

# SMD Power Inductor

## Fixed Inductor for Surface Mounting

## SPH17070 Series

### Construction

- Metal alloy powder
- Shielded construction



### Features

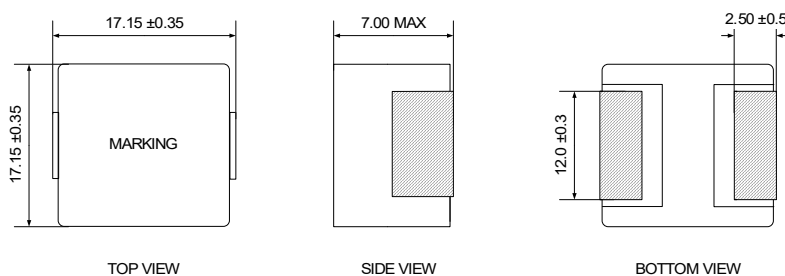
- Qualified to AEC-Q200
- Operating temperature -50 ~ +125°C (Including self temperature)
- Solder reflow temperature 260°C peak
- Low buzz noise
- High saturation current
- Suitable for lead-free reflow soldering



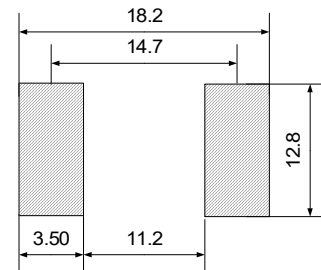
### Applications

- Automotive / Noise filtering and filter chokes
- DC/DC converters
- Portable gaming devices / personal navigation systems
- multimedia devices
- Portable and devices

### Dimensions (Unit:mm)



### Recommended Land Pattern (Unit:mm)



### Electrical Characteristics

| Ordering code | Inductance(uH) | DCR(mΩ,MAX) | SRF(MHz,TYP) | Isat*1(A,TYP) | Irms*2(A,TYP) | Marking |
|---------------|----------------|-------------|--------------|---------------|---------------|---------|
| SPH17070-2R2M | 2.20±20%       | 2.50        | 19.0         | 34.0          | 29.0          | 2R2     |
| SPH17070-3R3M | 3.30±20%       | 3.95        | 16.0         | 30.0          | 24.0          | 3R3     |
| SPH17070-4R7M | 4.70±20%       | 4.75        | 13.0         | 24.0          | 21.0          | 4R7     |
| SPH17070-6R8M | 6.80±20%       | 7.50        | 10.0         | 22.0          | 17.0          | 6R8     |
| SPH17070-8R2M | 8.20±20%       | 8.70        | 9.00         | 20.0          | 13.0          | 8R2     |

#### ※Test Equipment

\*Inductance : MICROTTEST 6632 (100kHz, 1.0V)

\*DCR Meter : ABM3245 (20mΩ~2MΩ)

\*Bias Current : MICROTTEST 6632 + 6240

\*SRF : Agilent HP8753ES

\*Specifications subject to change without notice. Please check our website for latest information.

#### \*Notes

\*1.Isat : DC current (A) that will cause L0 to drop approximately 30%

\*2.Irms : DC current (A) that will cause an approximate ΔT of 40°C

Revised 01/02/25

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|---------------|----------------|-------------|--------------|---------------|---------------|---------|
| SPH17070-100M | 10.0±20%       | 9.90        | 8.00         | 19.0          | 12.0          | 100     |
| SPH17070-150M | 15.0±20%       | 17.0        | 6.80         | 14.5          | 11.0          | 150     |
| SPH17070-220M | 22.0±20%       | 23.0        | 5.50         | 11.5          | 8.50          | 220     |
| SPH17070-330M | 33.0±20%       | 37.0        | 4.00         | 10.0          | 8.00          | 330     |
| SPH17070-470M | 47.0±20%       | 47.0        | 3.30         | 7.50          | 6.00          | 470     |
| SPH17070-680M | 68.0±20%       | 85.0        | 2.50         | 6.50          | 5.20          | 680     |
| SPH17070-100M | 100.0±20%      | 130.0       | 2.20         | 5.00          | 3.70          | 101     |

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