
New
**RoHs
Compliant**

High power low cost molded SMD Inductor

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

Specifications @25°C

Part Number	Inductance, Lo (μH) @100KHz, 0Adc			Heating Current ⁽²⁾ (Adc)	I _{sat} ⁽¹⁾ (Adc)	DCR ⁽³⁾ (mΩ) Max.		Height C (mm)	Figure
	Min.	Typ.	Max.			Typ.	Max.		
HM72A-06R20	0.16	0.20	0.24	21.2	41	2.3	3.0	3.0	1
HM72A-06R33	0.26	0.33	0.40	18.0	30	3.2	3.9	3.0	1
HM72A-06R47	0.38	0.47	0.56	16.1	26	4.0	4.2	3.0	1
HM72A-06R68	0.54	0.68	0.82	14.4	25	5.0	5.5	3.0	1
HM72A-06R82	0.66	0.82	0.98	12.0	24	7.2	8.0	3.0	1
HM72A-061R0	0.80	1.00	1.20	10.3	22	9.0	10.0	3.0	1
HM72A-061R5	1.20	1.50	1.80	8.4	18	14.5	15.0	3.0	1
HM72A-062R2	1.76	2.20	2.64	8.3	14	15.0	20.0	3.0	1
HM72A-063R3	2.64	3.30	3.96	5.9	13.5	30.0	33.0	3.0	1
HM72A-064R7	3.76	4.70	5.64	5.4	10	35.0	40.0	3.0	1
HM72A-066R8	5.44	6.80	8.16	5.2	8	38.0	46.0	3.0	1
HM72A-06100	8.0	10.0	12.0	3.2	7	100	105	3.0	1
HM72A-06220	17.6	22.0	26.4	2.2	2	219	241	3.0	1
HM72A-06330	26.4	33.0	39.6	1.8	2	302	332	3.0	1
HM72A-10R15	0.12	0.15	0.18	33.0	44	0.75	0.82	4.0	2
HM72A-10R24	0.19	0.24	0.29	35.0	38	0.65	0.72	4.0	2
HM72A-10R36	.288	.360	0.432	32.0	35	0.85	0.95	4.0	2
HM72A-10R47	0.38	0.47	0.56	27.0	32	1.10	1.20	4.0	2
HM72A-10R56	0.448	0.560	0.672	23.0	30	1.55	1.70	4.0	2
HM72A-101R0	0.80	1.00	1.20	18.0	21	3.0	3.3	4.0	2
HM72A-101R5	1.20	1.50	1.80	13.0	18	4.5	5.0	4.0	2
HM72A-101R8	1.44	1.80	2.16	13.0	15	4.5	5.0	4.0	2
HM72A-103R3	2.64	3.30	3.96	8.0	12	12.5	13.75	4.0	2
HM72A-104R7	3.76	4.70	5.64	7.6	10	13.8	15.20	4.0	2
HM72A-12R47L	0.38	0.47	0.56	31.0	55	1.30	1.43	3.5	2
HM72A-12R68L	0.54	0.68	0.82	27.0	49	1.80	2.0	3.5	2
HM72A-12R82L	0.66	0.82	0.98	22.0	44	2.40	3.0	3.5	2
HM72A-121R0L	0.80	1.00	1.20	19.0	42	3.4	3.6	3.5	2

HM72A-124R7L	3.76	4.70	5.64	10.0	24	14.0	15.0	3.5	2
HM72A-125R6L	4.48	5.60	6.72	8.0	19	22.5	24.75	3.5	2
HM72A-12R50	0.40	0.50	0.60	39.0	65	1.30	1.50	5.0	2
HM72A-12R56	0.45	0.56	0.67	34.0	55	1.30	1.50	5.0	2
HM72A-121R0	0.80	1.00	1.20	26.0	50	2.20	2.50	5.0	2
HM72A-121R5	1.20	1.50	1.80	20.0	48	3.60	4.10	5.0	2
HM72A-122R2	1.76	2.20	2.64	17.0	32	5.00	5.50	5.0	2
HM72A-121R0H	0.80	1.00	1.20	31.0	49	1.70	2.00	6.5	2
HM72A-122R2H	1.76	2.20	2.64	22.0	40	3.50	3.85	6.5	2
HM72A-123R3H	2.64	3.30	3.96	19.0	35	4.50	4.95	6.5	2
HM72A-124R7H	3.76	4.70	5.64	15.0	30	7.20	7.92	6.5	2

