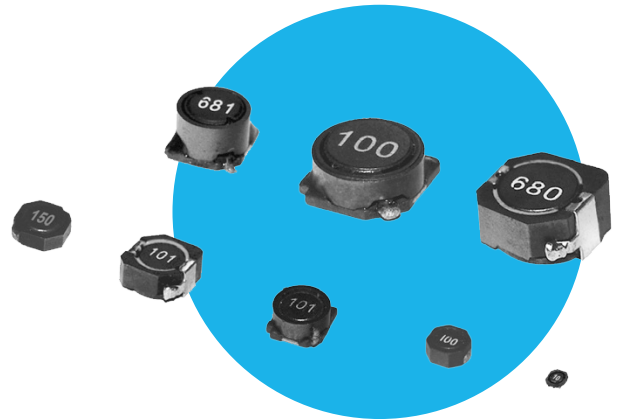


Shielded Surface Mount Power Inductors

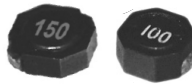
Model HM66A

Features and Benefits

- Operating Temperature Range -40°C to +85°C
- Operating Frequency Up to 3MHz
- RoHS Compliant



Specifications @ 25°C

A) Case Size 0420/0520/0530 

Part Number	Inductance ⁽¹⁾ (μH)	DCR Max (Ω)	Rated ⁽³⁾ Current (A)	Part Number	Inductance ⁽¹⁾ (μH)	DCR Max (Ω)	Rated ⁽³⁾ Current (A)
HM66A-04201R0NLF	1.0	0.058	1.50	HM66A-05204R7MLF	4.7	0.087	1.14
HM66A-04201R2NLF	1.2	0.070	1.40	HM66A-05206R8MLF	6.8	0.105	0.95
HM66A-04202R2NLF	2.2	0.082	1.00	HM66A-0520100MLF	10	0.150	0.76
HM66A-04203R3NLF	3.3	0.105	0.92	HM66A-0520150MLF	15	0.210	0.63
HM66A-04203R9NLF	3.9	0.120	0.80	HM66A-0520220MLF	22	0.275	0.56
HM66A-04204R7NLF	4.7	0.150	0.76	HM66A-0520270MLF	27	0.452	0.48
HM66A-04205R6NLF	5.6	0.180	0.69	HM66A-0520330MLF	33	0.455	0.44
HM66A-04206R8NLF	6.8	0.220	0.62	HM66A-0520470MLF	47	0.730	0.35
HM66A-04208R2NLF	8.2	0.240	0.56	HM66A-05301R2MLF	1.2	0.022	3.80
HM66A-0420100MLF	10	0.255	0.50	HM66A-05302R2MLF	2.2	0.029	2.41
HM66A-0420150MLF	15	0.390	0.40	HM66A-05303R3MLF	3.3	0.034	2.36
HM66A-0420220MLF	22	0.610	0.32	HM66A-05304R7MLF	4.7	0.045	1.87
HM66A-0420330MLF	33	0.920	0.28	HM66A-05306R8MLF	6.8	0.068	1.51
HM66A-0420470MLF	47	1.130	0.20	HM66A-0530100MLF	10	0.090	1.33
HM66A-0420680MLF	68	1.520	0.15	HM66A-0530150MLF	15	0.142	1.05
HM66A-0420101MLF	100	2.120	0.10	HM66A-0530220MLF	22	0.208	0.86
HM66A-05201R2MLF	1.2	0.044	2.15	HM66A-0530330MLF	33	0.257	0.72
HM66A-05202R0MLF	2.0	0.046	1.90	HM66A-0530470MLF	47	0.352	0.62
HM66A-05202R2MLF	2.2	0.059	1.63	HM66A-0530680MLF	68	0.525	0.51
HM66A-05203R3MLF	3.3	0.062	1.50	HM66A-0530101MLF	100	0.801	0.43
HM66A-05204R1MLF	4.1	0.081	1.20	HM66A-0530222MLF	2200	19.000	0.05

Outline Dimensions (mm)

Case Size	A (max)	Ht (Max)	X	Y	Z
0420	4.2	2.0	5.2	3.0	2.0
0520	5.3	2.0	6.0	3.9	2.0
0530	5.3	3.0	6.0	3.9	2.0


