

## Electrical / Environmental

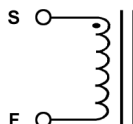
- Operating Temperature Range -40°C to +125°C
- Ambient Temperature, Maximum 85°C



# HM17

Radial Lead Inductors

## Schematic



## Specifications @ 25°C

| Inductance    |         |                              |                  |                                       |              | Inductance    |         |                              |                  |                                       |              |
|---------------|---------|------------------------------|------------------|---------------------------------------|--------------|---------------|---------|------------------------------|------------------|---------------------------------------|--------------|
| Part Number   | Lo (μH) | Tolerance <sup>(1)</sup> (%) | Test Freq. (kHz) | I <sub>rated</sub> <sup>(2)</sup> (A) | DCR (Ω) Max. | Part Number   | Lo (μH) | Tolerance <sup>(1)</sup> (%) | Test Freq. (kHz) | I <sub>rated</sub> <sup>(2)</sup> (A) | DCR (Ω) Max. |
| HM17-654220LF | 22      | ± 20%                        | 100              | 0.90                                  | 0.18         | HM17-664331LF | 330     | ± 10%                        | 1                | 0.33                                  | 1.48         |
| HM17-654270LF | 27      | ± 20%                        | 100              | 0.81                                  | 0.21         | HM17-664391LF | 390     | ± 10%                        | 1                | 0.30                                  | 1.66         |
| HM17-654330LF | 33      | ± 20%                        | 100              | 0.74                                  | 0.27         | HM17-664471LF | 470     | ± 10%                        | 1                | 0.27                                  | 1.91         |
| HM17-654390LF | 39      | ± 20%                        | 100              | 0.68                                  | 0.29         | HM17-664561LF | 560     | ± 10%                        | 1                | 0.25                                  | 2.31         |
| HM17-654470LF | 47      | ± 20%                        | 100              | 0.62                                  | 0.34         | HM17-664681LF | 680     | ± 10%                        | 1                | 0.23                                  | 2.67         |
| HM17-654560LF | 56      | ± 20%                        | 100              | 0.57                                  | 0.42         | HM17-664821LF | 820     | ± 10%                        | 1                | 0.21                                  | 3.10         |
| HM17-654680LF | 68      | ± 20%                        | 100              | 0.51                                  | 0.48         | HM17-664102LF | 1000    | ± 10%                        | 1                | 0.19                                  | 4.45         |
| HM17-654820LF | 82      | ± 20%                        | 100              | 0.47                                  | 0.55         | HM17-855100LF | 10      | ± 20%                        | 100              | 2.50                                  | 0.07         |
| HM17-654101LF | 100     | ± 10%                        | 1                | 0.42                                  | 0.68         | HM17-855120LF | 12      | ± 20%                        | 100              | 2.40                                  | 0.08         |
| HM17-654121LF | 120     | ± 10%                        | 1                | 0.39                                  | 0.77         | HM17-855150LF | 15      | ± 20%                        | 100              | 2.10                                  | 0.09         |
| HM17-654151LF | 150     | ± 10%                        | 1                | 0.35                                  | 0.95         | HM17-855180LF | 18      | ± 20%                        | 100              | 2.00                                  | 0.10         |
| HM17-654181LF | 180     | ± 10%                        | 1                | 0.32                                  | 1.15         | HM17-855220LF | 22      | ± 20%                        | 100              | 1.70                                  | 0.12         |
| HM17-654221LF | 220     | ± 10%                        | 1                | 0.29                                  | 1.30         | HM17-855270LF | 27      | ± 20%                        | 100              | 1.60                                  | 0.14         |
| HM17-654271LF | 270     | ± 10%                        | 1                | 0.26                                  | 1.55         | HM17-855330LF | 33      | ± 20%                        | 100              | 1.40                                  | 0.17         |
| HM17-654331LF | 330     | ± 10%                        | 1                | 0.23                                  | 2.18         | HM17-855390LF | 39      | ± 20%                        | 100              | 1.30                                  | 0.21         |
| HM17-654391LF | 390     | ± 10%                        | 1                | 0.21                                  | 2.47         | HM17-855470LF | 47      | ± 20%                        | 100              | 1.20                                  | 0.24         |
