

## IRON POWDER SURFACE MOUNT FIXED INDUCTOR

### TYPE FDV0630

**Inductance Range:** 0.20 - 4.7 $\mu$ H

**Frequency Range:** 0.1 - 5MHz

### Description

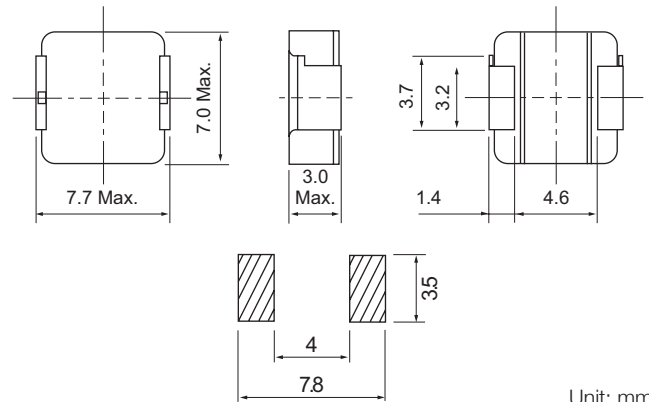
The TOKO FDV0630 Series is a compact, high-current surface mount fixed inductor with a maximum DC current rating of 16 Amps. Manufactured with a proprietary iron powder composition and process, the product is specifically designed for high current, space constrained DC-DC converter applications in portable computing, point-of-load modules, and computer peripherals.



### Features

- Compact size: 7.7mm x 7.0mm
- Low profile: 3.0mm maximum
- High DC current: 16.3A at 0.20 $\mu$ H
- Magnetically shielded
- Low DC resistance
- Low audible noise
- Reflow solderable
- Packaged on 1000 piece reels
- Lead-free terminations

### Dimensions & Recommended Patterns:



Unit: mm

### STANDARD PARTS SELECTION GUIDE

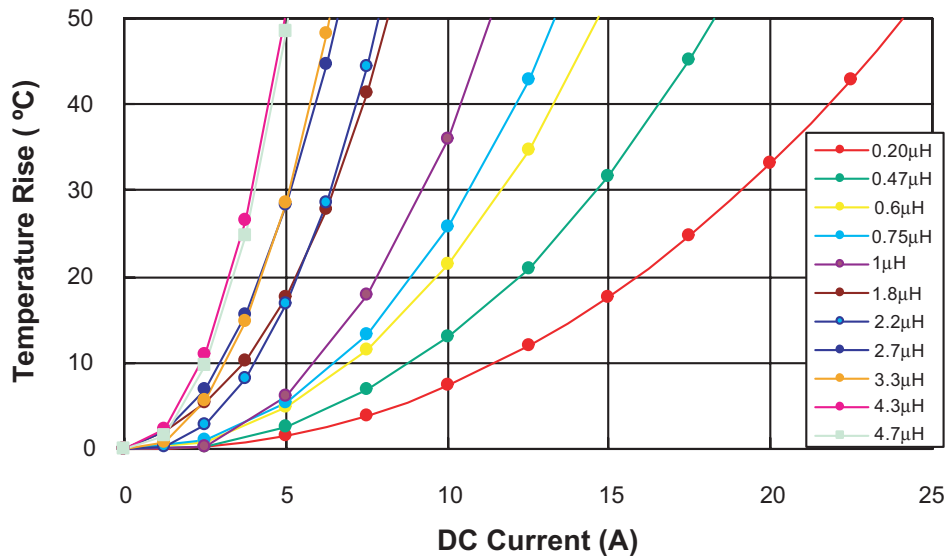
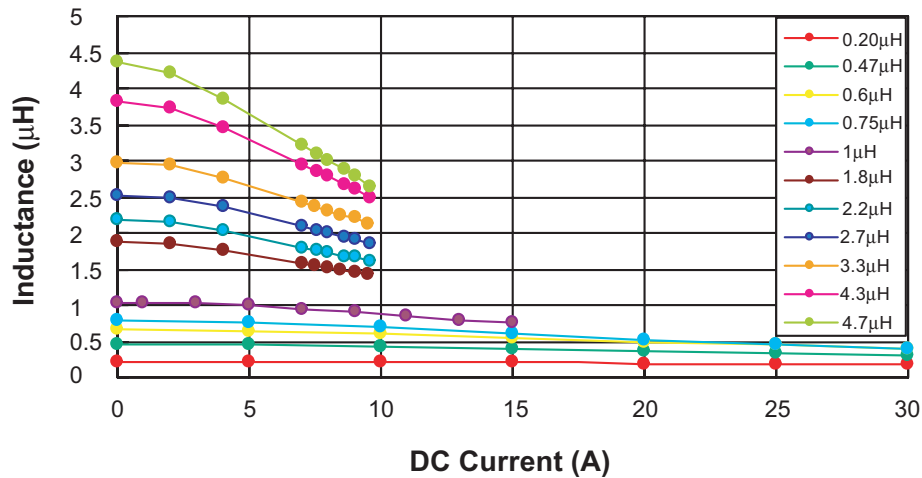
- (1) Inductance is measured by LCR-meter 4284A (Agilent) or equivalent.
- (2) DC resistance is measured by Digital Multimeter 34420A (Agilent) or equivalent.
- (3) Maximum allowable DC current is that which causes a 20% inductance reduction from the initial value, or coil temperature to rise by 40°C,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

### TYPE FDV0630

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)
FDV0630-R20M=P3	0.20	$\pm$ 20	100	2.4	19.0	16.3	30
FDV0630-R47M=P3	0.47	$\pm$ 20	100	4.6	16.0	11.5	30
FDV0630-R60M=P3	0.60	$\pm$ 20	100	6.5	13.5	10.0	30
FDV0630-R75M=P3	0.75	$\pm$ 20	100	7.5	10.0	8.9	30
FDV0630-1R0M=P3	1.0	$\pm$ 20	100	10.0	9.1	7.7	30
FDV0630-1R8M=P3	1.8	$\pm$ 20	100	18.0	6.6	5.7	30
FDV0630-2R2M=P3	2.2	$\pm$ 20	100	21.0	6.4	5.3	30
FDV0630-2R7M=P3	2.7	$\pm$ 20	100	27.0	5.4	4.4	30
FDV0630-3R3M=P3	3.3	$\pm$ 20	100	31.0	5.2	4.3	30
FDV0630-4R3M=P3	4.3	$\pm$ 20	100	45.0	4.5	3.4	30
FDV0630-4R7M=P3	4.7	$\pm$ 20	100	49.0	4.2	3.3	30

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

TYPICAL CHARACTERISTICS



The information furnished by TOKO, Inc. is believed to be accurate and reliable. However, TOKO reserves the right to make changes or improvements in the design, specification or manufacture of its products without further notice. TOKO does not assume any liability arising from the application or use of any product or circuit described herein, nor for any infringements of patents or other rights of third parties which may result from the use of its products. No license is granted by implication or otherwise under any patent or patent rights of TOKO, Inc.