

Miniature Low Profile, Shielded Surface Mount Inductors

Model HM66 Series

Features

- Operating Temperature Range -40°C to +125°C
- Ambient Temperature, Maximum 80°C
- Temperature Rise, Maximum 40°C
- Operating Frequency Up to 3MHz
- RoHS Compliant



Specifications @ 25°C

| Part Number | Inductance ⁽¹⁾ Nominal μH ± 20% | DC Resistance Ω Max. | Rated ⁽²⁾ Current Amps | Figure | Part Number | Inductance ⁽¹⁾ Nominal μH ± 20% | DC Resistance Ω Max. | Rated ⁽²⁾ Current Amps | Figure |
|--------------|--|----------------------------|---|--------|--------------|--|----------------------------|---|--------|
| HM66-101R5LF | 1.5 | 0.055 | 1.55 | 1 | HM66-30150LF | 15 | 0.1490 | 0.76 | 2 |
| HM66-102R2LF | 2.2 | 0.072 | 1.20 | 1 | HM66-30180LF | 18 | 0.1660 | 0.72 | 2 |
| HM66-103R3LF | 3.3 | 0.085 | 1.10 | 1 | HM66-30220LF | 22 | 0.2350 | 0.70 | 2 |
| HM66-104R7LF | 4.7 | 0.105 | 0.90 | 1 | HM66-30270LF | 27 | 0.2610 | 0.58 | 2 |
| HM66-105R6LF | 5.6 | 0.140 | 0.80 | 1 | HM66-30330LF | 33 | 0.3780 | 0.56 | 2 |
| HM66-106R8LF | 6.8 | 0.170 | 0.73 | 1 | HM66-30390LF | 39 | 0.3837 | 0.50 | 2 |
| HM66-10100LF | 10 | 0.210 | 0.55 | 1 | HM66-30470LF | 47 | 0.5870 | 0.48 | 2 |
| HM66-10150LF | 15 | 0.295 | 0.45 | 1 | HM66-30560LF | 56 | 0.6245 | 0.41 | 2 |
| HM66-10220LF | 22 | 0.430 | 0.40 | 1 | HM66-30680LF | 68 | 0.6990 | 0.35 | 2 |
| HM66-10330LF | 33 | 0.675 | 0.32 | 1 | HM66-30820LF | 82 | 0.9148 | 0.32 | 2 |
| HM66-151R5LF | 1.5 | 0.055 | 1.55 | 2 | HM66-30101LF | 100 | 1.020 | 0.29 | 2 |
| HM66-152R2LF | 2.2 | 0.072 | 1.20 | 2 | HM66-30121LF | 120 | 1.270 | 0.27 | 2 |
| HM66-153R3LF | 3.3 | 0.085 | 1.10 | 2 | HM66-30151LF | 150 | 1.350 | 0.24 | 2 |
| HM66-154R7LF | 4.7 | 0.105 | 0.90 | 2 | HM66-30181LF | 180 | 1.540 | 0.22 | 2 |
| HM66-156R8LF | 6.8 | 0.170 | 0.73 | 2 | HM66-404R1LF | 4.1 | 0.057 | 1.95 | 2 |
| HM66-15100LF | 10 | 0.210 | 0.55 | 2 | HM66-405R4LF | 5.4 | 0.076 | 1.60 | 2 |
| HM66-15150LF | 15 | 0.295 | 0.45 | 2 | HM66-406R2LF | 6.2 | 0.096 | 1.40 | 2 |
| HM66-15220LF | 22 | 0.430 | 0.40 | 2 | HM66-408R9LF | 8.9 | 0.116 | 1.25 | 2 |
| HM66-15330LF | 33 | 0.675 | 0.32 | 2 | HM66-40100LF | 10 | 0.124 | 1.20 | 2 |
| HM66-201R0LF | 1.0 | 0.045 | 1.72 | 2 | HM66-40120LF | 12 | 0.153 | 1.10 | 2 |