| HM17-654471LF | 470     | ± 10%                        | 1                | 0.20                                  | 2.92         | HM17-855560LF | 56      | ± 20%                        | 100              | 1.10                                  | 0.31         |
| HM17-654561LF | 560     | ± 10%                        | 1                | 0.18                                  | 3.97         | HM17-855680LF | 68      | ± 20%                        | 100              | 1.00                                  | 0.34         |
| HM17-654681LF | 680     | ± 10%                        | 1                | 0.16                                  | 4.57         | HM17-855820LF | 82      | ± 20%                        | 100              | 0.93                                  | 0.40         |
| HM17-654821LF | 820     | ± 10%                        | 1                | 0.15                                  | 5.28         | HM17-855101LF | 100     | ± 10%                        | 1                | 0.81                                  | 0.52         |
| HM17-654102LF | 1000    | ± 10%                        | 1                | 0.13                                  | 7.06         | HM17-855121LF | 120     | ± 10%                        | 1                | 0.76                                  | 0.59         |
| HM17-664220LF | 22      | ± 20%                        | 100              | 1.27                                  | 0.11         | HM17-855151LF | 150     | ± 10%                        | 1                | 0.67                                  | 0.71         |
| HM17-664270LF | 27      | ± 20%                        | 100              | 1.14                                  | 0.14         | HM17-855181LF | 180     | ± 10%                        | 1                | 0.62                                  | 0.89         |
| HM17-664330LF | 33      | ± 20%                        | 100              | 1.03                                  | 0.17         | HM17-855221LF | 220     | ± 10%                        | 1                | 0.54                                  | 1.04         |
| HM17-664390LF | 39      | ± 20%                        | 100              | 0.95                                  | 0.19         | HM17-855271LF | 270     | ± 10%                        | 1                | 0.49                                  | 1.28         |
| HM17-664470LF | 47      | ± 20%                        | 100              | 0.87                                  | 0.23         | HM17-855331LF | 330     | ± 10%                        | 1                | 0.44                                  | 1.47         |
| HM17-664560LF | 56      | ± 20%                        | 100              | 0.80                                  | 0.26         | HM17-855391LF | 390     | ± 10%                        | 1                | 0.41                                  | 1.67         |
| HM17-664680LF | 68      | ± 20%                        | 100              | 0.72                                  | 0.28         | HM17-855471LF | 470     | ± 10%                        | 1                | 0.38                                  | 1.95         |
| HM17-664820LF | 82      | ± 20%                        | 100              | 0.66                                  | 0.39         | HM17-855561LF | 560     | ± 10%                        | 1                | 0.35                                  | 2.83         |
| HM17-664101LF | 100     | ± 10%                        | 1                | 0.59                                  | 0.43         | HM17-855681LF | 680     | ± 10%                        | 1                | 0.32                                  | 3.25         |
| HM17-664121LF | 120     | ± 10%                        | 1                | 0.54                                  | 0.54         | HM17-855821LF | 820     | ± 10%                        | 1                | 0.31                                  | 3.82         |
| HM17-664151LF | 150     | ± 10%                        | 1                | 0.48                                  | 0.64         | HM17-855102LF | 1000    | ± 10%                        | 1                | 0.25                                  | 5.28         |
| HM17-664181LF | 180     | ± 10%                        | 1                | 0.44                                  | 0.74         | HM17-855122LF | 1200    | ± 10%                        | 1                | 0.23                                  | 6.03         |
| HM17-664221LF | 220     | ± 10%                        | 1                | 0.40                                  | 0.96         | HM17-855152LF | 1500    | ± 10%                        | 1                | 0.21                                  | 7.15         |
| HM17-664271LF | 270     | ± 10%                        | 1                | 0.36                                  | 1.12         | HM17-855182LF | 1800    | ± 10%                        | 1                | 0.20                                  | 8.26         |

