

High Current Toroidal Inductors

Model HM54

Features and Benefits

- Operating Temperature Range -40°C to +155°C
- Temperature Rise, Maximum 50°C
- Operating Frequency Up to 400kHz
- RoHS Compliant

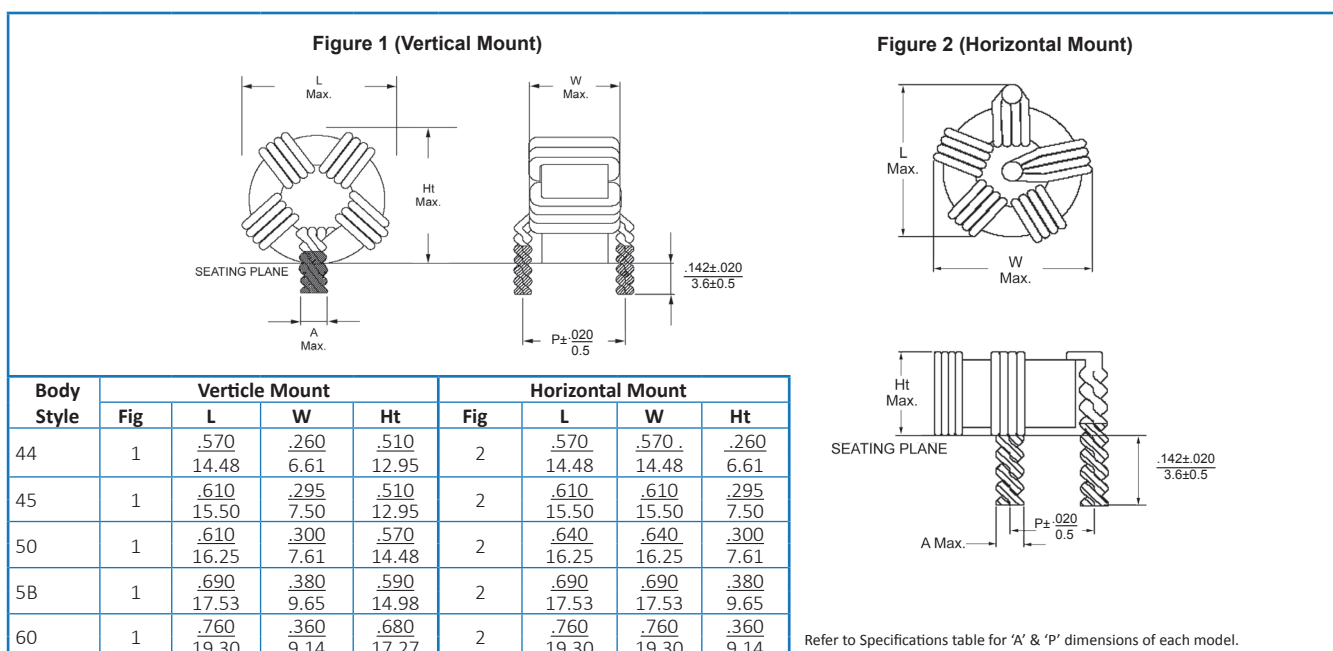


Specifications

Part Number	Inductance 100 kHz, 0.1 V		Heating Current (Adc)	$I_{sat}^{(2)}$ (Adc)	DCR ⁽³⁾ mΩ Max.	Dim. A (Inch/mm)	Dim. P (Inch/mm)	Fig.
	@ 0 Adc μH ± 10%	@ I_{sat} μH Typ.						
HM54-44R42VLF	0.42	0.38	32	32	1.15	.099/2.5	.284/7.2	1
HM54-44R42HLF	0.42	0.38	32	32	1.15	.099/2.5	.228/5.8	2
HM54-45R41VLF	0.41	0.35	33	33	0.70	.099/2.5	.335/8.5	1
HM54-45R41HLF	0.41	0.35	33	33	0.70	.099/2.5	.256/6.5	2
HM54-5BR51VLF	0.51	0.42	32	42	0.75	.126/3.2	.386/9.8	1
HM54-5BR51HLF	0.51	0.42	32	42	0.75	.126/3.2	.284/7.2	2
HM54-50R60VLF	0.60	0.50	31	32	1.1	.114/2.9	.370/9.4	1
HM54-50R60HLF	0.60	0.50	31	32	1.1	.114/2.9	.322/8.2	2
HM54-50R86VLF	0.86	0.61	27	27	1.6	.099/2.5	.370/9.4	1
HM54-50R86HLF	0.86	0.61	27	27	1.6	.099/2.5	.322/8.2	2
HM54-60R86VLF	0.86	0.71	35	41	1.1	.126/3.2	.386/9.8	1
HM54-60R86HLF	0.86	0.71	35	41	1.1	.126/3.2	.362/9.2	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 applying the current to the component for 30 minutes.
(2) I_{sat} is the saturation current at which inductance rolls off approximately 30% from its initial value.
(3) DC resistance is measured at 25°C.

