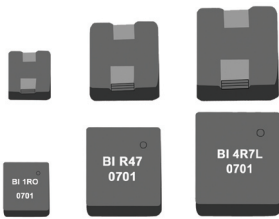


**Electrical / Environmental**

# HM72A



High Power High Performance Molded Surface Mount Inductors

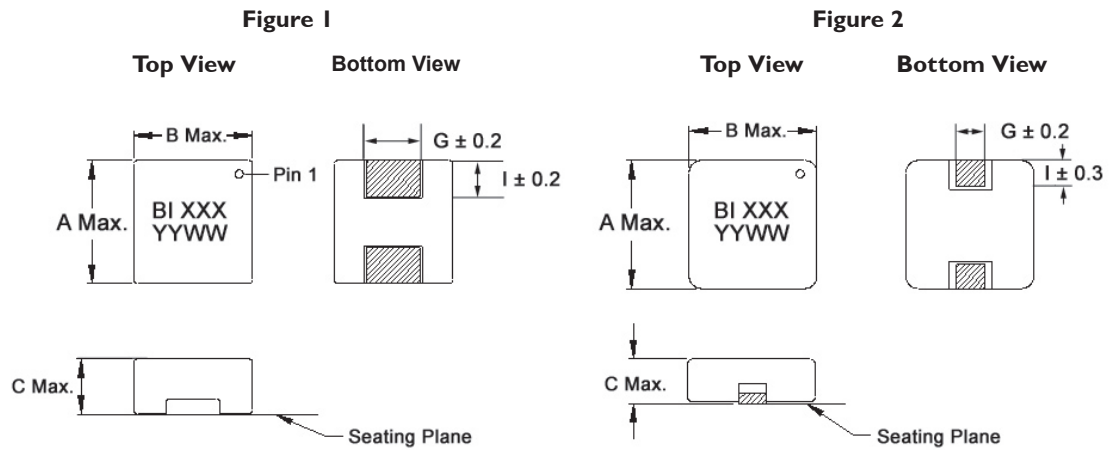
- Operating Temperature Range -40°C to +155°C
- Temperature Rise, Maximum 50°C

**Specifications @ 25 °C**

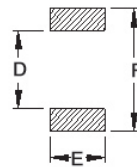
Part Number	Inductance, Lo @ 100 kHz, OAdc			Heating Current <sup>(1)</sup> (Adc)	I <sub>sat</sub> <sup>(2)</sup> (Adc)	DC Resistance (mΩ)		Height C (mm)	Figure
	Min.	Typ.	Max.			Typ.	Max.		
HM72A-06R20LF	0.16	0.20	0.24	21.2	41	2.30	3.00	3.0	1
HM72A-06R33LF	0.26	0.33	0.40	18.0	30	3.20	3.90	3.0	1
HM72A-06R47LF	0.38	0.47	0.56	16.1	26	4.00	4.20	3.0	1
HM72A-06R68LF	0.54	0.68	0.82	14.4	25	5.00	5.50	3.0	1
HM72A-06R82LF	0.66	0.82	0.98	12.0	24	7.20	8.00	3.0	1
HM72A-061R0LF	0.80	1.00	1.20	10.3	22	9.00	10.00	3.0	1
HM72A-061R5LF	1.20	1.50	1.80	8.4	18	14.50	15.00	3.0	1
HM72A-062R2LF	1.76	2.20	2.64	8.3	14	15.00	20.00	3.0	1
HM72A-063R3LF	2.64	3.30	3.96	6.6	13.5	24.00	26.00	3.0	1
HM72A-064R7LF	3.76	4.70	5.64	5.4	10	35.00	40.00	3.0	1
HM72A-066R8LF	5.44	6.80	8.16	4.1	8	62.00	68.00	3.0	1
HM72A-06100LF	8.00	10.00	12.00	3.2	7	100.00	105.00	3.0	1
HM72A-06220LF	17.6	22.0	26.4	2.2	4.5	219.00	241.00	3.0	1
HM72A-06330LF	26.4	33.0	39.6	1.8	3.5	302.00	332.00	3.0	1
HM72A-10R15LF	0.12	0.15	0.18	33.0	44	0.75	0.82	4.0	2
HM72A-10R24LF	0.19	0.24	0.29	35.0	38	0.65	0.72	4.0	2
HM72A-10R36LF	0.288	0.360	0.432	32.0	35	0.85	0.95	4.0	2
HM72A-10R47LF	0.38	0.47	0.56	27.0	32	1.10	1.20	4.0	2
HM72A-10R56LF	0.448	0.560	0.672	23.0	30	1.55	1.70	4.0	2
HM72A-101R0LF	0.80	1.00	1.20	18.0	21	2.56	2.75	4.0	2
HM72A-101R5LF	1.20	1.50	1.80	13.0	18	4.50	5.00	4.0	2
HM72A-101R8LF	1.44	1.80	2.16	13.0	15	4.50	5.00	4.0	2
HM72A-103R3LF	2.64	3.30	3.96	8.0	12	12.50	13.75	4.0	2
HM72A-104R7LF	3.76	4.70	5.64	7.6	10	13.80	15.20	4.0	2
HM72A-12R47LLF	0.38	0.47	0.56	31.0	55	1.30	1.43	3.5	2
HM72A-12R68LLF	0.54	0.68	0.82	27.0	49	1.80	2.00	3.5	2
HM72A-12R82LLF	0.66	0.82	0.98	22.0	44	2.40	3.00	3.5	2
HM72A-121R0LLF	0.80	1.00	1.20	19.0	42	3.40	3.60	3.5	2
HM72A-124R7LLF	3.76	4.70	5.64	10.0	24	14.00	15.00	3.5	2
HM72A-125R6LLF	4.48	5.60	6.72	8.0	19	22.50	24.75	3.5	2
HMA72-12R50LF	0.40	0.50	0.60	39.0	65	1.30	1.50	5.0	2
HMA72-12R56LF	0.45	0.56	0.67	34.0	55	1.30	1.50	5.0	2
HM72A-121R0LF	0.80	1.00	1.20	26.0	50	2.20	2.50	5.0	2
HM72A-121R5LF	1.20	1.50	1.80	20.0	48	3.60	4.10	5.0	2
HM72A-122R2LF	1.76	2.20	2.64	17.0	32	5.00	5.50	5.0	2
HM72A-121R0HLF	0.80	1.00	1.20	31.0	49	1.70	2.00	6.5	2
HM72A-122R2HLF	1.76	2.20	2.64	22.0	40	3.50	3.85	6.5	2
HM72A-123R3HLF	2.64	3.30	3.96	19.0	35	5.50	6.80	6.5	2
HM72A-124R7HLF	3.76	4.70	5.64	15.0	30	7.20	7.92	6.5	2

