



Shielded Low Profile Surface Mount Inductors

- Operating Temperature Range -40°C to +155°C
- Ambient Temperature, Maximum 80°C
- Temperature Rise, Maximum 50°C

Specifications @ 25 °C

Part Number	Inductance 100 kHz 0.1 V @ 0 Adc @ I _{rated} µH ± 20% µH Typ.		I _{rated} ⁽¹⁾ Rated Current Amps	Heating ⁽²⁾ Current Amps	I _{sat} ⁽³⁾ Saturation Current Amps	DC Resistance mΩ Typ. mΩ Max.		Height Inch/mm Max.	Figure
HM73-10R10	0.10	0.09	22.0	26.7	38.0	1.4	1.65	.138/3.50	2
HM73-10R10L	0.10	0.09	22.0	28.0	38.0	1.2	1.40	.124/3.15	1
HM73-10R20	0.22	0.20	17.0	23.0	23.0	1.8	2.10	.138/3.50	2
HM73-10R20L	0.22	0.20	17.0	23.0	23.0	1.8	2.10	.124/3.15	1
HM73-10R47	0.47	0.42	15.0	19.2	23.0	2.7	3.16	.158/4.00	1
HM73-10R68	0.68	0.64	12.0	14.9	28.0	4.5	5.20	.158/4.00	1
HM73-101R0	1.00	1.00	8.5	14.9	15.0	5.2	7.00	.158/4.00	1
HM73-101R0L	1.00	0.90	6.0	10.9	18.0	8.4	8.80	.126/3.20	1
HM73-101R5	1.50	1.30	6.5	12.7	11.0	6.2	8.30	.177/4.50	1
HM73-102R0	2.00	1.70	8.0	11.8	11.0	7.2	8.30	.177/4.50	1
HM73-106R0	6.00	5.00	4.8	6.0	4.8	26	30.0	.197/5.00	1
HM73-106R4	6.40	5.80	3.5	6.0	6.0	26	30.0	.197/5.00	1
HM73-15R10	0.108	0.103	30.0	40.8	51.0	0.6	0.70	.185/4.70	1
HM73-15R20	0.20	0.17	21.0	35.3	40.0	0.8	0.90	.158/4.00	1
HM73-15R47	0.47	0.42	17.0	26.7	35.0	1.4	1.55	.158/4.00	1
HM73-15R70	0.70	0.65	16.0	27.7	30.0	1.3	1.50	.177/4.50	1
HM73-151R0	1.00	0.95	10.0	22.0	34.0	2.0	2.20	.220/5.60	1
HM73-151R2	1.20	1.07	14.0	23.0	23.0	2.0	2.30	.232/5.90	1
HM73-151R5	1.50	1.33	10.0	22.9	25.0	1.90	2.20	.216/5.50	1
HM73-152R2	2.20	2.10	8.0	16.1	13.0	3.85	4.60	.216/5.50	1
HM73-154R7	4.70	3.50	10.0	15.6	16.0	4.80	5.00	.288/7.30	1
HM73-201R0	1.00	0.91	16.0	18.8	32.0	2.8	3.30	.177/4.50	1
HM73-201R5	1.50	1.43	13.0	16.4	22.0	3.7	4.40	.177/4.50	1
HM73-30R60	0.60	0.54	27.0	30.1	40.0	1.1	1.25	.216/5.50	1
HM73-301R0	1.00	0.89	23.0	25.8	34.0	1.5	1.70	.216/5.50	1
HM73-301R5	1.50	1.25	18.0	22.9	30.0	1.9	2.30	.216/5.50	1
HM73-302R2	2.20	2.00	12.0	15.0	24.0	4.4	5.10	.216/5.50	1
HM73-303R9	3.90	3.60	10.0	13.7	18.0	5.7	7.20	.216/5.50	1
HM73-304R6	4.60	4.10	9.0	12.4	14.0	6.5	8.30	.216/5.50	1
HM73-316R4	6.40	5.65	6.5	7.8	16.0	16.6	25.00	.197/5.00	2
HM73-318R2	8.20	7.72	5.6	7.3	16.0	18.8	26.00	.197/5.00	2
HM73-31100	10.0	8.90	6.0	6.9	10.0	20.8	26.00	.197/5.00	2
HM73-40R15	0.15	0.13	40.0	44.7	80.0	0.5	0.55	.256/6.50	1
HM73-40R30	0.30	0.27	40.0	40.8	73.0	0.5	0.65	.256/6.50	1
HM73-40R40	0.40	0.37	40.0	40.0	61.0	0.65	1.00	.256/6.50	1
HM73-40R50	0.50	0.46	40.0	40.0	49.0	0.8	1.00	.256/6.50	1
HM73-40R90	0.90	0.80	25.0	28.8	40.0	1.2	1.40	.256/6.50	1
HM73-402R2	2.20	1.90	15.0	20.8	27.0	2.3	2.60	.256/6.50	1
HM73-509R1	9.10	7.40	8.0	10.5	15.0	9.1	10.8	.295/7.50	1
HM73-50100	10.0	8.49	8.0	10.2	15.0	9.6	11.4	.295/7.50	1
HM73-50120	12.0	10.59	7.0	8.7	13.0	13.0	15.0	.295/7.50	1