Outline Dimensions (Inch/mm)



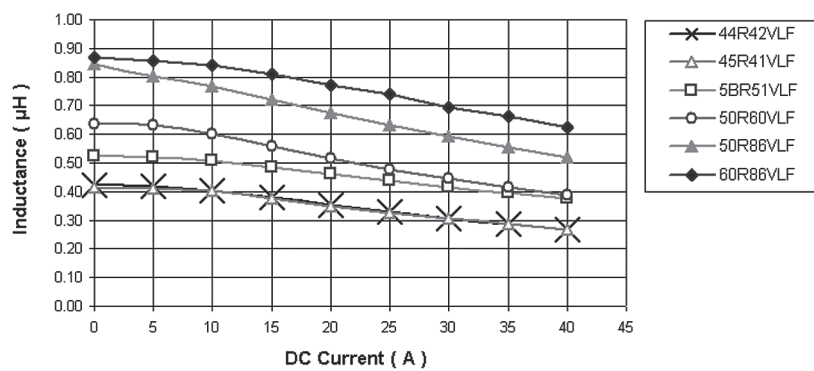
General Note

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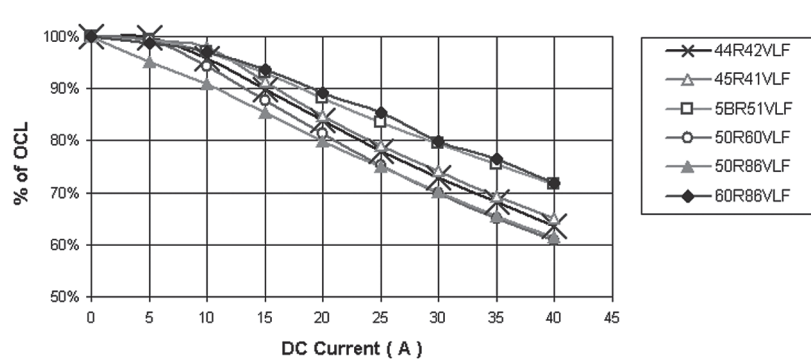
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Electrical Characteristics @ 25°C

Inductance vs. Current Characteristics



Inductance Rolloff vs. Current Characteristics



General Note

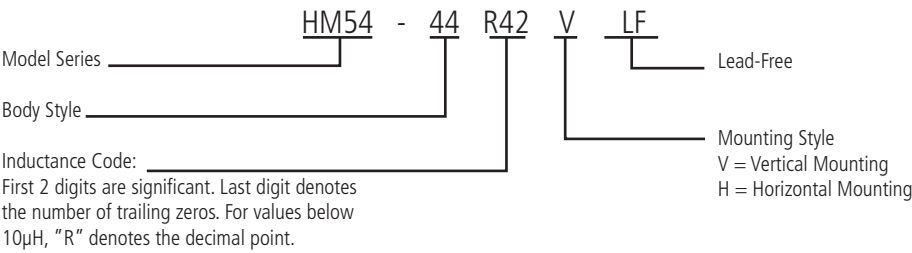
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Packaging

Standard		Vacuum Tray		
		Body Style	Capacity Per Tray (Units)	Capacity Per Carton (Units)
	44	Figure 1 (Vertical Mount)	50	800
		Figure 2 (Horizontal Mount)	40	560
	45	Figure 1 (Vertical Mount)	50	800
		Figure 2 (Horizontal Mount)	40	560
	50	Figure 1 (Vertical Mount)	40	560
		Figure 2 (Horizontal Mount)	40	560
	5B	Figure 1 (Vertical Mount)	44	660
		Figure 2 (Horizontal Mount)	50	500
60	Figure 1 (Vertical Mount)	30	360	
	Figure 2 (Horizontal Mount)	50	500	

Ordering Information



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