| HM66-202R2LF | 2.2 | 0.075 | 1.32 | 2 | HM66-40150LF | 15 | 0.196 | 0.97 | 2 |
| HM66-202R7LF | 2.7 | 0.105 | 1.28 | 2 | HM66-40180LF | 18 | 0.210 | 0.85 | 2 |
| HM66-203R3LF | 3.3 | 0.110 | 1.04 | 2 | HM66-40220LF | 22 | 0.290 | 0.80 | 2 |
| HM66-203R9LF | 3.9 | 0.155 | 0.88 | 2 | HM66-40270LF | 27 | 0.330 | 0.75 | 2 |
| HM66-204R7LF | 4.7 | 0.162 | 0.84 | 2 | HM66-40330LF | 33 | 0.386 | 0.65 | 2 |
| HM66-205R6LF | 5.6 | 0.170 | 0.80 | 2 | HM66-40390LF | 39 | 0.520 | 0.57 | 2 |
| HM66-206R8LF | 6.8 | 0.200 | 0.76 | 2 | HM66-40470LF | 47 | 0.595 | 0.54 | 2 |
| HM66-208R2LF | 8.2 | 0.245 | 0.68 | 2 | HM66-40560LF | 56 | 0.665 | 0.50 | 2 |
| HM66-20100LF | 10 | 0.200 | 0.61 | 2 | HM66-40680LF | 68 | 0.840 | 0.43 | 2 |
| HM66-20120LF | 12 | 0.210 | 0.56 | 2 | HM66-40820LF | 82 | 0.978 | 0.41 | 2 |
| HM66-20150LF | 15 | 0.240 | 0.50 | 2 | HM66-40101LF | 100 | 1.200 | 0.36 | 2 |
| HM66-20180LF | 18 | 0.338 | 0.48 | 2 | HM66-502R5LF | 2.5 | 0.018 | 2.60 | 2 |
| HM66-20220LF | 22 | 0.397 | 0.41 | 2 | HM66-503R0LF | 3.0 | 0.024 | 2.40 | 2 |
| HM66-20270LF | 27 | 0.441 | 0.35 | 2 | HM66-504R2LF | 4.2 | 0.031 | 2.20 | 2 |
| HM66-20330LF | 33 | 0.694 | 0.32 | 2 | HM66-505R3LF | 5.3 | 0.038 | 1.90 | 2 |
| HM66-20390LF | 39 | 0.709 | 0.30 | 2 | HM66-506R2LF | 6.2 | 0.045 | 1.80 | 2 |
| HM66-301R2LF | 1.2 | 0.0236 | 2.56 | 2 | HM66-508R2LF | 8.2 | 0.053 | 1.60 | 2 |
| HM66-301R8LF | 1.8 | 0.0275 | 2.20 | 2 | HM66-50100LF | 10 | 0.065 | 1.30 | 2 |
| HM66-302R2LF | 2.2 | 0.0313 | 2.04 | 2 | HM66-50120LF | 12 | 0.076 | 1.20 | 2 |
| HM66-302R7LF | 2.7 | 0.0433 | 1.60 | 2 | HM66-50150LF | 15 | 0.103 | 1.10 | 2 |
| HM66-303R3LF | 3.3 | 0.0492 | 1.57 | 2 | HM66-50180LF | 18 | 0.110 | 1.00 | 2 |
| HM66-303R9LF | 3.9 | 0.0648 | 1.44 | 2 | HM66-50220LF | 22 | 0.122 | 0.90 | 2 |
| HM66-304R7LF | 4.7 | 0.0720 | 1.32 | 2 | HM66-50270LF | 27 | 0.175 | 0.85 | 2 |
| HM66-305R6LF | 5.6 | 0.1009 | 1.17 | 2 | HM66-50330LF | 33 | 0.189 | 0.75 | 2 |
| HM66-306R8LF | 6.8 | 0.1089 | 1.12 | 2 | HM66-50390LF | 39 | 0.212 | 0.70 | 2 |
| HM66-308R2LF | 8.2 | 0.1175 | 1.04 | 2 | HM66-50470LF | 47 | 0.260 | 0.62 | 2 |
| HM66-30100LF | 10 | 0.1283 | 1.00 | 2 | HM66-50560LF | 56 | 0.305 | 0.58 | 2 |
| HM66-30120LF | 12 | 0.1316 | 0.84 | 2 | HM66-50680LF | 68 | 0.355 | 0.52 | 2 |