Last Updated: 25 October, 2005

Specifications @ 25 °C (Cont'd)

Part Number	Inductance 100 kHz 0.1 V		⁽¹⁾ I _{rated} Rated Current Amps	Heating ⁽²⁾ Current Amps	I _{sat} ⁽³⁾ Saturation Current Amps	DC Resistance		Height Inch/mm Max.	Figure
	@ 0 A dc μH ±20%	@ I _{rated} μH Typ.				mΩ Typ.	mΩ Max.		
HM73-50140	14.0	12.00	5.5	9.5	10.0	11.0	13.2	.335/8.50	1
HM73-5015R5	15.5	13.00	5.0	9.9	10.0	15.0	18.2	.315/8.00	1
HM73-5020R9	20.9	17.00	4.5	8.0	8.0	16.0	19.0	.315/8.00	1
HM73-5026R5	26.5	22.50	4.6	7.0	8.8	21.0	25.2	.355/9.00	1

- Notes:
- (1) The rated current is the approximate current at which inductance will be decreased by 20% 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 component for 30 minutes.
 - (3) Isat is the saturation current at which inductance rolls off approximately 30% from its initial unbiased inductance value.
 - (4) PC Board layout, proximity of other components, trace size and airflow will affect temperature rise and must be considered when selecting an inductor.

Packaging

Standard: Embossed Tape & Reel

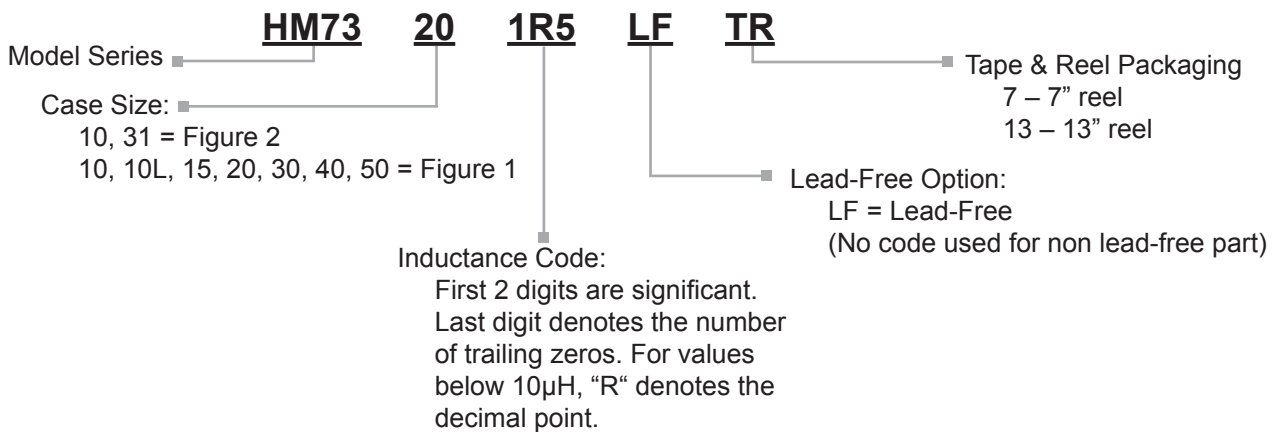
(1) Case size 10 & 10L

Reel:	Diameter:	7" (177.8mm)	13" (330.2mm)
	Capacity:	= 250 Units	1000 Units

(2) Other case sizes

Reel:	Diameter:	Case size 15, 20, 30, 31, 40, 50 =	13" (330.2mm)
	Capacity :	Case size 20, 30, 31, 40	= 400 Units
		Case size 15	= 500 Units
		Case size 50	= 250 Units

Ordering Information



Outline Dimensions (Inch/mm)