## Specifications @ 25°C (Cont'd)

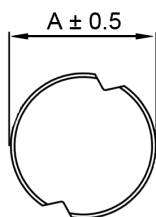
| Inductance    |         |                              |                  |                                       |              | Inductance    |         |                              |                  |                                       |              |
|---------------|---------|------------------------------|------------------|---------------------------------------|--------------|---------------|---------|------------------------------|------------------|---------------------------------------|--------------|
| Part Number   | Lo (μH) | Tolerance <sup>(1)</sup> (%) | Test Freq. (kHz) | I <sub>rated</sub> <sup>(2)</sup> (A) | DCR (Ω) Max. | Part Number   | Lo (μH) | Tolerance <sup>(1)</sup> (%) | Test Freq. (kHz) | I <sub>rated</sub> <sup>(2)</sup> (A) | DCR (Ω) Max. |
| HM17-855222LF | 2200    | ± 10%                        | 1                | 0.18                                  | 11.10        | HM17-895100LF | 10      | ± 20%                        | 100              | 2.60                                  | 0.04         |
| HM17-855272LF | 2700    | ± 10%                        | 1                | 0.16                                  | 13.10        | HM17-895120LF | 12      | ± 20%                        | 100              | 2.60                                  | 0.04         |
| HM17-855332LF | 3300    | ± 10%                        | 1                | 0.14                                  | 15.90        | HM17-895150LF | 15      | ± 20%                        | 100              | 2.10                                  | 0.05         |
| HM17-855392LF | 3900    | ± 10%                        | 1                | 0.13                                  | 18.00        | HM17-895180LF | 18      | ± 20%                        | 100              | 2.00                                  | 0.05         |
| HM17-855472LF | 4700    | ± 10%                        | 1                | 0.12                                  | 23.90        | HM17-895220LF | 22      | ± 20%                        | 100              | 1.70                                  | 0.06         |
| HM17-855562LF | 5600    | ± 10%                        | 1                | 0.11                                  | 26.80        | HM17-895270LF | 27      | ± 20%                        | 100              | 1.60                                  | 0.06         |
| HM17-855682LF | 6800    | ± 10%                        | 1                | 0.098                                 | 31.70        | HM17-895330LF | 33      | ± 20%                        | 100              | 1.40                                  | 0.07         |
| HM17-855822LF | 8200    | ± 10%                        | 1                | 0.088                                 | 46.50        | HM17-895390LF | 39      | ± 20%                        | 100              | 1.40                                  | 0.08         |
| HM17-855103LF | 10000   | ± 10%                        | 1                | 0.081                                 | 55.70        | HM17-895470LF | 47      | ± 20%                        | 100              | 1.30                                  | 0.10         |
| HM17-875100LF | 10      | ± 20%                        | 100              | 2.90                                  | 0.05         | HM17-895560LF | 56      | ± 20%                        | 100              | 1.20                                  | 0.11         |
| HM17-875120LF | 12      | ± 20%                        | 100              | 2.50                                  | 0.06         | HM17-895680LF | 68      | ± 20%                        | 100              | 1.10                                  | 0.14         |
| HM17-875150LF | 15      | ± 20%                        | 100              | 2.20                                  | 0.07         | HM17-895820LF | 82      | ± 20%                        | 100              | 1.00                                  | 0.16         |
| HM17-875180LF | 18      | ± 20%                        | 100              | 1.90                                  | 0.08         | HM17-895101LF | 100     | ± 10%                        | 1                | 0.90                                  | 0.19         |
| HM17-875220LF | 22      | ± 20%                        | 100              | 1.80                                  | 0.09         | HM17-895121LF | 120     | ± 10%                        | 1                | 0.82                                  | 0.22         |
| HM17-875270LF | 27      | ± 20%                        | 100              | 1.70                                  | 0.11         | HM17-895151LF | 150     | ± 10%                        | 1                | 0.74                                  | 0.27         |
| HM17-875330LF | 33      | ± 20%                        | 100              | 1.50                                  | 0.13         | HM17-895181LF | 180     | ± 10%                        | 1                | 0.71                                  | 0.31         |
| HM17-875390LF | 39      | ± 20%                        | 100              | 1.30                                  | 0.14         | HM17-895221LF | 220     | ± 10%                        | 1                | 0.64                                  | 0.38         |
| HM17-875470LF | 47      | ± 20%                        | 100              | 1.30                                  | 0.15         | HM17-895271LF | 270     | ± 10%                        | 1                | 0.57                                  | 0.53         |
| HM17-875560LF | 56      | ± 20%                        | 100              | 1.20                                  | 0.18         | HM17-895331LF | 330     | ± 10%                        | 1                | 0.51                                  | 0.61         |
| HM17-875680LF | 68      | ± 20%                        | 100              | 1.10                                  | 0.20         | HM17-895391LF | 390     | ± 10%                        | 1                | 0.48                                  | 0.69         |
| HM17-875820LF | 82      | ± 20%                        | 100              | 1.00                                  | 0.24         | HM17-895471LF | 470     | ± 10%                        | 1                | 0.43                                  | 0.89         |