General Note

TT Electronics reserves the right to make changes in product specification without notice or liability.
All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

Model HM66 Series

Specifications @ 25°C (Continued)

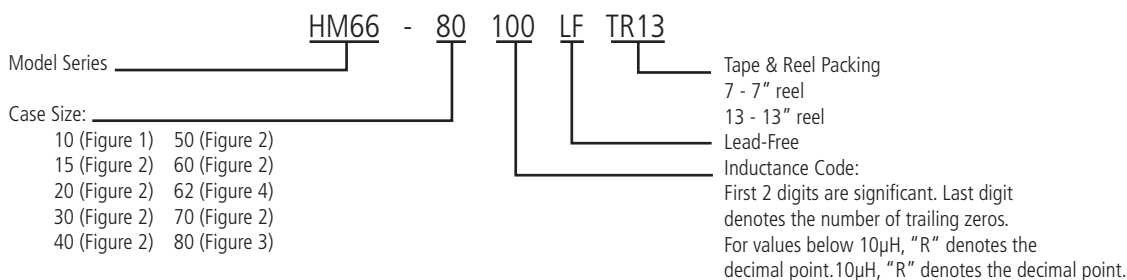
| Part Number | Inductance ⁽¹⁾ Nominal μH ± 20% | DC Resistance Ω Max. | Rated ⁽²⁾ Current Amps | Figure | Part Number | Inductance ⁽¹⁾ Nominal μH ± 20% | DC Resistance Ω Max. | Rated ⁽²⁾ Current Amps | Figure |
|--------------|--|----------------------------|---|--------|--------------|--|----------------------------|---|--------|
| HM66-50820LF | 82 | 0.463 | 0.46 | 2 | HM66-70120LF | 12 | 0.053 | 1.70 | 2 |
| HM66-50101LF | 100 | 0.520 | 0.42 | 2 | HM66-70150LF | 15 | 0.057 | 1.60 | 2 |
| HM66-603R0LF | 3.0 | 0.024 | 3.00 | 2 | HM66-70180LF | 18 | 0.092 | 1.50 | 2 |
| HM66-603R9LF | 3.9 | 0.027 | 2.60 | 2 | HM66-70220LF | 22 | 0.096 | 1.30 | 2 |
| HM66-605R0LF | 5.0 | 0.031 | 2.40 | 2 | HM66-70270LF | 27 | 0.109 | 1.20 | 2 |
| HM66-606R0LF | 6.0 | 0.035 | 2.25 | 2 | HM66-70330LF | 33 | 0.124 | 1.10 | 2 |
| HM66-607R3LF | 7.3 | 0.054 | 2.10 | 2 | HM66-70390LF | 39 | 0.138 | 1.00 | 2 |
| HM66-608R6LF | 8.6 | 0.058 | 1.85 | 2 | HM66-70470LF | 47 | 0.155 | 0.95 | 2 |
| HM66-60100LF | 10 | 0.065 | 1.70 | 2 | HM66-70560LF | 56 | 0.202 | 0.85 | 2 |
| HM66-60120LF | 12 | 0.070 | 1.55 | 2 | HM66-70680LF | 68 | 0.234 | 0.75 | 2 |
| HM66-60150LF | 15 | 0.084 | 1.40 | 2 | HM66-70820LF | 82 | 0.324 | 0.70 | 2 |
| HM66-60180LF | 18 | 0.095 | 1.32 | 2 | HM66-70101LF | 100 | 0.358 | 0.65 | 2 |
| HM66-60220LF | 22 | 0.128 | 1.20 | 2 | HM66-70221LF | 220 | 0.820 | 0.45 | 2 |
| HM66-60270LF | 27 | 0.142 | 1.05 | 2 | HM66-801R5LF | 1.5 | 0.0081 | 10.0 | 3 |
| HM66-60330LF | 33 | 0.165 | 0.97 | 2 | HM66-802R5LF | 2.5 ± 30% | 0.0105 | 7.50 | 3 |
| HM66-60390LF | 39 | 0.210 | 0.86 | 2 | HM66-803R8LF | 3.8 | 0.013 | 6.00 | 3 |
| HM66-60470LF | 47 | 0.238 | 0.80 | 2 | HM66-805R2LF | 5.2 | 0.022 | 5.50 | 3 |
| HM66-60560LF | 56 | 0.277 | 0.73 | 2 | HM66-807R0LF | 7 | 0.027 | 4.80 | 3 |
| HM66-60680LF | 68 | 0.304 | 0.65 | 2 | HM66-80100LF | 10 | 0.035 | 4.40 | 3 |
| HM66-60820LF | 82 | 0.390 | 0.60 | 2 | HM66-80150LF | 15 | 0.050 | 3.60 | 3 |
| HM66-60101LF | 100 | 0.535 | 0.54 | 2 | HM66-80220LF | 22 | 0.073 | 2.90 | 3 |
| HM66-621R0LF | 1.0 | 0.023 | 3.50 | 4 | HM66-80330LF | 33 | 0.093 | 2.30 | 3 |
| HM66-621R5LF | 1.5 | 0.036 | 2.47 | 4 | HM66-80470LF | 47 | 0.128 | 2.10 | 3 |
| HM66-621R8LF | 1.8 | 0.036 | 2.47 | 4 | HM66-80680LF | 68 | 0.213 | 1.50 | 3 |
| HM66-703R3LF | 3.3 | 0.020 | 3.50 | 2 | HM66-80101LF | 100 | 0.304 | 1.35 | 3 |
| HM66-705R0LF | 5.0 | 0.024 | 2.90 | 2 | HM66-80151LF | 150 | 0.506 | 1.15 | 3 |
| HM66-706R2LF | 6.2 | 0.027 | 2.50 | 2 | HM66-80221LF | 220 | 0.756 | 0.92 | 3 |
| HM66-707R4LF | 7.4 | 0.031 | 2.30 | 2 | HM66-80331LF | 330 | 1.090 | 0.70 | 3 |
| HM66-708R7LF | 8.7 | 0.034 | 2.20 | 2 | HM66-80561LF | 560 | 1.696 | 0.43 | 3 |
| HM66-70100LF | 10 | 0.038 | 2.00 | 2 | HM66-80102LF | 1000 | 2.853 | 0.33 | 3 |