General Note

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Model HM66A

Specifications @ 25°C

B) Case Size 0628/0728/0730/0732/0745/1045/1255/1265/1275



Part Number	Inductance ⁽²⁾ (μH)	DCR Max (Ω)	Rated ^{(3), (5)} Current (A)	Part Number	Inductance ⁽²⁾ (μH)	DCR Max (Ω)	Rated ⁽⁵⁾ Current (A)
HM66A-06284R7MLF	4.7	0.043	1.60	HM66A-0732471MLF	470	2.460	0.20
HM66A-06286R8MLF	6.8	0.062	1.50	HM66A-0732681MLF	680	3.780	0.16
HM66A-0628100MLF	10	0.082	1.30	HM66A-0732102MLF	1000	5.736	0.13
HM66A-0628150MLF	15	0.120	1.00	HM66A-07453R3MLF	3.3	0.024	2.50
HM66A-0628220MLF	22	0.144	0.77	HM66A-07454R7MLF	4.7	0.036	2.00
HM66A-0628330MLF	33	0.216	0.69	HM66A-07456R8MLF	6.8	0.047	1.70
HM66A-0628470MLF	47	0.324	0.59	HM66A-0745100MLF	10	0.043	1.30
HM66A-0628680MLF	68	0.468	0.50	HM66A-0745150MLF	15	0.062	1.10
HM66A-0628101MLF	100	0.744	0.42	HM66A-0745220MLF	22	0.073	0.90
HM66A-07283R3MLF	3.3	0.044	1.60	HM66A-0745330MLF	33	0.115	0.82
HM66A-07284R7MLF	4.7	0.054	1.50	HM66A-0745470MLF	47	0.150	0.75
HM66A-07286R8MLF	6.8	0.071	1.30	HM66A-0745680MLF	68	0.210	0.60
HM66A-0728100MLF	10	0.100	1.10	HM66A-0745101MLF	100	0.300	0.50
HM66A-0728150MLF	15	0.156	0.88	HM66A-0745151MLF	150	0.580	0.40
HM66A-0728220MLF	22	0.216	0.75	HM66A-0745221MLF	220	0.624	0.33
HM66A-0728330MLF	33	0.288	0.65	HM66A-0745331MLF	330	0.888	0.25
HM66A-0728470MLF	47	0.408	0.54	HM66A-0745471MLF	470	1.260	0.22
HM66A-07303R3MLF	3.3	0.028	1.80	HM66A-0745681MLF	680	1.776	0.20
HM66A-07304R7MLF	4.7	0.043	1.60	HM66A-0745102MLF	1000	2.736	0.14
HM66A-07306R8MLF	6.8	0.049	1.50	HM66A-1045100MLF	10	0.043	3.00
HM66A-0730100MLF	10	0.064	1.30	HM66A-1045150MLF	15	0.056	2.40
HM66A-0730150MLF	15	0.101	1.00	HM66A-1045220MLF	22	0.071	2.10
HM66A-0730220MLF	22	0.132	0.86	HM66A-1045330MLF	33	0.098	1.60
HM66A-0730330MLF	33	0.192	0.65	HM66A-1045470MLF	47	0.120	1.40
HM66A-0730470MLF	47	0.288	0.57	HM66A-1045680MLF	68	0.168	1.20
HM66A-0730680MLF	68	0.372	0.49	HM66A-1045101MLF	100	0.240	1.00
HM66A-0730101MLF	100	0.540	0.35	HM66A-1045151MLF	150	0.420	0.79
HM66A-07323R3MLF	3.3	0.028	1.90	HM66A-1045221MLF	220	0.564	0.65
HM66A-07324R7MLF	4.7	0.043	1.70	HM66A-1045331MLF	330	0.816	0.54
HM66A-07326R8MLF	6.8	0.049	1.60	HM66A-1045471MLF	470	1.236	0.47
HM66A-0732100MLF	10	0.064	1.40	HM66A-1045681MLF	680	1.920	0.38
HM66A-0732150MLF	15	0.090	1.10	HM66A-1045102MLF	1000	3.360	0.32
HM66A-0732220MLF	22	0.132	0.96	HM66A-1045152MLF	1500	4.080	0.22
HM66A-0732330MLF	33	0.192	0.75	HM66A-12556R0NLF	6	0.020	3.60
HM66A-0732470MLF	47	0.288	0.67	HM66A-1255100MLF	10	0.026	3.40
HM66A-0732680MLF	68	0.372	0.59	HM66A-1255150MLF	15	0.031	2.80
HM66A-0732101MLF	100	0.540	0.45	HM66A-1255220MLF	22	0.041	2.30
HM66A-0732151MLF	150	0.780	0.37	HM66A-1255330MLF	33	0.050	1.90
HM66A-0732221MLF	220	1.260	0.29	HM66A-1255470MLF	47	0.074	1.60
HM66A-0732331MLF	330	2.004	0.22	HM66A-1255680MLF	68	0.100	1.30


General Note

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Model HM66A

Specifications @ 25°C (Continued)

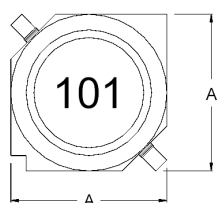
C) Case Size 0628/0728/0730/0732/0745/1045/1255/1265/1275