Notes:

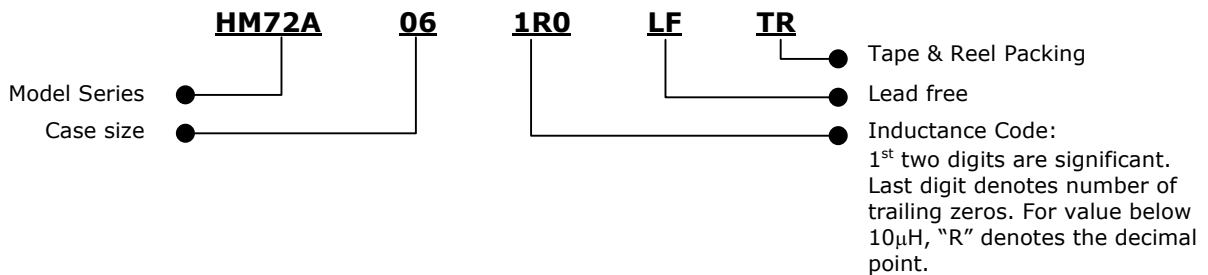
- (1) *Isat Current is the approximate current at which inductance will be decreased by 20 % typical from its initial (zero DC) value.*
- (2) *The heating current is the DC current, which causes the component temperature to increase by approximately 50°C. This current is determined by soldering the component on a typical application PCB, and then apply the current to the device for 30 minutes.*
- (3) *DC Resistance is measured at 25°C.*

Packaging

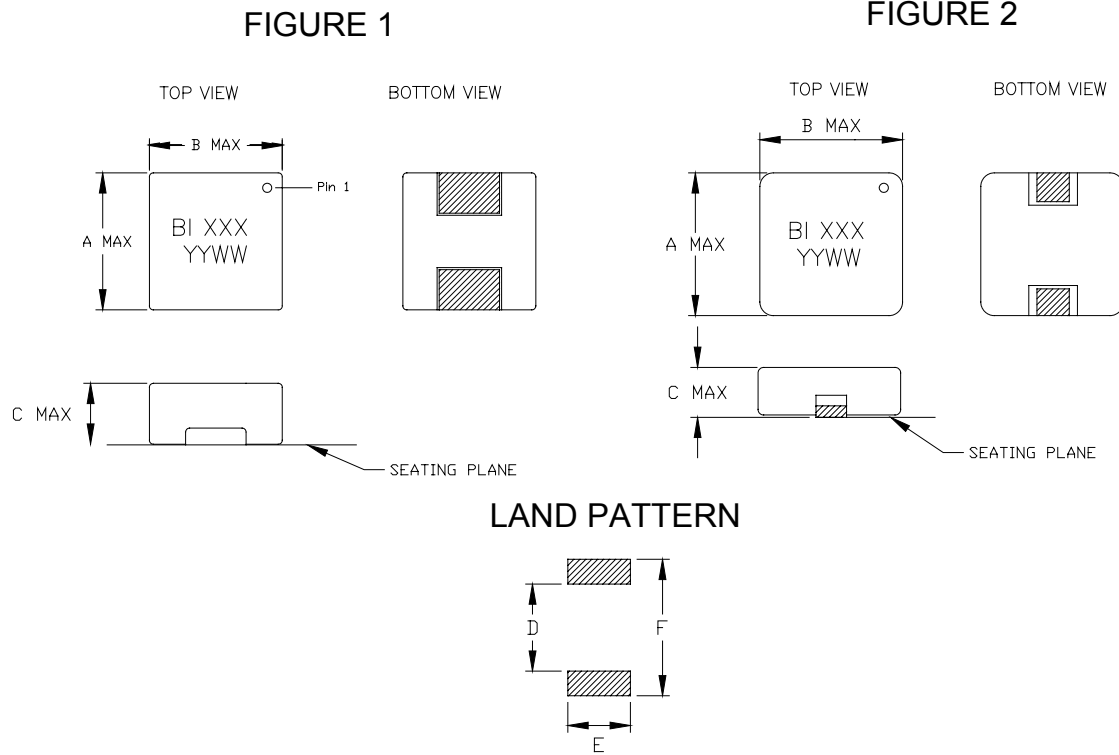
STANDARD: Embossed Tape & Reel

Reel :	Diameter :	13" (330.2mm)
	Capacity :	06xxx 1000
		10xxx 500
		12xxxL 500
		12xxx/12xxxH 400

