

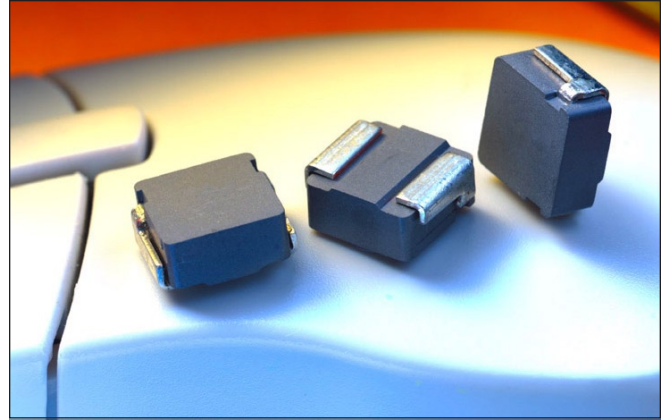
### TYPE FDH1040 / FDH1040B

**Inductance Range:** 0.36 - 0.56 $\mu$ H

**Frequency Range:** 0.1 - 5MHz

### Description

The TOKO FDH1040 / FDH1040B Series is a compact, high-current surface mount fixed inductor with a maximum DC current rating of 24 Amps. Manufactured with a proprietary iron powder composition and process, the product is specifically designed for high current, space constrained DC-DC converter applications in portable computing, point-of-load modules, and computer peripherals.

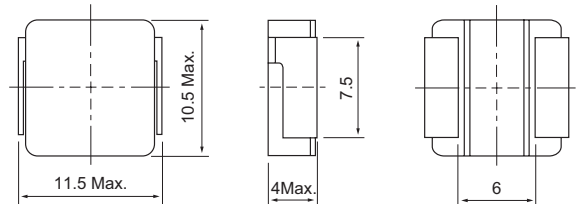


### Features

- Compact size: 11.5mm x 10.5mm
- Low profile: 4.0mm maximum
- High DC current: 24.0A at 0.36 $\mu$ H
- Magnetically shielded
- Low DC resistance
- Low audible noise
- Reflow solderable
- Packaged on 500 piece reels
- Lead-free terminations