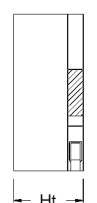
Part Number	Inductance ⁽²⁾ (μH)	DCR Max (Ω)	Rated ⁽⁵⁾ Current (A)	Part Number	Inductance ⁽²⁾ (μH)	DCR Max (Ω)	Rated ⁽⁵⁾ Current (A)
HM66A-1255101MLF	100	0.140	1.10	HM66A-1265101MLF	100	0.148	1.60
HM66A-1255151MLF	150	0.228	0.88	HM66A-1265151MLF	150	0.328	1.00
HM66A-1255221MLF	220	0.324	0.72	HM66A-12751R2NLF	1.2	0.008	13.0
HM66A-1255331MLF	330	0.492	0.59	HM66A-12752R7NLF	2.7	0.011	10.0
HM66A-1255471MLF	470	0.624	0.49	HM66A-12753R9NLF	3.9	0.012	9.00
HM66A-1255681MLF	680	0.912	0.43	HM66A-12755R6NLF	5.6	0.014	7.80
HM66A-1255102MLF	1000	1.344	0.34	HM66A-12756R8NLF	6.8	0.016	7.20
HM66A-1255152MLF	1500	2.076	0.29	HM66A-1275100MLF	10	0.019	5.50
HM66A-12652R0NLF	2.0	0.014	10.0	HM66A-1275150MLF	15	0.022	4.70
HM66A-12654R2NLF	4.2	0.018	7.30	HM66A-1275220MLF	22	0.032	4.00
HM66A-12657R0MLF	7.0	0.021	5.70	HM66A-1275330MLF	33	0.047	3.20
HM66A-1265100MLF	10	0.024	5.00	HM66A-1275470MLF	47	0.063	2.70
HM66A-1265150MLF	15	0.028	4.20	HM66A-1275680MLF	68	0.093	2.00
HM66A-1265220MLF	22	0.038	3.50	HM66A-1275101MLF	100	0.150	1.90
HM66A-1265330MLF	33	0.049	2.80	HM66A-1275151MLF	150	0.210	1.50
HM66A-1265470MLF	47	0.069	2.40	HM66A-1275221MLF	220	0.310	1.30
HM66A-1265680MLF	68	0.094	2.00				

Outline Dimensions (mm)

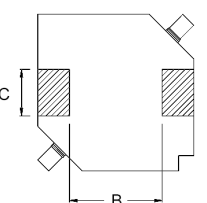
Top View



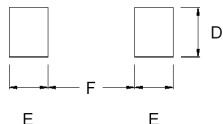
Side View



Bottom View



Recommended PCB Layout




Case Size	A	Ht	B	C	D	E	F
0628	6 ± 0.2	2.8 ± 0.3	4.0	2.0	2.2	1.5	4.0
0728	7 ± 0.2	2.8 ± 0.2	4.0	2.0	2.2	1.5	4.0
0730	7 ± 0.2	3 ± 0.2	4.0	2.0	2.2	1.5	4.0
0732	7 ± 0.2	3.2 ± 0.2	4.0	2.0	2.2	1.5	4.0
0745	7 ± 0.2	4.5 ± 0.3	4.0	2.0	2.2	1.5	4.0
1045	10.1 ± 0.3	4.5 ± 0.3	6.0	3.0	3.2	2.5	5.6
1255	12.5 ± 0.3	5.5 ± 0.4	8.6	3.0	3.2	2.5	8.6
1265	12.5 ± 0.3	6.5 ± 0.4	8.6	3.0	3.2	2.5	8.6
1275	12.5 ± 0.3	7.5 ± 0.4	8.2	2.5	3.2	2.5	8.2

General Note

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Model HM66A

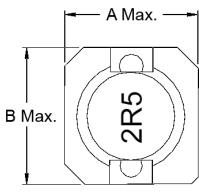
Specifications @ 25°C (Continued)

D) Case Size 1030/1050 

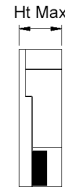
Part Number	Inductance ⁽¹⁾ (μ H)	DCR Max (Ω)	Rated ^{(4),(6)} Current (A)	Part Number	Inductance ⁽¹⁾ (μ H)	DCR Max (Ω)	Rated ⁽⁶⁾ Current (A)
HM66A-1030100NLF	10	58.1	2.70	HM66A-1050270NLF	27	65.4	2.24
HM66A-1030120NLF	12	72.1	2.25	HM66A-1050330NLF	33	81.4	1.88
HM66A-1030150NLF	15	86.5	2.22	HM66A-1050390NLF	39	103.1	1.70
HM66A-1030180NLF	18	116.1	1.90	HM66A-1050470NLF	47	122.1	1.56
HM66A-1030220NLF	22	145.4	1.78	HM66A-1050560NLF	56	144.8	1.39
HM66A-1030270NLF	27	175.9	1.63	HM66A-1050680NLF	68	193.0	1.36
HM66A-1030330NLF	33	213.4	1.46	HM66A-1050820NLF	82	219.4	1.20
HM66A-1030390NLF	39	268.9	1.32	HM66A-1050101NLF	100	247.0	1.09
HM66A-1030470NLF	47	298.6	1.18	HM66A-1050121NLF	120	298.4	1.00
HM66A-1030560NLF	56	335.8	1.10	HM66A-1050151NLF	150	355.1	0.91
HM66A-1030680NLF	68	451.3	1.04	HM66A-1050181NLF	180	393.4	0.84
HM66A-1030820NLF	82	513.8	0.94	HM66A-1050221NLF	220	483.8	0.75
HM66A-1030101NLF	100	700.0	0.84	HM66A-1050271NLF	270	632.5	0.68
HM66A-1030121NLF	120	765.0	0.76	HM66A-1050331NLF	330	780.0	0.60
HM66A-1030151NLF	150	876.3	0.70	HM66A-1050391NLF	390	957.5	0.57
HM66A-10501R5NLF	1.5	5.8	8.30	HM66A-1050471NLF	470	1220.4	0.50
HM66A-1050100NLF	10	25.8	3.45	HM66A-1050561NLF	560	1352.4	0.47
HM66A-1050120NLF	12	32.0	3.40	HM66A-1050681NLF	680	1519.2	0.43
HM66A-1050150NLF	15	40.0	2.83	HM66A-1050821NLF	820	1694.4	0.39
HM66A-1050180NLF	18	46.0	2.62	HM66A-1050102NLF	1000	1946.4	0.35
HM66A-1050220NLF	22	58.5	2.44				

Outline Dimensions (mm)

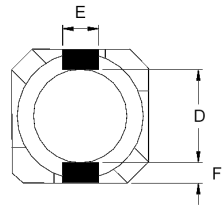
Top View



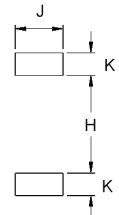
Side View



Bottom View



Recommended PCB Layout



Case Size	A	B	Ht	D	E	F	H	J	K
1030	10.3	10.5	3.0	7.7	3.0	1.2	7.3	3.6	1.7
1050	10.3	10.5	5.0	7.7	3.0	1.2	7.3	3.6	1.7

General Note

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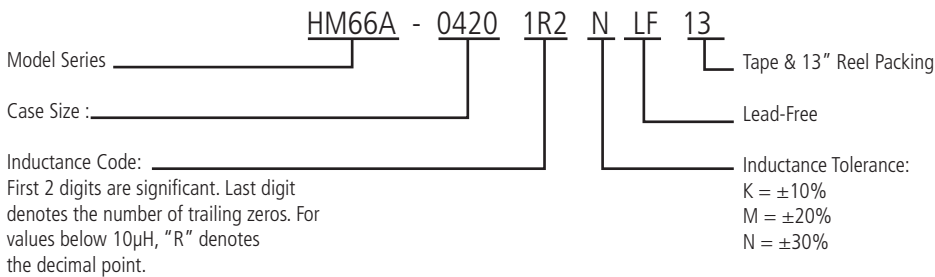
Model HM66A

- Notes:
- (1) Inductance for case size 0420, 0520, 0530, 1030 & 1050 is measured at 100 kHz, 0.1 Vac without DC current.
 - (2) Inductance for case size 0628, 0728, 0730, 0732, 0745, 1045, 1255, 1265 & 1275 is measured at 1 kHz, 0.5 Vac without DC current.
 - (3) The rated current for case size 0312, 0315, 0318, 0420, 0520, 0530 & 0628 is the approximate DC current at which the inductance will be decreased by 30% from its initial (zero DC) value.
 - (4) The rated current for case size 0630 is the approximate DC current at which the inductance will be decreased by 35% from its initial (zero DC) value.
 - (5) The rated current for case size 0728, 0730, 0732, 0745, 1045, 1255, 1265 & 1275 is the approximate DC current at which the inductance will be decreased by 30% from its initial (zero DC) value.
 - (6) The rated current for case size 1030 & 1050 is the approximate DC current at which the inductance will be decreased by 25% from its initial (zero DC) value.

Packaging

Tape & Reel	
Standard	Reel: Diameter: = 13" (330.2mm)
	Capacity: Case size 0745, 1045, 1050, 1255, 1265, 1275 = 500 Units
	Case size 0420, 0728, 0730, 0732, 1030 = 1000 Units
	Case size 0628 = 2000 Units
	Case size 0530 = 2500 Units
	Case size 0520 = 3000 Units

Ordering Information



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