- Notes: (1) The heating current is the DC current which causes the component temperature to increase by approximately 50°C. This current is determined by soldering the component on a typical application PCB, and then apply the current to the device for 30 minutes.  
(2) The saturation current (I<sub>sat</sub>) is the approximate current at which the inductance will be decreased by 20% typical from its initial (zero DC) value.

## Outline Dimensions (mm)



### Recommended Land Pattern



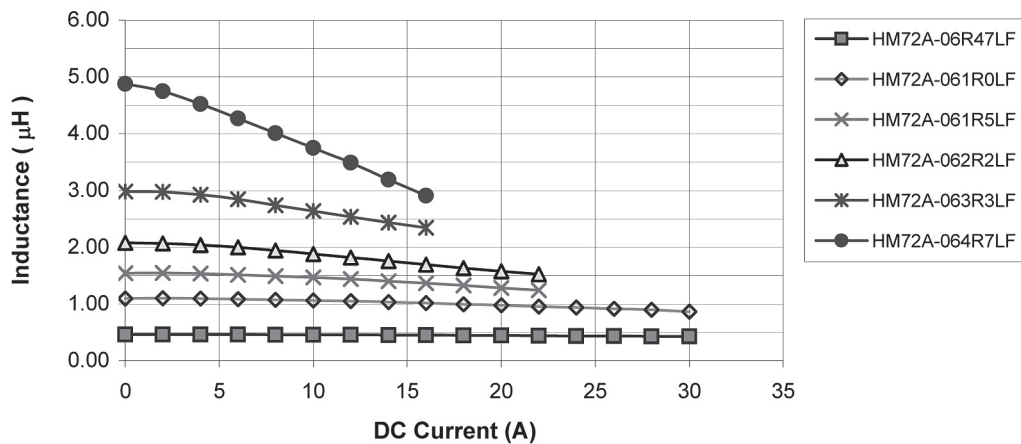
Case Size	Fig.	A	B	D	E	F	G*	I
06	1	7.23	6.8	2.0	3.3	7.4	3.0	2.0
10	2	11.5	10.5	4.9	3.3	11.5	3.0	2.5
12*	2	13.5	13.0	6.9	3.3	13.5	3.0	2.5

Note: Refer to Specifications table for 'C' dimension of each model.

\* The 'G' dimension of HM72-123R3HLF & HM72A-124R7HLF is 2.3mm.