Figure 1

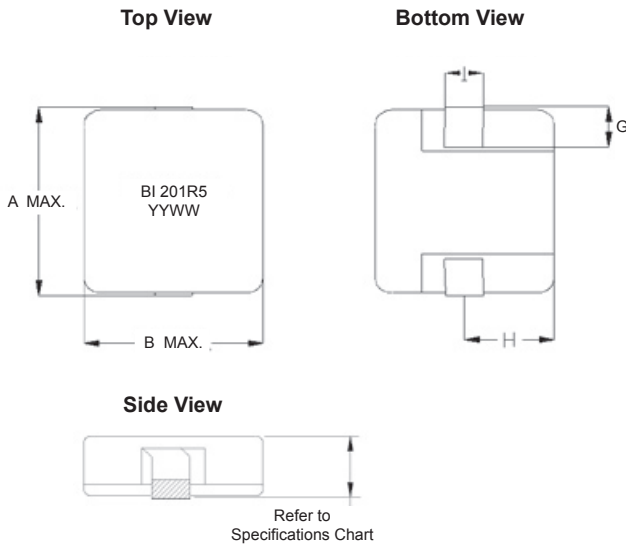
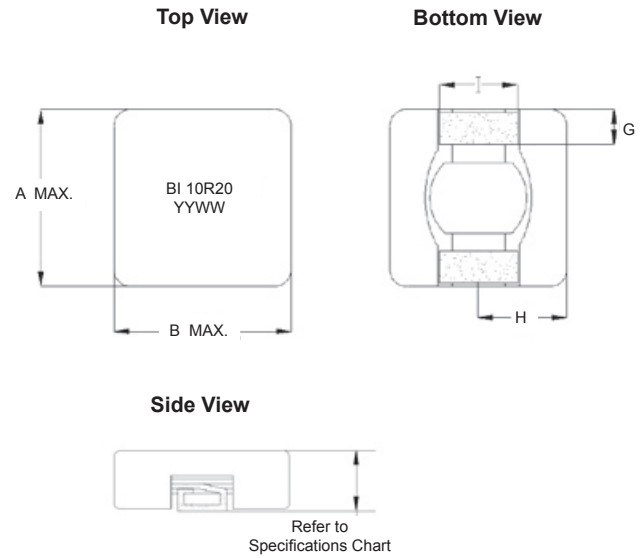
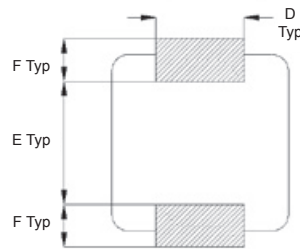


Figure 2



Recommended Solder Pad Layout



Case Size	Fig.	A	B	D	E	F	G	H	I
10	2	$\frac{.295}{7.50}$	$\frac{.265}{6.73}$	$\frac{.138}{3.50}$	$\frac{.138}{3.50}$	$\frac{.098}{2.50}$	$\frac{.079 \pm .020}{2.0 \pm 0.5}$	$\frac{.126 \pm .0197}{3.2 \pm 0.5}$	$\frac{.118 \pm .02}{3.0 \pm 0.5}$
10 & 10L	1	$\frac{.285}{7.23}$	$\frac{.265}{6.73}$	$\frac{.059}{1.50}$	$\frac{.098}{2.50}$	$\frac{.098}{2.50}$	$\frac{.079 \pm .020}{2.0 \pm 0.5}$	$\frac{.126 \pm .0197}{3.2 \pm 0.5}$	$\frac{.053 \pm .02}{1.35 \pm 0.5}$
15	1	$\frac{.461}{11.70}$	$\frac{.413}{10.50}$	$\frac{.098}{2.50}$	$\frac{.177}{4.50}$	$\frac{.138}{3.50}$	$\frac{.09 \pm .020}{2.3 \pm 0.5}$	$\frac{.197 \pm .0197}{5.0 \pm 0.5}$	$\frac{.079 \pm .02}{2.0 \pm 0.5}$
20	1	$\frac{.531}{13.5}$	$\frac{.512}{13.0}$	$\frac{.110}{2.80}$	$\frac{.362}{9.20}$	$\frac{.120}{3.05}$	$\frac{.118 \pm .020}{3.0 \pm 0.5}$	$\frac{.240 \pm .0197}{6.1 \pm 0.5}$	$\frac{.091 \pm .02}{2.3 \pm 0.5}$
30	1	$\frac{.571}{14.5}$	$\frac{.512}{13.0}$	$\frac{.110}{2.80}$	$\frac{.362}{9.20}$	$\frac{.120}{3.05}$	$\frac{.118 \pm .020}{3.0 \pm 0.5}$	$\frac{.240 \pm .0197}{6.1 \pm 0.5}$	$\frac{.091 \pm .02}{2.3 \pm 0.5}$
31	2	$\frac{.512}{13.0}$	$\frac{.512}{13.0}$	$\frac{.295}{7.50}$	$\frac{.236}{6.00}$	$\frac{.177}{4.50}$	$\frac{.118 \pm .020}{3.0 \pm 0.5}$	$\frac{.240 \pm .0197}{6.1 \pm 0.5}$	$\frac{.217 \pm .02}{5.5 \pm 0.5}$
40	1	$\frac{.591}{15.0}$	$\frac{.512}{13.0}$	$\frac{.110}{2.80}$	$\frac{.362}{9.20}$	$\frac{.120}{3.05}$	$\frac{.118 \pm .020}{3.0 \pm 0.5}$	$\frac{.240 \pm .0197}{6.1 \pm 0.5}$	$\frac{.091 \pm .02}{2.3 \pm 0.5}$
50	1	$\frac{.591}{15.0}$	$\frac{.512}{13.0}$	$\frac{.110}{2.80}$	$\frac{.362}{9.20}$	$\frac{.120}{3.05}$	$\frac{.118 \pm .020}{3.0 \pm 0.5}$	$\frac{.240 \pm .0197}{6.1 \pm 0.5}$	$\frac{.091 \pm .02}{2.3 \pm 0.5}$