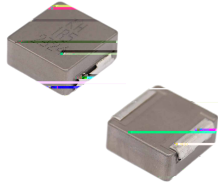
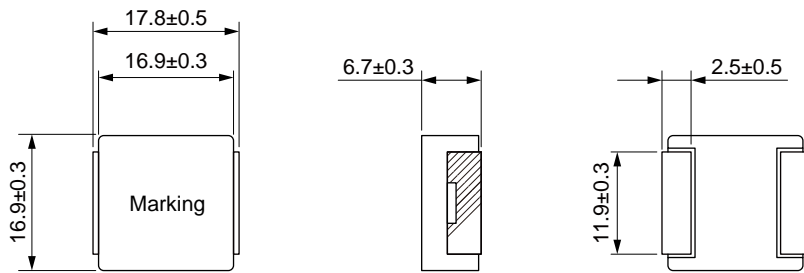


SMD Low Profile High Current Molded Inductor Size 1870

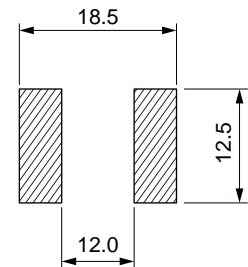


- Shielded construction
 - Capable of corresponding high frequency .
 - Low loss realized with low DCR.
 - High performance (Isat) realized by metal dust core.
 - Ultra low buzz noise, due to composite construction.
 - 100% Lead(Pb)-Free and RoHS compliant.
 - AEC-Q200 qualified
 - Operating temperature: -55 to +155 °C(including self-temperature rise)
 - Quantity: 200PCS
-
- Noise filter for various drive circuitry requiring high temperature operation and peak current handling capability
 - Boost-Converter
 - Buck-Converter DC/DC

Dimensions: [mm]



Land Pattern: [mm]



Electrical Properties:

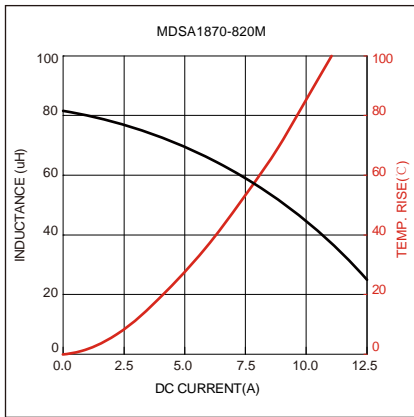
| Part No | Inductance @ 100KHz/1V | Tolerance | Temperature Rise Current Typ. (A) | Current Typ. (A) | DC Resistance Typ. | DC Resistance Max. |
|---------------|------------------------|-----------|-----------------------------------|------------------|--------------------|--------------------|
| MDSA1870-1R0M | 1.00 | ±20% | 45.0 | 48.0 | 1.20 | 1.40 |
| MDSA1870-1R5M | 1.50 | ±20% | 38.0 | 45.0 | 1.60 | 1.90 |
| MDSA1870-2R2M | 2.20 | ±20% | 31.0 | 34.0 | 2.00 | 2.50 |
| MDSA1870-3R3M | 3.30 | ±20% | 29.0 | 31.0 | 3.00 | 3.80 |
| MDSA1870-4R7M | 4.70 | ±20% | 27.0 | 28.0 | 4.00 | 5.00 |
| MDSA1870-6R8M | 6.80 | ±20% | 23.0 | 24.0 | 6.50 | 7.80 |
| MDSA1870-100M | 10.0 | ±20% | 20.0 | 21.0 | 10.0 | 11.5 |
| MDSA1870-150M | 15.0 | ±20% | 15.0 | 15.0 | 13.5 | 16.5 |
| MDSA1870-220M | 22.0 | ±20% | 13.0 | 13.0 | 21.5 | 25.0 |
| MDSA1870-330M | 33.0 | ±20% | 11.5 | 11.5 | 33.0 | 38.0 |
| MDSA1870-470M | 47.0 | ±20% | 9.0 | 9.0 | 41.0 | 48.0 |
| MDSA1870-680M | 68.0 | ±20% | 7.8 | 8.1 | 68.0 | 78.0 |
| MDSA1870-820M | 82.0 | ±20% | 6.3 | 7.8 | 71.0 | 85.0 |

Saturation Current will cause L to drop approximately 30%

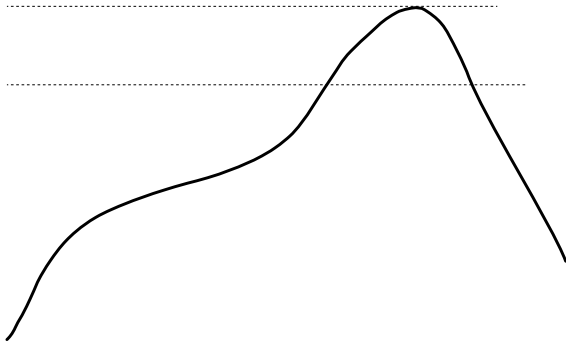
Temperature Rise Current: The actual value of DC current when the temperature rise is $\Delta T=40^{\circ}\text{C}$

Typical Electrical Characteristics:

Typical Electrical Characteristics:



Soldering Reflow:



Preheat condition: 150 ~200°C / 60~120 sec.

Allowed time above 217°C: 60~90 sec.

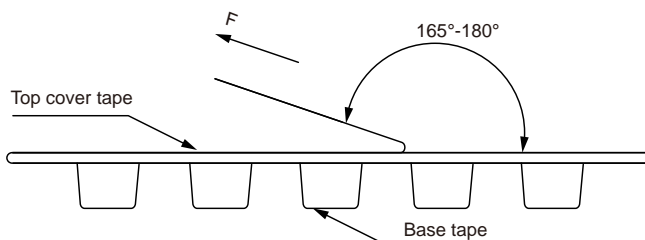
Max temperature: 260°C.

Allowed Reflow time: 2x max.

Packaging Information:

Tape Dimension :

Peel force of top cover tape:

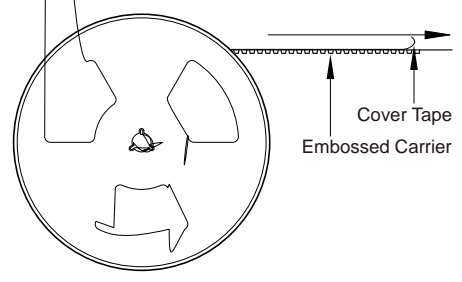


The peel force of top cover tape shall be between 0.1 to 1.3 N

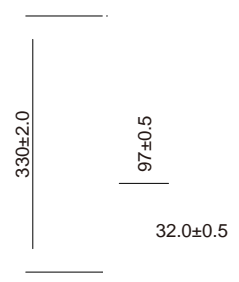
Product Marking:

| | |
|---------|--------------------------|
| Marking | KH+Printing (Inductance) |
|---------|--------------------------|

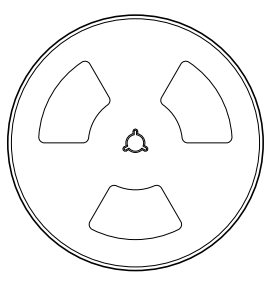
Reel Dimension: [mm]



2.2±0.5



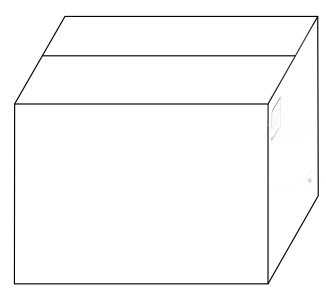
Packaging Quantity:



200 Pcs/Reel



2 Reel /Inner box(400 Pcs)



2 Inner box/Carton box(800 Pcs)

Cautions and Warnings:

- The storage period is within 12 months after the completion of production. Be sure to follow the storage conditions (temperature: -5 to 35°C, humidity: 75% RH Max).If the storage period elapses, the soldering of the terminal electrodes may deteriorate.The warranty period is one year.

-
-
-
-
-
-
-