

1.FEATURES

RoHS compliant
 Super low resistance, ultra high current rating
 High performance (Isat) realized by metal dust core
 Frequency Range

2.APPLICATION

PDA, notebook, desktop, and server applications.
 Low profile, high current power supplies.
 DC/DC converters in distributed power systems.
 DC/DC converters for field programmable gate array.

3.PRODUCT IDENTIFICATION

YKMS 0603 -XXX □ I (f)
 ① ② ③ ④ ⑤ ⑥

| | |
|------|-------------------------------------|
| ① | Type |
| YKMS | Wire Wound SMD Type Power Inductors |

| | | |
|---|----------------------------------|---------------|
| ② | External Dimensions (L X H) (mm) | |
| | 0603 | 7.6*7.1*3.2 |
| | 0605 | 7.8*7.1*5.0 |
| | 1004 | 11.6*10.3*4.2 |
| | 1306 | 13.8*13.1*6.5 |

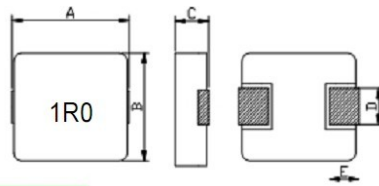
| | | |
|---------|--------------------|--|
| ③ | Nominal Inductance | |
| Example | Nominal Value | |
| R47 | 0.47uH | |
| 1R0 | 1.0uH | |
| 100 | 10uH | |

| | | |
|---|----------------------|--|
| ⑤ | Packing | |
| T | Tape Carrier Package | |

| | | |
|---|----------------------|--|
| ④ | Inductance Tolerance | |
| M | ±20% | |

| | | |
|-----|-------------------------------|--|
| ⑥ | Environmental state | |
| (f) | environment-friendly products | |

4.SHAPE AND DIMENSIONS



Unit: mm

| Series | A | B | C | D | E |
|----------|---------|---------|--------|--------|---------|
| YKMS0603 | 7.6MAX | 7.1MAX | 3.2MAX | 3.0REF | 1.6±0.6 |
| YKMS0605 | 7.8MAX | 7.1MAX | 5.0MAX | 3.0REF | 1.6±0.6 |
| YKMS1004 | 11.6MAX | 10.3MAX | 4.2MAX | 3.0REF | 1.6±0.6 |
| YKMS1306 | 13.8MAX | 13.1MAX | 6.5MAX | 3.0REF | 1.6±0.6 |

5.Electrical Characteristics

YKMS0603-Series

| Part Number | L(uH) | DCR | | Isat(A) | Irms(A) |
|--------------------|-------|------|------|---------|---------|
| | ±20% | TYP | MAX | TYP | MAX |
| YKMS0603- R47MT(f) | 0.47 | 5.0 | 6.5 | 26.0 | 14.0 |
| YKMS0603- R68MT(f) | 0.68 | 6.0 | 7.5 | 24.0 | 12.0 |
| YKMS0603- R82MT(f) | 0.82 | 7.0 | 8.5 | 22.0 | 12.0 |
| YKMS0603-1R0MT(f) | 1.0 | 8.2 | 10.0 | 20.0 | 10.0 |
| YKMS0603- 1R5MT(f) | 1.5 | 12.0 | 15.0 | 14.0 | 9.0 |
| YKMS0603- 2R2MT(f) | 2.2 | 15.0 | 18.0 | 14.0 | 8.0 |
| YKMS0603- 3R3MT(f) | 3.3 | 20.0 | 25.0 | 12.0 | 6.0 |
| YKMS0603- 4R7MT(f) | 4.7 | 36.0 | 40.0 | 10.0 | 5.0 |
| YKMS0603- 6R8MT(f) | 6.8 | 53.0 | 60.0 | 8.0 | 4.0 |
| YKMS0603- 8R2MT(f) | 8.2 | 68.0 | 75.0 | 6.0 | 3.5 |
| YKMS0603- 100MT(f) | 10 | 72.0 | 80.0 | 5.0 | 3.0 |