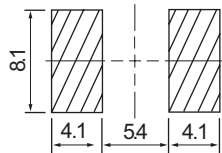
### Dimensions

#### FDH1040

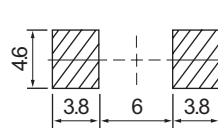


### Recommended Patterns:

#### FDH1040

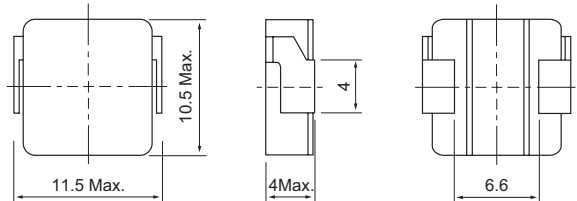


#### FDH1040B



Unit: mm

#### FDH1040B



Unit: mm

## STANDARD PARTS SELECTION GUIDE

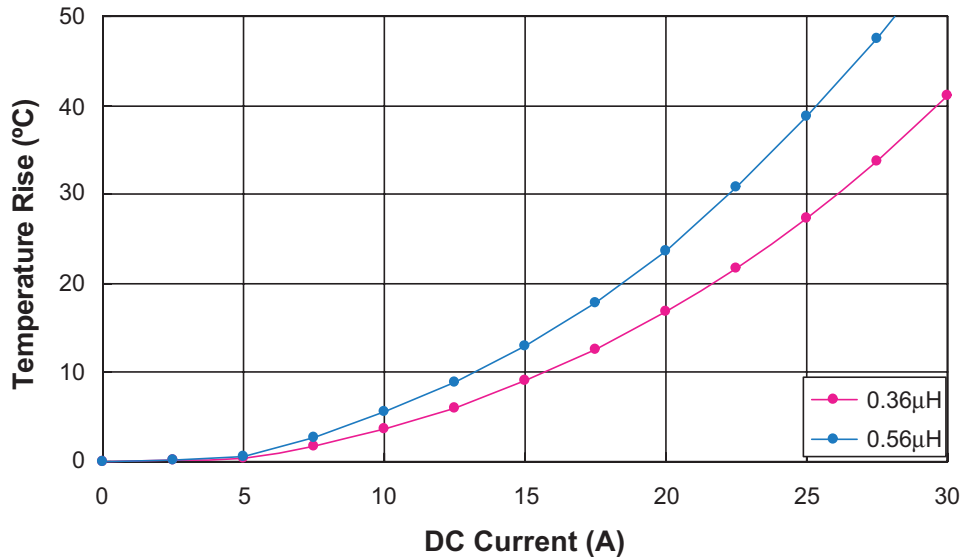
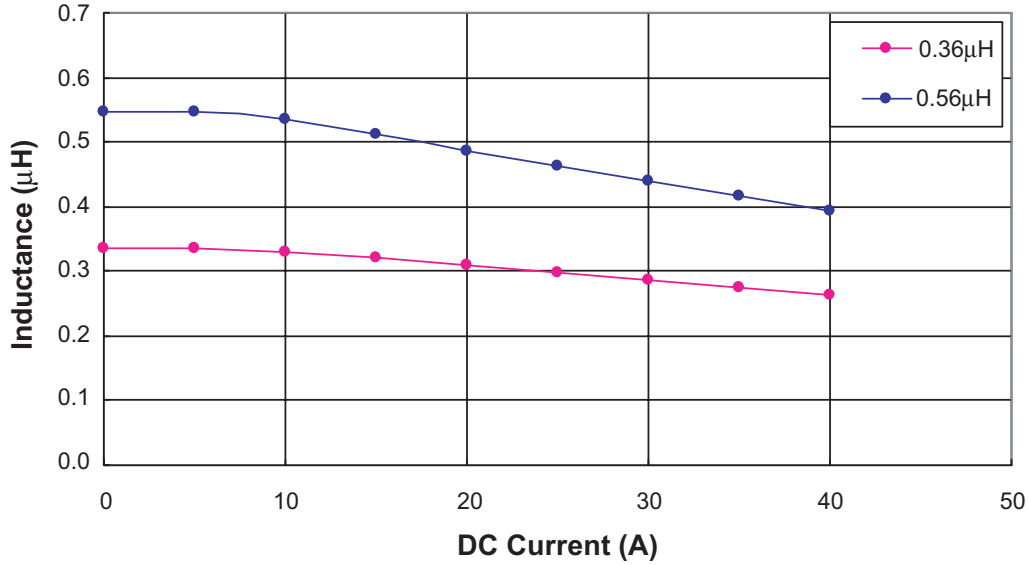
- (1) Inductance is measured by LCR-meter 4284A (Agilent) or equivalent.
- (2) DC resistance is measured by Digital Multimeter 34420A (Agilent) or equivalent.
- (3) Maximum allowable DC current is that which causes a 20% inductance reduction from the initial value, or coil temperature to rise by 40°C, whichever is smaller. (Reference ambient temperature 20°C).

### TYPE FDH1040 / FDH1040B

| TOKO Part Number | Inductance <sup>(1)</sup> ( $\mu$ H) | Tolerance (%) | Test Freq. (kHz) | DC <sup>(2)</sup> Resistance (m $\Omega$ ) max. | Inductance <sup>(3)</sup> Decrease Current [-20%] (A) max. | Temperature <sup>(3)</sup> Rise Current [+40°C] (A) max. | Absolute Max. Voltage (V) |
|------------------|--------------------------------------|---------------|------------------|---|--|--|---------------------------|
| FDH1040-R36M=P3  | 0.36                                 | $\pm$ 20      | 100              | 1.4   | 28.0   | 24.0   | 30                        |
| FDH1040B-R36M=P3 | 0.36                                 | $\pm$ 20      | 100              | 1.4   | 28.0   | 24.0   | 30                        |
| FDH1040-R56M=P3  | 0.56                                 | $\pm$ 20      | 100              | 1.9   | 22.0   | 20.0   | 30                        |
| FDH1040B-R56M=P3 | 0.56                                 | $\pm$ 20      | 100              | 1.9   | 22.0   | 20.0   | 30                        |

Note: =P3 is added to each part number to indicate tape and reel packaging.

### TYPICAL CHARACTERISTICS



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