	10.0	100	20	125.0	3.5	2.9

<b>LML0630AA Series</b>						
P/N	Inductance (uH)	Test Freq. (KHz/1V)	Tolerance (+/-%)	DCR (mΩ) Max.	Isat (A) Typ.	Idc (A) Typ.
LML0630AA-R22MR-06	0.22	100	20	2.8	40.0	19.0
LML0630AA-R24MR-06	0.24	100	20	1.5	32.0	27.5
LML0630AA-R33MR-06	0.33	100	20	3.5	25.0	18.0
LML0630AA-R47MR-06	0.47	100	20	4.1	20.0	16.0
LML0630AA-R56MR-06	0.56	100	20	4.5	18.0	15.0
LML0630AA-R68MR-06	0.68	100	20	5.3	17.0	14.0
LML0630AA-R82MR-06	0.82	100	20	6.0	16.0	13.0
LML0630AA-1R0MR-06	1.0	100	20	7.4	15.0	11.5
LML0630AA-1R5MR-06	1.5	100	20	12.1	14.0	9.0
LML0630AA-2R2MR-06	2.2	100	20	15.0	12.0	8.0
LML0630AA-3R3MR-06	3.3	100	20	22.0	9.5	7.5
LML0630AA-4R7MR-06	4.7	100	20	33.0	9.0	5.5
LML0630AA-6R8MR-06	6.8	100	20	48.0	6.0	4.5
LML0630AA-8R2MR-06	8.2	100	20	60.0	6.0	4.0
LML0630AA-100MR-06	10.0	100	20	68.0	5.5	3.8
LML0630AA-150MR-06	15.0	100	20	115.0	4.5	2.8
LML0630AA-220MR-06	22.0	100	20	200.0	3.0	2.2
LML0630AA-330MR-06	33.0	100	20	270.0	3.0	2.0

**Note :**

- ◎testing frequency:100KHz/1V;
- ◎All test Data is referenced to 25°C ambient
- ◎Typical Heat Rating DC Current (Idc) would cause an approximately  $\Delta T$  of 40°C, base on IEC62024-2 by PCB class-C.
- ◎Typical Saturation DC Current (Isat) would cause Lo to drop approximately 30%

## Packing Specification

	pcs / reel	Reel size	Inner box (400*350*140mm)	Carton outside (430*380*320mm)
LML0420AA_Series	3K	13	18K	36K
	pcs / reel	Reel size	Inner box (400*350*140mm)	Carton outside (430*380*320mm)
LML0530AA_Series	2K	13	12K	24K
	pcs / reel	Reel size	Inner box (400*350*140mm)	Carton outside (430*380*320mm)
LML0630AA_Series	1.5K	13	9.0K	18K