YKMS0605-Series

| Part Number | L(uH) | DCR | | Isat(A) | Irms(A) |
|--------------------|-------|------|------|---------|---------|
| | ±20% | TYP | MAX | TYP | MAX |
| YKMS0605- R82MT(f) | 0.82 | 5.0 | 8.0 | 22.0 | 15.0 |
| YKMS0605-1R0MT(f) | 1.0 | 5.0 | 6.5 | 20.0 | 14.5 |
| YKMS0605-1R5MT(f) | 1.5 | 6.5 | 8.0 | 18.0 | 14.0 |
| YKMS0605- 2R2MT(f) | 2.2 | 13.0 | 16.0 | 14.0 | 12.0 |
| YKMS0605- 3R3MT(f) | 3.3 | 15.0 | 18.0 | 13.0 | 10.0 |
| YKMS0605- 4R7MT(f) | 4.7 | 30.0 | 35.0 | 12.0 | 7.5 |
| YKMS0605- 6R8MT(f) | 6.8 | 45.0 | 50.0 | 10.0 | 6.0 |
| YKMS0605- 8R2MT(f) | 8.2 | 55.0 | 60.0 | 8.0 | 4.5 |
| YKMS0605- 100MT(f) | 10 | 55.0 | 65.0 | 7.0 | 4.0 |
| YKMS0605- 120MT(f) | 12 | 60.0 | 68.0 | 5.0 | 3.5 |
| YKMS0605- 150MT(f) | 15 | 64.0 | 70.0 | 4.5 | 3.5 |

YKMS1001-Series

| Part Number | L(uH) | DCR | | Isat(A) | Irms(A) |
|---------------------|-------|------|------|---------|---------|
| | ±20% | TYP | MAX | TYP | MAX |
| YKMS1004 – R36MT(f) | 0.36 | 1.5 | 2.0 | 35.0 | 20.0 |
| YKMS1004 – R47MT(f) | 0.47 | 1.7 | 2.2 | 35.0 | 16.0 |
| YKMS1004 – R68MT(f) | 0.68 | 3.2 | 4.2 | 30.0 | 14.0 |
| YKMS1004 – 1R0MT(f) | 1.0 | 3.8 | 4.9 | 25.0 | 13.0 |
| YKMS1004 – 1R5MT(f) | 1.5 | 4.5 | 5.5 | 22.0 | 10.0 |
| YKMS1004 – 2R2MT(f) | 2.2 | 6.7 | 8.7 | 19.0 | 9.0 |
| YKMS1004 – 3R3MT(f) | 3.3 | 15.6 | 18.0 | 17.0 | 8.0 |
| YKMS1004 – 4R7MT(f) | 4.7 | 19.0 | 22.0 | 15.0 | 7.0 |
| YKMS1004 – 6R8MT(f) | 6.8 | 20.0 | 25.0 | 12.0 | 6.0 |
| YKMS1004 – 8R2MT(f) | 8.2 | 25.0 | 30.0 | 10.0 | 5.5 |
| YKMS1004 – 100MT(f) | 10 | 30.0 | 35.0 | 8.0 | 5.0 |

YKMS1306-Series

| Part Number | L(uH) | DCR | | Isat(A) | Irms(A) |
|--------------------|-------|------|------|---------|---------|
| | ±20% | TYP | MAX | TYP | MAX |
| YKMS1306 –R47MT(f) | 0.47 | 1.6 | 2.5 | 40.0 | 25.0 |
| YKMS1306 –R68MT(f) | 0.68 | 1.6 | 2.5 | 40.0 | 22.0 |
| YKMS1306 –1R0MT(f) | 1.0 | 2.3 | 3.0 | 36.0 | 20.0 |
| YKMS1306 –1R5MT(f) | 1.5 | 2.8 | 4.0 | 35.0 | 18.0 |
| YKMS1306 –2R2MT(f) | 2.2 | 5.2 | 8.0 | 30.0 | 16.0 |
| YKMS1306 –3R3MT(f) | 3.3 | 7.2 | 10.0 | 25.0 | 12.0 |
| YKMS1306 –4R7MT(f) | 4.7 | 8.5 | 11.0 | 22.0 | 10.0 |
| YKMS1306 –5R6MT(f) | 5.6 | 10.5 | 13.0 | 20.0 | 9.0 |
| YKMS1306 –6R8MT(f) | 6.8 | 11.0 | 15.0 | 16.0 | 8.0 |
| YKMS1306 –8R2MT(f) | 8.2 | 15.0 | 20.0 | 13.0 | 6.0 |
| YKMS1306 –100MT(f) | 10 | 20.0 | 26.0 | 10.0 | 5.0 |

6.NOTES

- 1.Test Frequency:100KHZ/1.0V;
- 2.Irms:DC current (A) that will cause an approximate ΔT of 40°C;
- 3.Isat:DC current (A) that will cause Lo to drop approximately 30% typ;