

# SMD High Current Inductors

Fixed Inductor for Surface Mounting

SPH10040

## SMD Shielded type

UNIT : mm

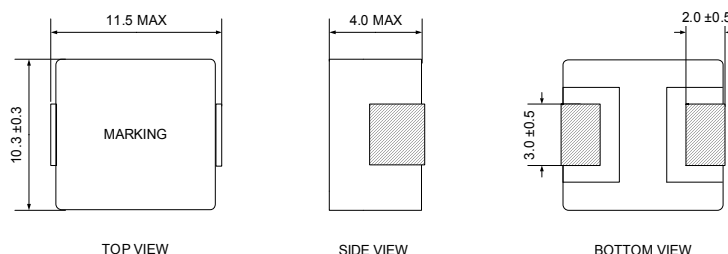
### TYPE SPH10040

For Reflow Soldering

Frequency Range: 1kHz ~5MHz

Inductance Range: 0.47 ~ 47uH

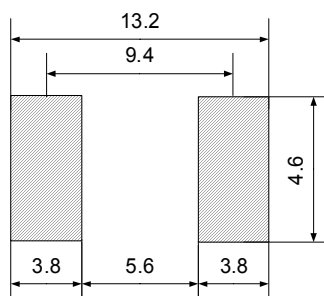
### Dimensions



### Features

- \*Low profile (4.0mm high)
- \*Suitable for reflow soldering
- \*Available on tape and reel for automatic insertion
- \*Handles high transient current spikes without saturation
- \*Ultra low buzz noise, due to composite construction
- \*Pass the AEC-Q200 Certification Test

### Recommended PCB Pattern



## Electrical Characteristics

| Ordering code | Inductance range (μH) | DCR(mΩ,MAX) | Rated current (A,max) | Temperature rise current (A,max) | Marking |
|---------------|-----------------------|-------------|-----------------------|----------------------------------|---------|
| SPH10040-R47M | 0.47±20%              | 1.7         | 40.0                  | 30.0                             | R47     |
| SPH10040-R56M | 0.56±20%              | 2.0         | 33.0                  | 25.0                             | R56     |
| SPH10040-R68M | 0.68±20%              | 2.4         | 30.0                  | 23.0                             | R68     |
| SPH10040-1R0M | 1.0±20%               | 3.3         | 28.0                  | 19.0                             | 1R0     |
| SPH10040-1R5M | 1.5±20%               | 4.2         | 24.0                  | 16.0                             | 1R5     |
| SPH10040-2R2M | 2.2±20%               | 7.0         | 16.5                  | 12.0                             | 2R2     |
| SPH10040-3R3M | 3.3±20%               | 11.8        | 16.0                  | 11.0                             | 3R3     |
| SPH10040-4R7M | 4.7±20%               | 20.0        | 13.0                  | 9.0                              | 4R7     |
| SPH10040-6R8M | 6.8±20%               | 25.0        | 12.0                  | 8.5                              | 6R8     |
| SPH10040-8R2M | 8.2±20%               | 27.0        | 9.0                   | 8.0                              | 8R2     |
| SPH10040-100M | 10±20%                | 30.0        | 8.5                   | 7.8                              | 100     |
| SPH10040-150M | 15±20%                | 45.0        | 7.0                   | 6.5                              | 150     |
| SPH10040-220M | 22±20%                | 66.0        | 5.5                   | 5.0                              | 220     |
| SPH10040-330M | 33±20%                | 92.0        | 4.8                   | 4.4                              | 330     |
| SPH10040-470M | 47±20%                | 145.0       | 3.5                   | 3.3                              | 470     |

## Standard Parts selection Guide

\*Inductance : Agilent 4284A (100kHz, 1.0V)

\*DCR Meter : ABM3245 (20mΩ~2MΩ)

\*Bias Current : Agilent 4285A + Agilent 42841A

\*Temperature rise current : DC current that causes the temperature rise ( $\Delta T = 40^{\circ}\text{C}$ ) from  $25^{\circ}\text{C}$  ambient.

\*Inductance drop = 30% at rated current / criterion(measure of time) : within 3 seconds

Note: can purchase customizing type, please contact us.