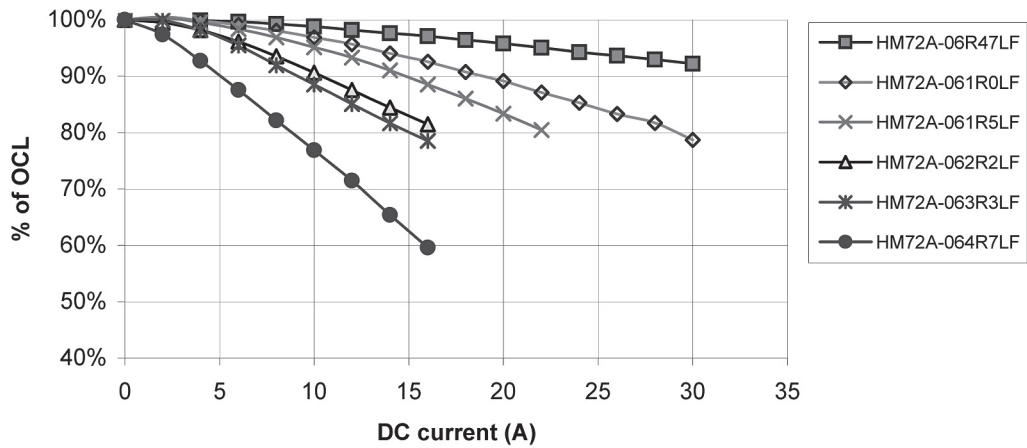
## Electrical Characteristics @ 25 °C

### Inductance vs. Current Characteristics



## Electrical Characteristics @ 25 °C (Cont'd)

### Inductance Rolloff vs. Current Characteristics

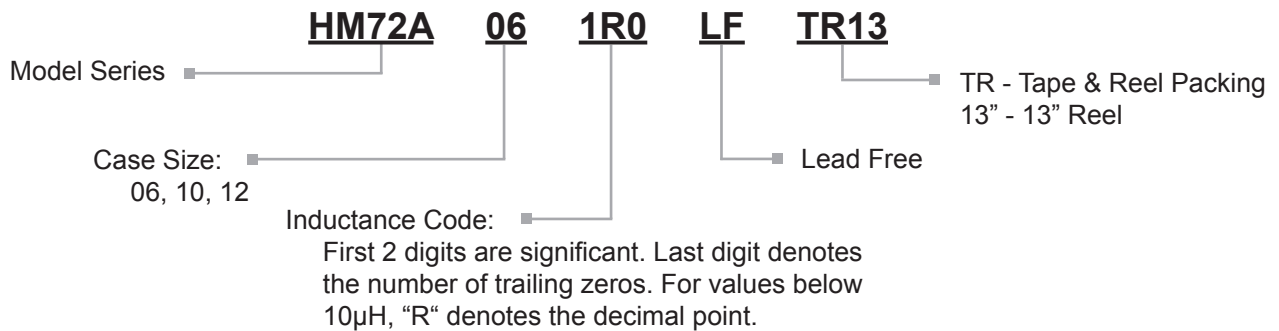


## Packaging

**Standard:** Embossed Tape and Reel

Reel:	Diameter:	=	13" (330.2mm)
	Capacity:	06XXX	= 1,000 Units
		10XXX	= 500 Units
		12XXXL	= 500 Units
		12XXX/ 12XXXH	= 400 Units

## Ordering Information



# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## TT electronics:

[HM72A-06R68LFTR](#) [HM72A-06R82LFTR](#) [HM72A-061R5LFTR](#) [HM72A-062R2LFTR](#) [HM72A-063R3LFTR](#) [HM72A-121R0LFTR](#) [HM72A-124R7LFTR](#) [HM72A-064R7LFTR](#) [HM72A-123R3HLFTR13](#) [HM72A-124R7HLFTR13](#) [HM72A-101R5LFTR](#) [HM72A-06R20LFTR13](#) [HM72A-06R33LFTR13](#) [HM72A-06R47LFTR13](#) [HM72A-06R68LFTR13](#) [HM72A-06R82LFTR13](#) [HM72A-061R0LFTR13](#) [HM72A-061R5LFTR13](#) [HM72A-062R2LFTR13](#) [HM72A-063R3LFTR13](#) [HM72A-064R7LFTR13](#) [HM72A-06330LFTR13](#) [HM72A-06220LFTR13](#) [HM72A-06C800LFTR](#) [HM72A-06C802LFTR](#) [HM72A-06C803LFTR](#) [HM72A-06R80LFTR13](#) [HM72A-101R0LFTR13](#) [HM72A-101R5LFTR13](#) [HM72A-10C800LFTR](#) [HM72A-10R56LFTR13](#) [HM72A-121R0HLFTR13](#) [HM72A-121R0LFTR13](#) [HM72A-122R2HLFTR13](#) [HM72A-124R7HLFTR1](#) [HM72A-124R7LFTR13](#) [HM72A-126R8HLFTR](#) [HM72A-12C800LFTR](#) [HM72A-12R33HLFTR13](#) [HM72A-12R47HLFTR13](#) [HM72A-12R47LFTR13](#) [HM72A-12R47LLFTR13](#) [HM72A-12R68LFTR13](#)