Notes: (1) Test conditions for case sizes 10, 15, 20, 30, 80 = 100 kHz, 0.1 V without DC current. Test conditions for case sizes 40, 50, 60, 70 = 10 kHz, 0.1 V without DC current. Inductance for case size 62 is measured at 100kHz, 1V without DC current.
(2) Rated DC current is the approximate current at which inductance will be decreased by 35% from its initial (zero DC) value or the DC current at which ΔT = 40°C, whichever is lower.

Packaging

| Standard: | Embossed Tape and Reel | |
|-----------|------------------------|--|
| | Reel: | Diameter: |
| | Capacity: | Case size 20, 62 = 3,000 Units Case size 30, 40, 50 = 2,000 Units Case size 60 = 1,500 Units Case size 10, 15, 70 = 1,000 Units Case size 80 = 800 Units |

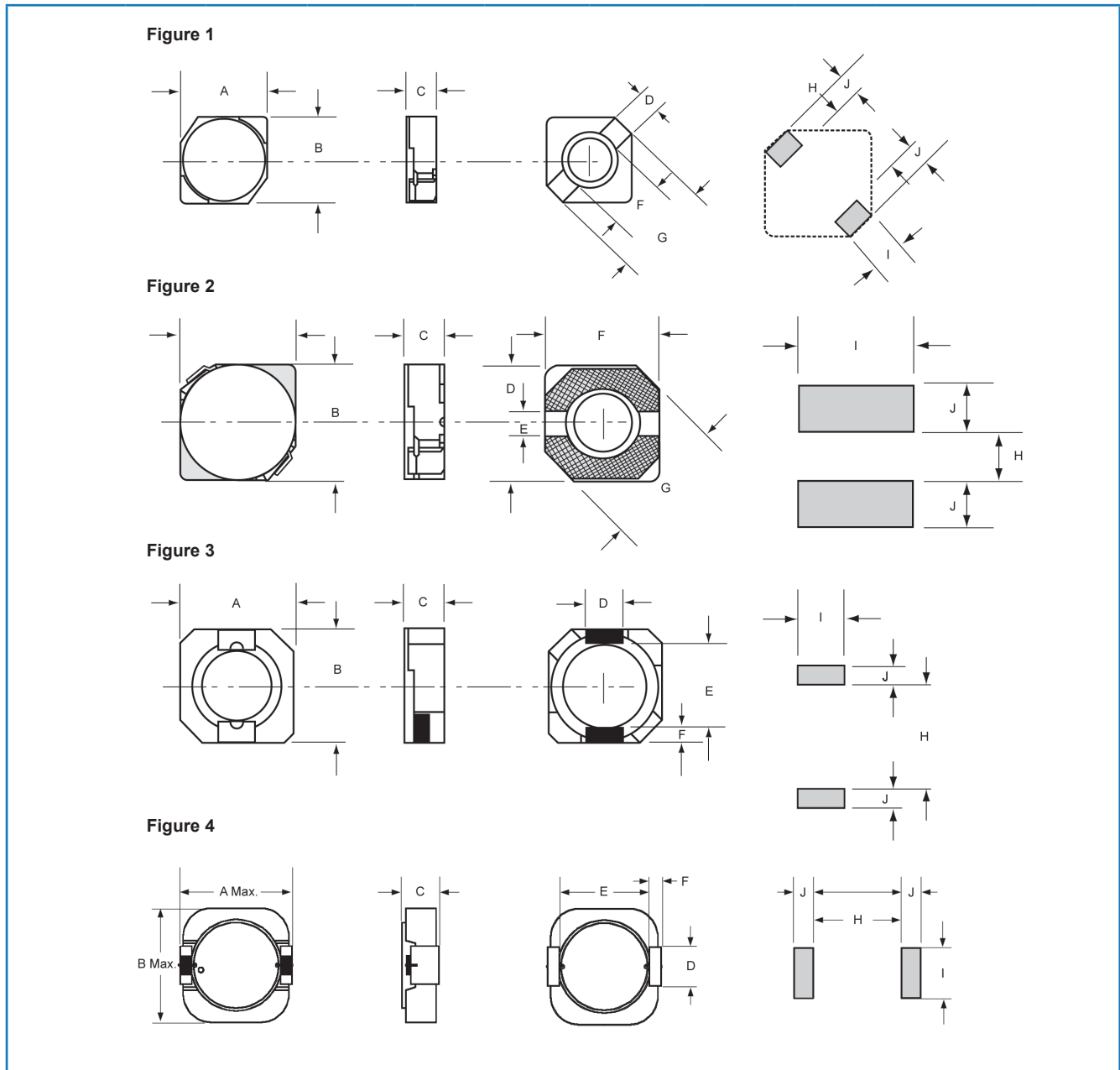
Ordering Information



General Note

TT Electronics reserves the right to make changes in product specification without notice or liability.
 All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

Outline Dimensions (mm)



| Case Size | Figure | A | B | C Max. | D | E | F | G Max. | H | I | J |
|-----------|--------|------------|------------|--------|-------------|------------|------------|--------|-----|------|------|