| HM17-875101LF | 100     | ± 10%                        | 1                | 0.89                                  | 0.28         | HM17-895561LF | 560     | ± 10%                        | 1                | 0.40                                  | 1.01         |
| HM17-875121LF | 120     | ± 10%                        | 1                | 0.81                                  | 0.36         | HM17-895681LF | 680     | ± 10%                        | 1                | 0.35                                  | 1.18         |
| HM17-875151LF | 150     | ± 10%                        | 1                | 0.72                                  | 0.42         | HM17-895821LF | 820     | ± 10%                        | 1                | 0.32                                  | 1.57         |
| HM17-875181LF | 180     | ± 10%                        | 1                | 0.66                                  | 0.57         | HM17-895102LF | 1000    | ± 10%                        | 1                | 0.30                                  | 1.84         |
| HM17-875221LF | 220     | ± 10%                        | 1                | 0.57                                  | 0.63         | HM17-895122LF | 1200    | ± 10%                        | 1                | 0.27                                  | 2.10         |
| HM17-875271LF | 270     | ± 10%                        | 1                | 0.51                                  | 0.88         | HM17-895152LF | 1500    | ± 10%                        | 1                | 0.23                                  | 2.80         |
| HM17-875331LF | 330     | ± 10%                        | 1                | 0.46                                  | 1.05         | HM17-895182LF | 1800    | ± 10%                        | 1                | 0.21                                  | 3.21         |
| HM17-875391LF | 390     | ± 10%                        | 1                | 0.44                                  | 1.17         | HM17-895222LF | 2200    | ± 10%                        | 1                | 0.19                                  | 4.21         |
| HM17-875471LF | 470     | ± 10%                        | 1                | 0.41                                  | 1.34         | HM17-895272LF | 2700    | ± 10%                        | 1                | 0.17                                  | 4.94         |
| HM17-875561LF | 560     | ± 10%                        | 1                | 0.36                                  | 1.72         | HM17-895332LF | 3300    | ± 10%                        | 1                | 0.15                                  | 6.16         |
| HM17-875681LF | 680     | ± 10%                        | 1                | 0.33                                  | 1.96         | HM17-895392LF | 3900    | ± 10%                        | 1                | 0.14                                  | 6.84         |
| HM17-875821LF | 820     | ± 10%                        | 1                | 0.30                                  | 2.56         | HM17-895472LF | 4700    | ± 10%                        | 1                | 0.13                                  | 7.89         |
| HM17-875102LF | 1000    | ± 10%                        | 1                | 0.27                                  | 2.94         | HM17-895562LF | 5600    | ± 10%                        | 1                | 0.12                                  | 11.50        |
| HM17-875122LF | 1200    | ± 10%                        | 1                | 0.24                                  | 4.04         | HM17-895682LF | 6800    | ± 10%                        | 1                | 0.11                                  | 13.20        |
| HM17-875152LF | 1500    | ± 10%                        | 1                | 0.22                                  | 4.70         | HM17-895822LF | 8200    | ± 10%                        | 1                | 0.10                                  | 15.20        |
| HM17-875182LF | 1800    | ± 10%                        | 1                | 0.20                                  | 5.05         | HM17-895103LF | 10000   | ± 10%                        | 1                | 89m                                   | 22.00        |
| HM17-875222LF | 2200    | ± 10%                        | 1                | 0.18                                  | 6.25         | HM17-895123LF | 12000   | ± 10%                        | 1                | 73m                                   | 25.00        |
| HM17-875272LF | 2700    | ± 10%                        | 1                | 0.16                                  | 8.72         | HM17-895153LF | 15000   | ± 10%                        | 1                | 68m                                   | 29.10        |
| HM17-875332LF | 3300    | ± 10%                        | 1                | 0.15                                  | 10.6         | HM17-895183LF | 18000   | ± 10%                        | 1                | 66m                                   | 38.90        |
| HM17-875392LF | 3900    | ± 10%                        | 1                | 0.14                                  | 14.2         | HM17-895223LF | 22000   | ± 10%                        | 1                | 59m                                   | 44.90        |
| HM17-875472LF | 4700    | ± 10%                        | 1                | 0.12                                  | 16.7         | HM17-895273LF | 27000   | ± 10%                        | 1                | 52m                                   | 55.70        |
| HM17-875562LF | 5600    | ± 10%                        | 1                | 0.11                                  | 18.7         | HM17-895333LF | 33000   | ± 10%                        | 1                | 48m                                   | 64.20        |
| HM17-875682LF | 6800    | ± 10%                        | 1                | 0.10                                  | 21.8         | HM17-895393LF | 39000   | ± 10%                        | 1                | 42m                                   | 74.20        |
| HM17-875822LF | 8200    | ± 10%                        | 1                | 93m                                   | 28.7         | HM17-895473LF | 47000   | ± 10%                        | 1                | 38m                                   | 96.40        |
| HM17-875103LF | 10000   | ± 10%                        | 1                | 84m                                   | 33.0         |               |         |                              |                  |                                       |              |

