



## 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 O. I V		I <sub>rated</sub> <sup>(1)</sup> Rated Current Amps	Heating <sup>(2)</sup> Current Amps	I <sub>sat</sub> <sup>(3)</sup> Saturation Current Amps	DC Resistance		Height Inch/mm Max.	Figure
	@ 0 Adc µH ± 20%	@ I <sub>rated</sub> µH Typ.				mΩ Typ.	mΩ Max.		
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		<sup>(1)</sup> I <sub>rated</sub> Rated Current Amps	Heating <sup>(2)</sup> Current Amps	I <sub>sat</sub> <sup>(3)</sup> Saturation Current Amps	DC Resistance		Height Inch/mm Max.	Figure
	@ 0 A/c μH ±20%	@ I <sub>rated</sub> 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

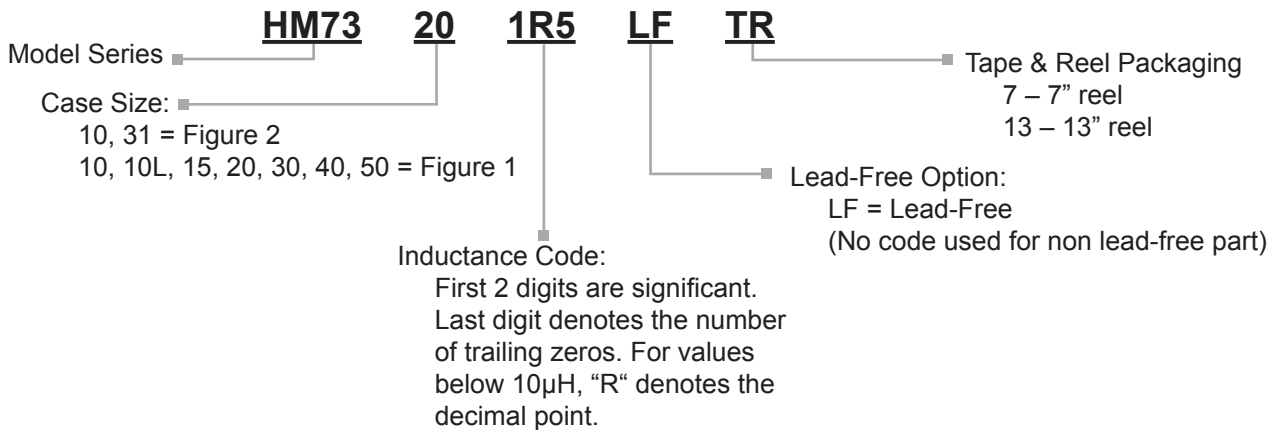
##### (1) Case size 10 & 10L

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

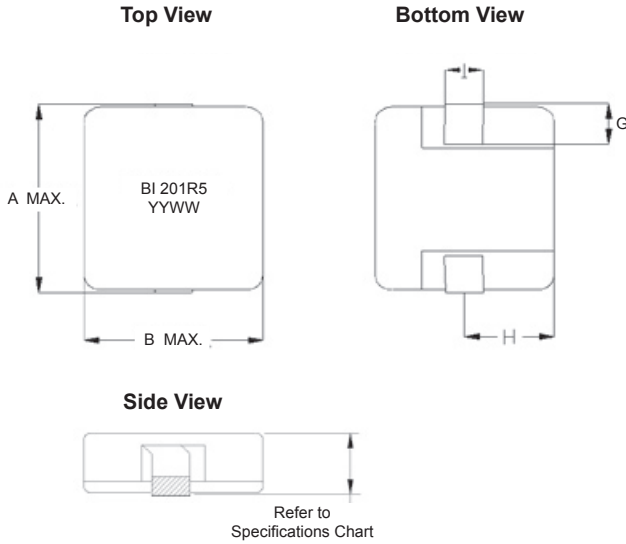
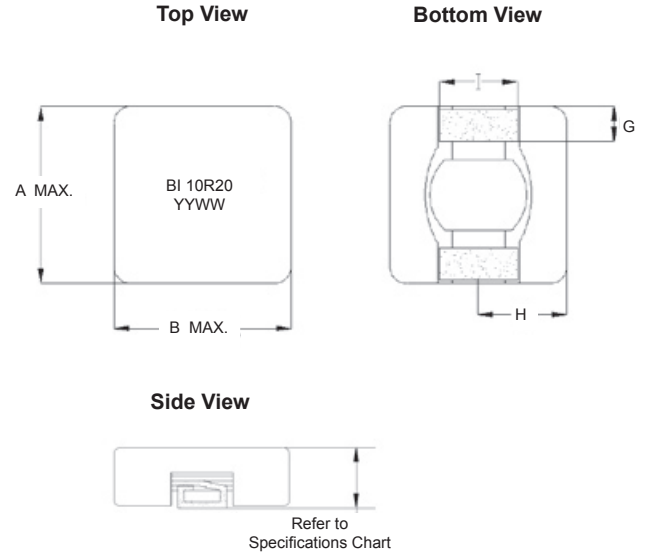
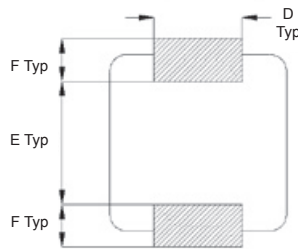


Figure 2



#### Recommended Solder Pad Layout



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