| 10 | 1 | 3.8 ± 0.5 | 3.8 ± 0.5 | 1.8 | 1.15 ± 0.25 | - | 2.8 ± 0.1 | 5.2 | 2.4 | 1.55 | 1.4 |
| 15 | 2 | 3.8 ± 0.5 | 3.8 ± 0.5 | 1.85 | 3.8 ± 0.3 | 1.1 ± 0.15 | 3.8 ± 0.3 | 5.5 | 1.1 | 4.5 | 1.7 |
| 20 | 2 | 4.7 ± 0.5 | 4.7 ± 0.5 | 2.1 | 4.5 ± 0.3 | 1.5 ± 0.15 | 4.5 ± 0.3 | 6.9 | 1.5 | 5.3 | 1.9 |
| 30 | 2 | 4.7 ± 0.5 | 4.7 ± 0.5 | 3.0 | 4.5 ± 0.3 | 1.5 ± 0.15 | 4.5 ± 0.3 | 6.9 | 1.5 | 5.3 | 1.9 |
| 40 | 2 | 5.7 ± 0.5 | 5.7 ± 0.5 | 2.0 | 5.5 ± 0.3 | 2.0 ± 0.15 | 5.5 ± 0.3 | 8.2 | 2.0 | 6.3 | 2.15 |
| 50 | 2 | 5.7 ± 0.5 | 5.7 ± 0.5 | 3.0 | 5.5 ± 0.3 | 2.0 ± 0.15 | 5.5 ± 0.3 | 8.2 | 2.0 | 6.3 | 2.15 |
| 60 | 2 | 6.7 ± 0.5 | 6.7 ± 0.5 | 3.0 | 6.5 ± 0.3 | 2.0 ± 0.15 | 6.5 ± 0.3 | 9.5 | 2.0 | 7.3 | 2.65 |
| 62 | 4 | 6.7 | 6.2 | 2.0 | 2.0 ± 0.15 | 5.0 ± 0.3 | 0.6 ± 0.15 | - | 4.6 | 2.6 | 1.0 |
| 70 | 2 | 6.7 ± 0.5 | 6.7 ± 0.5 | 4.0 | 6.5 ± 0.3 | 2.0 ± 0.15 | 6.5 ± 0.3 | 9.5 | 2.0 | 7.3 | 2.65 |
| 80 | 3 | 10.0 ± 0.5 | 10.2 ± 0.5 | 4.0 | 3.0 ± 0.1 | 7.7 ± 0.3 | 1.2 ± 0.15 | - | 7.3 | 3.2 | 1.7 |

General Note

TT Electronics reserves the right to make changes in product specification without notice or liability.
All information is subject to TT Electronics' own data and is considered accurate at time of going to print.