Ordering Information

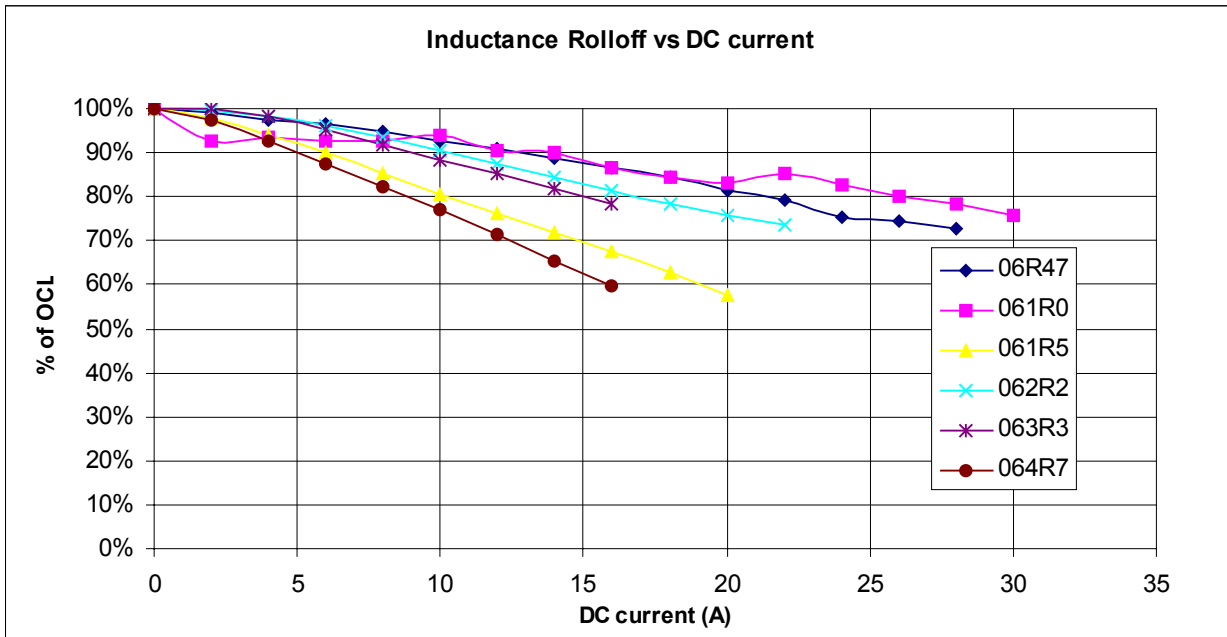
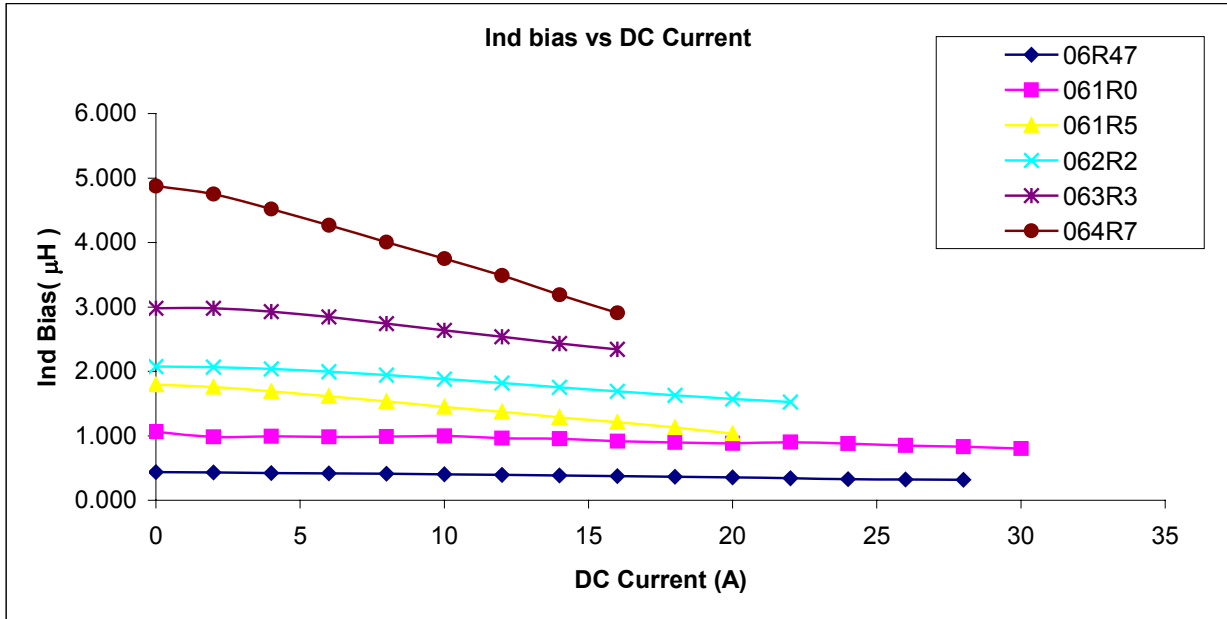


