

## Electrical / Environmental

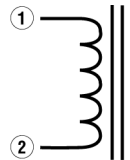
- Operating Temperature Range -40°C to +130°C
- Ambient Temperature, Maximum 80°C
- Insulation System Class B, 130°C
- Temperature Rise, Maximum 50°C
- Operating Frequency Up to 400kHz



# HM77

Low Profile Surface Mount Inductors

## Schematic



## Specifications

Part Number	Operating Values			Control Values <sup>(3)</sup>			
	L <sub>DC</sub> $\mu$ H <sup>(1)</sup>	I <sub>DC</sub> Amps	ET <sub>op</sub> V- $\mu$ S <sup>(2)</sup>	Case Size	L w/o DC L <sub>o</sub> $\mu$ H $\pm$ 20%	DC Resistance m $\Omega$ , Nom.	DC Resistance m $\Omega$ Max.
HM77 - 10001LF	1.01	3.40	0.532	1	1.10	11.00	12.5
HM77 - 20001LF	6.20	1.40	1.33	1	7.00	60.30	70
HM77 - 30001LF	17.6	1.00	2.40	1	22.7	109.00	125
HM77 - 40002LF	3.80	4.80	1.76	2	5.20	17.0	19.1
HM77 - 50002LF	9.40	2.80	2.70	2	12.3	37.80	43.4
HM77 - 60002LF	29.7	1.40	4.60	2	35.3	141.00	166
HM77 - 70002LF	114	0.94	10	2	167	330.00	380
HM77 - 80003LF	2.50	8.00	1.77	3	3.80	7.20	8.30
HM77 - 90003LF	5.10	5.40	2.51	3	7.50	14.30	17.7
HM77 - 10003LF	16.2	2.70	4.29	3	21.9	54.70	63
HM77 - 11003LF	58.1	1.30	7.83	3	73	233.00	290
HM77 - 12003LF	192	0.90	15.7	3	292	472.00	560
HM77 - 13003LF	383	0.72	23.5	3	672	750.00	862
HM77 - 14004LF	0.91	13.3	1.035	4	1.25	4.56	5.70
HM77 - 15004LF	1.32	11.5	1.33	4	2.10	4.56	5.70
HM77 - 16004LF	4.90	7.80	3.04	4	7.90	10.50	12.4
HM77 - 17004LF	9.00	5.50	4.06	4	14	19.30	22.3
HM77 - 18004LF	29.1	2.70	6.90	4	40.5	75.80	85
HM77 - 19004LF	645	0.74	36.5	4	1134	1040	1250
HM77 - 30004LF	33	3.0	9.50	4	48	48.5	59
HM77 - 20005LF	1.75	10.9	1.83	5	2.80	5.68	6.90
HM77 - 21005LF	2.50	11.4	2.23	5	4.20	6.19	7.50
HM77 - 22006LF	2.03	13	3.30	6	2.70	5.60	6.80
HM77 - 23006LF	3.50	12.4	3.13	6	6.50	7.54	8.7
HM77 - 24006LF	4.70	10.4	3.58	6	8.40	8.30	10.0
HM77 - 25006LF	9.30	7.20	4.92	6	16	20.05	23.0
HM77 - 26006LF	16.1	5.10	6.27	6	25.9	30.3	32
HM77 - 27006LF	50	2.60	10.5	6	72.9	115	130
HM77 - 28006LF	1070	0.710	54.4	6	1950	1480	1700
HM77 - 29006LF	68	3.00	9.50	6	122	85	102
HM77 - 31007ALF	2.5	11.4	2.23	7	4.20	5.20	6.20
HM77 - 32007ALF	1.68	13.9	1.83	7	2.80	3.60	4.0

Notes: (1) Inductance values are rated at -40°C to +130°C operating temperature range with rated DC current flowing and the operating ET<sub>op</sub> across the inductor.  
 (2) ET<sub>op</sub> is rated at 500 kHz.  
 (3) The control values of inductance are measured at the operating flux density equal or less than 10 gauss and without DC current.

## Outline Dimensions (Inch/mm) / Packaging

Figure 1

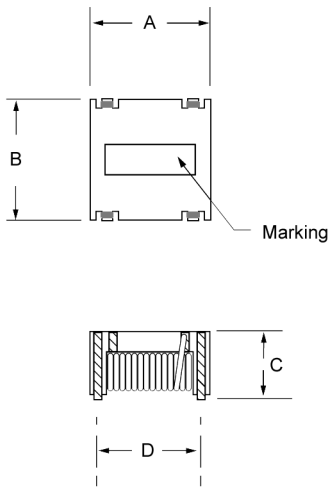
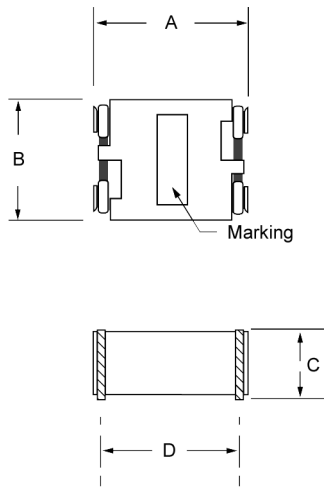
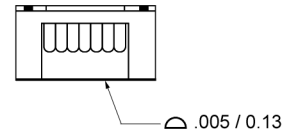


Figure 2

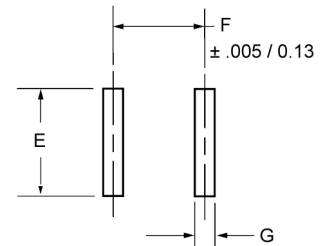


Coplanarity



Case size	A	B	C	D	E	F	G	Reel Capacity	Figure
1	.340 8.64	.340 8.64	.250 6.35	.260 6.60	.330 8.38	.270 6.86	.060 1.52	500	1
2	.447 11.35	.447 11.35	.350 8.89	.350 8.89	.425 10.80	.360 9.14	.060 1.52	350	1
3	.571 14.50	.571 14.50	.350 8.89	.450 11.43	.550 13.97	.460 11.68	.100 2.54	350	2
4	.625 15.88	.600 15.24	.360 9.14	.500 12.70	.580 14.73	.510 12.95	.100 2.54	200	2
5	.725 18.40	.585 14.90	.360 9.14	.610 15.50	.580 14.73	.610 15.50	.100 2.54	200	2
6	.805 20.40	.710 18.03	.445 11.30	.680 17.27	.690 17.53	.690 17.53	.100 2.54	150	2
7	.669 17.00	.669 17.00	.400 10.16	.560 14.22	.665 16.89	.560 14.22	.100 2.54	200	2

Recommended Solder Pad Layout



- Notes: (1) For case size 1 to 6, the reel capacity is for part number ending with suffix 'LFTR'.  
 (2) For case size 7, the reel capacity is for part number ending with suffix 'ALFTR'

## Ordering Information