Notes: (1) Tolerance : 10 ~ 82μH ± 20% (M), 100 ~ 10000 μH ± 10% (K).

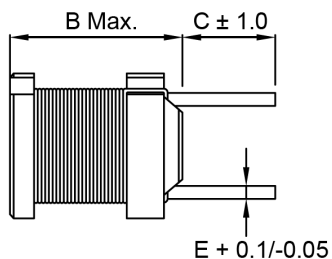
(2) I<sub>rated</sub> is the DC current at which inductance will be decreased by approximately 10% from its initial (zero DC) value.

## Outline Dimensions (mm)

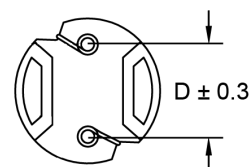
Top View



Side View



Bottom View



| Case Size | A   | B   | C   | D   | E   |
|-----------|-----|-----|-----|-----|-----|
| 654       | 6.0 | 5.0 | 4.0 | 4.0 | 0.5 |
| 664       | 6.0 | 6.5 | 4.0 | 4.0 | 0.5 |
| 855       | 7.8 | 5.5 | 5.0 | 5.0 | 0.7 |
| 875       | 7.8 | 7.5 | 5.0 | 5.0 | 0.7 |
| 895       | 7.8 | 9.5 | 5.0 | 5.0 | 0.7 |

## Packaging

**Standard:** Boxes

Capacity = 100 Units

Carton

Capacity = 6000 Units

## Ordering Information