Outline Dimensions (mm)



Case Size	A	B	D	E	F	
06	7.23	6.8	2.0	3.3	7.4	
10	11.5	10.5	3.5	3.3	11.5	
12	13.5	13.0	6.9	3.3	13.5	

Electrical Characteristic @ 25°C



Revision	Description	Date
3.1	Revise case 06 outline dimension Was : A =7.8mm, D=4.6mm and F=8.3mm Is : A =7.23mm, D=2.0mm and F=7.4mm Revise L Vs I chart Revise Isat for HM72A-06R47 to 22A and HM72A-061R0 to 16A	17-Feb-06
3.2	Add model 06R20 and 06R33 Revise 063R3 DCR to 30mR typ, 33mR max Revise heating current specification. Revise case 12 part number and height. Revise 062R2 bias current to 8A	4 th -Apr-06
3.3	Add model 06220 and 06330 Delete 06R80, Add 06R82 Revise 064R7 Irated current from 6.0A to 9.0A	5 th -Apr-06
3.4	Change operating temperature from 180°C to 155°C Change Irated to Isat and updated Isat current. Add new model HM72A-06100, -10R15, -12R82L, -12R56, -121R0H	24 th -May-06
3.5	Revise Isat current 06R20, 06R33, 061R0, 062R2 and 063R3 Add new model HM72A-124R7L, -125R6L and -122R2	26 th -Jun-06
3.51	Remove 10R40, add model 10R47, 101R0 & 101R5. Revised bias current 06R33, 06R47, 06R68 & 064R7	21 st -Jul-06
3.60	Add 10R36, 101R0, 10R56, 101R8, 121R0L, change I sat for 06R20, 06R33, 06R47, 06R68 and 06R82	
3.61	Update packaging requirement for case 10 and 12 Change I sat 062R2 Revised 123R3H bias current 15A to 26A	28 th -Aug-06
3.7	Add new model 10R24, 12R47L and 12R68L 104R7, revise bias current from 6.0A to 16A, DCR to 13.8mΩ typ and 15.2mΩ Max Revise bias current & inductance 06R68 from 36A to 32A, 0.45uH to 0.52uH typ. Revise 103R3 bias current & DCR	26 th -Sep-06
3.8	Add new model 121R0 and 121R5 Revised 10R47 Isat to 50A. Revised 101R0 Isat to 30A. Revised 124R7L Isat to 24A, DCR to 14 mohms typ and 15.0 Max Revised 12R50 and 12R56 Isat to 65A and DCR Revised note (1) statement, removed " <i>or the current at which $\Delta T = 50^{\circ}C$, whichever is lower.</i> " Revised 101R8 bias current to 24A Revised 103R3 bias current to 22A, DCR and Heating current. Revised bias inductance tolerance from 20% typical to 25% Max Revised 061R5 bias current from 18A to 21A	22 nd -Nov-06
3.81	Updated Isat current per Vishay specification. Removed HM72A-10R10L (Not mature yet)	10 th -Jan-07