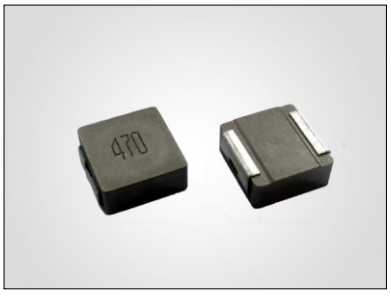
# SMD High Current Power Inductor - HI1770 Series

Meisongbei




## Features

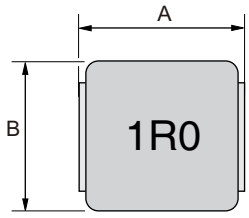
- Shielded Construction
- Core Material: Metal alloy powder
- Low core loss
- Ultra low buzz noise
- RoHS, Halogen Free and REACH compliance

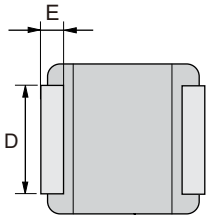
## General Specifications

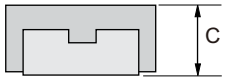
- Storage temp range: -55°C to +125°C
- Operating temp range: -55°C to +125°C
- Moisture Sensitivity Level(MSL): 1

RoHS COMPLIANT | REACH COMPLIANT | Halogen Free

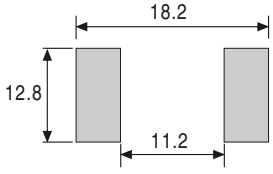
## Shape and Dimensions (Unit:mm)




Recommended Layout



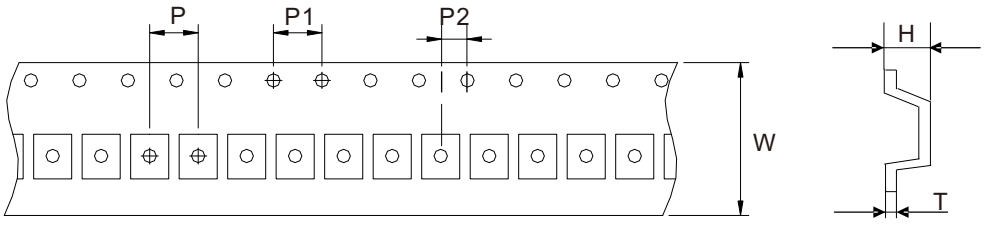

| Type | A | B | C | D | E |
|---|---|---|---|---|---|
| HI1770 | 17.15±0.35 | 17.15Max | 7.0Max | 12.0±0.3 | 2.5±0.5 |

## Electrical Characteristics For HI1770 Series @ 25°C

| Part Number | Inductance (μH) ±20% | DCR (mΩ) Max. | Isat (A) Typ. | Irms (A) Typ. |
|---|---|---|---|---|
| HI1770-2R2M | 2.2 | 2.5 | 34 | 29 |
| HI1770-3R3M | 3.3 | 3.95 | 30 | 24 |
| HI1770-4R7M | 4.7 | 4.75 | 24 | 21 |
| HI1770-6R8M | 6.8 | 7.5 | 22 | 17 |
| HI1770-8R2M | 8.2 | 8.7 | 20 | 13 |
| HI1770-100M | 10 | 9.9 | 19 | 12 |
| HI1770-150M | 15 | 17 | 14.5 | 11 |
| HI1770-220M | 22 | 23 | 11.5 | 8.5 |
| HI1770-330M | 33 | 37 | 10 | 8 |
| HI1770-470M | 47 | 47 | 7.5 | 6 |
| HI1770-680M | 68 | 85 | 6.5 | 5.2 |
| HI1770-101M | 100 | 130 | 5 | 3.7 |

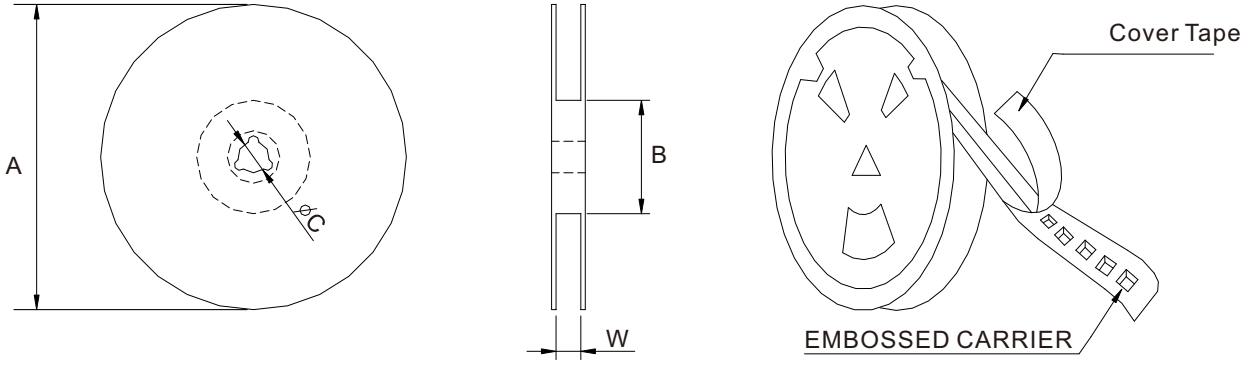
- Inductance tested at 100kHz, 1.0Vrms, 0.0Adc
- Heat Rating Current (Irms): Current that cause the temperature 40°C rise from 25°C
- Saturation Current (Isat): DC current at which the inductance drops 30% from its value without current

## Tape & Reel Specifications:




Unit: mm

| Type | Dimension | W | P | P1 | P2 | H | T |
|---|---|---|---|---|---|---|---|
| | Tolerance | ±0.3 | ±0.1 | ±0.1 | ±0.1 | ±0.15 | ±0.05 |
| HI1770 | | 32.0 | 24.0 | 4.0 | 2.0 | 7.30 | 0.50 |




Unit: mm

| Type | Dimension | QTY Per Reel | A | B | C | W |
|---|---|---|---|---|---|---|
| | Tolerance | PCS | ±2.0 | ±0.5 | ±0.5 | ±0.5 |
| HI1770 | | 200 | 330 | 97 | 13 | 32.8 |