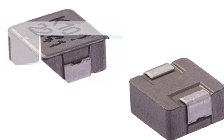


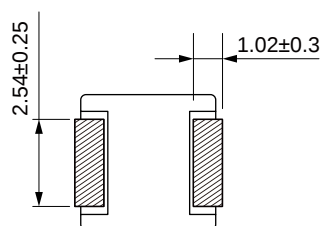
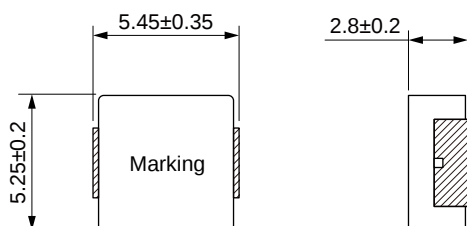
## SMD Low Profile High Current Molded Inductor Size 5030



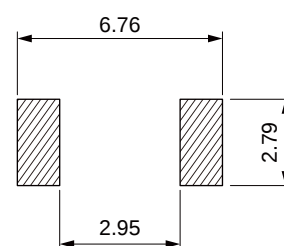
- High performance realized by metal dust core and hot pressing process.
- Ultra low buzz noise, due to composite construction.
- The wide pad design provides excellent anti-vibration capability.
- AEC-Q200 qualified.
- Operating temperature: -55 to +155 °C (including self-temperature rise)
- Quantity: 2000PCS

- Thermal management products, such as water pumps and valves
- Headlamps, tail lamps and interior lighting
- HVAC

### Dimensions: [mm]



### Land Pattern: [mm]



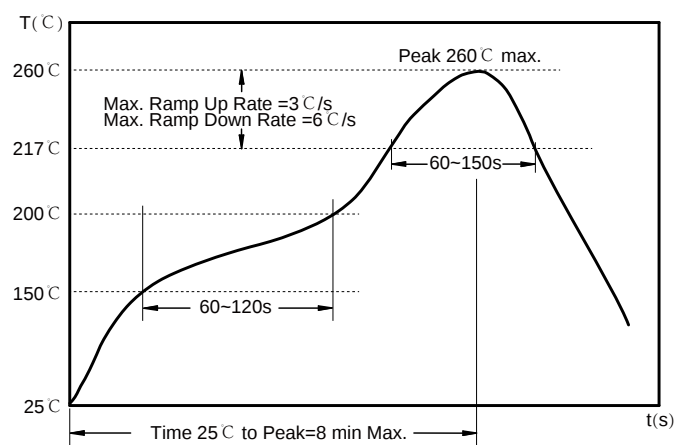
### Electrical Properties:

| Part No        | Inductance<br>@ 100KHz/1V | Tolerance | Temperature<br>Rise Current<br>Typ. | Temperature<br>Rise Current<br>Max. | Current<br>Typ. | Current<br>Max. | DC<br>Resistance<br>Max. |
|----------------|---------------------------|-----------|-------------------------------------|-------------------------------------|-----------------|-----------------|--------------------------|
| MDA5030HT-R33M | 0.33                      | ±20%      | 16.7                                | 15.0                                | 11.2            | 9.6             | 5.00                     |
| MDA5030HT-R68M | 0.68                      | ±20%      | 11.3                                | 10.2                                | 11.7            | 10.0            | 9.74                     |
| MDA5030HT-1R0M | 1.00                      | ±20%      | 10.8                                | 9.7                                 | 8.0             | 6.5             | 11.5                     |
| MDA5030HT-1R5M | 1.50                      | ±20%      | 8.2                                 | 7.4                                 | 7.1             | 5.9             | 17.7                     |
| MDA5030HT-2R2M | 2.20                      | ±20%      | 7.1                                 | 6.4                                 | 6.3             | 5.1             | 23.0                     |
| MDA5030HT-3R3M | 3.30                      | ±20%      | 5.5                                 | 5.0                                 | 5.5             | 4.7             | 38.0                     |
| MDA5030HT-4R7M | 4.70                      | ±20%      | 4.4                                 | 3.9                                 | 4.5             | 3.9             | 59.0                     |
| MDA5030HT-6R8M | 6.80                      | ±20%      | 3.5                                 | 3.1                                 | 3.5             | 3.0             | 92.0                     |
| MDA5030HT-100M | 10.0                      | ±20%      | 2.8                                 | 2.5                                 | 2.35            | 2.0             | 129.5                    |

Saturation Current will cause L to drop approximately 20%.

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

Soldering Reflow:



Preheat condition:  $150 \sim 200^{\circ}\text{C} / 60 \sim 120 \text{ sec.}$   
Allowed time above  $217^{\circ}\text{C}$ : 60-150 sec.  
Max temperature:  $260^{\circ}\text{C}$ .  
  
Allowed Reflow time: 2x max.

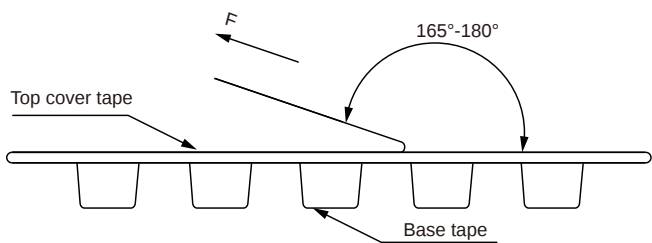
Packaging Information:

Tape Dimension:



| Series    | A0<br>(mm)     | B0<br>(mm)     | D<br>(mm)     | P0<br>(mm)    | P1<br>(mm)    | W<br>(mm)      | K0<br>(mm)    | E<br>(mm)      | T<br>(mm)       |
|-----------|----------------|----------------|---------------|---------------|---------------|----------------|---------------|----------------|-----------------|
| MDA5030HT | $5.75 \pm 0.1$ | $6.05 \pm 0.1$ | $1.5 \pm 0.1$ | $4.0 \pm 0.1$ | $8.0 \pm 0.1$ | $12.0 \pm 0.3$ | $3.6 \pm 0.1$ | $1.75 \pm 0.1$ | $0.35 \pm 0.05$ |

Peel force of top cover tape:

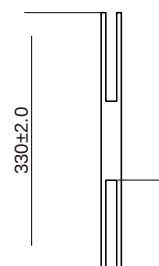
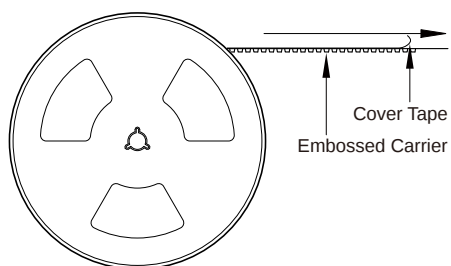


The peel force of top cover tape shall be between 0.1 to 1.3 N

Product Marking:

|         |                                |
|---------|--------------------------------|
| Marking | K+Printing (Inductance+period) |
|---------|--------------------------------|

Reel Dimension: [mm]



Packaging Quantity: