

TYPE FDU1250

Inductance Range: 0.50 - 1.50 μ H

Frequency Range: 0.1 - 5MHz

Description

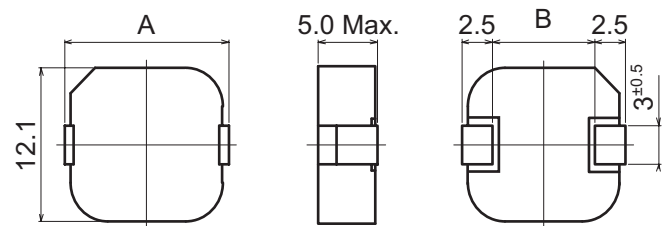
The TOKO FDU1250 Series is a compact, high-current surface mount fixed inductor with a maximum DC current rating of 27.2 Amps at 0.50 μ H. Manufactured with a proprietary iron powder composition and process, the product is specifically designed for high current, space constrained DC-DC converter applications in portable computing, point-of-load modules, and computer peripherals.



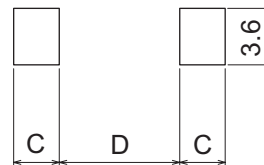
Features

- Compact size: 13.6mm x 12.4mm
- Low profile: 5.0mm maximum
- High DC current: 27.2A at 0.50 μ H
- Magnetically shielded
- Low DC resistance
- Low audible noise
- Reflow solderable
- Packaged on 500 piece reels
- Lead-free terminations

Dimensions and Recommended Footprint



Unit: mm
Tolerance: \pm 0.3mm



Units: mm

TOKO Part No.	A	B	C	D
FDU1250-R50M=P3	13.3	8.3	3	7.9
FDU1250-R56M=P3	13.3	8.3	3	7.9
FDU1250-R75M=P3	13.3	8.3	3	7.9
FDU1250-1R0M=P3	13.3	8.3	3	7.9
FDU1250-1R5M=P3	13.2 \pm 0.4	8.2	3.1	7.7

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.

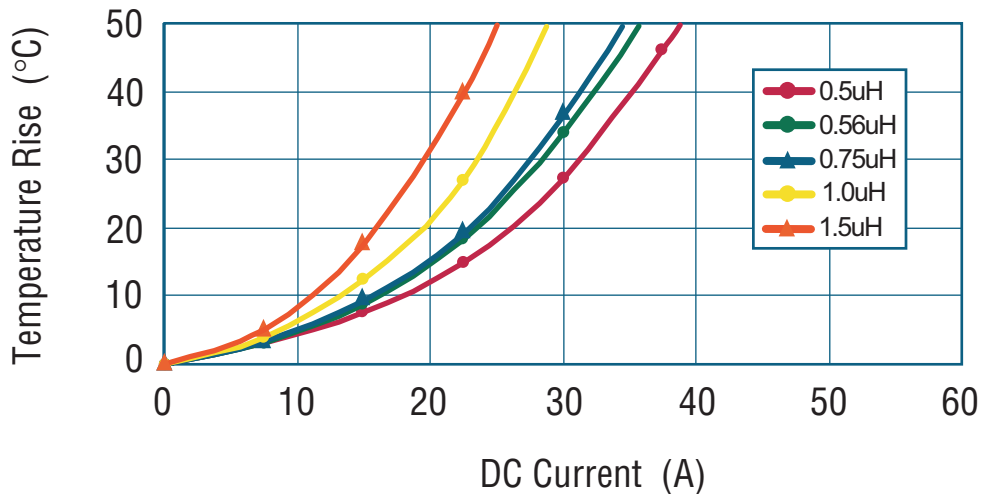
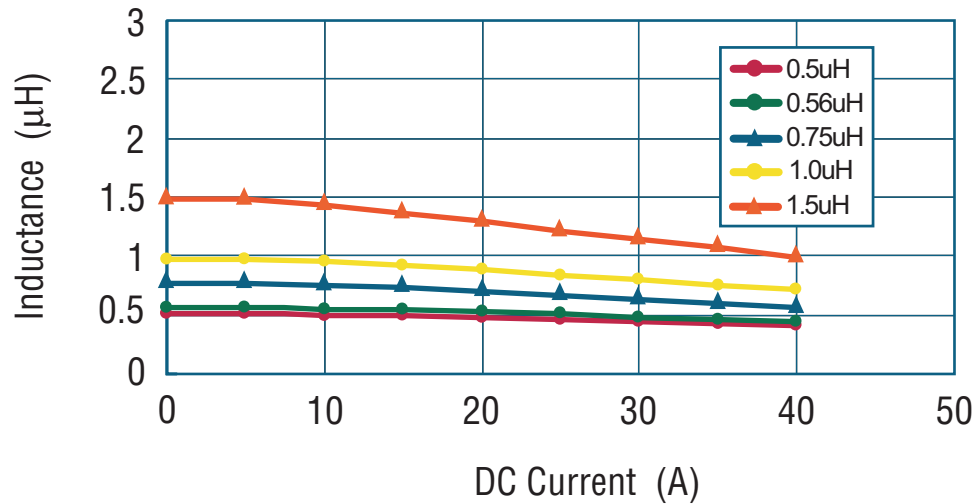
(3) Maximum allowable DC current is that which causes a 20% inductance reduction from the initial value, or coil temperature to rise by 40°C, whichever is smaller. (Reference ambient temperature 20°C).

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TOKO Part Number	Inductance (μ H) ⁽¹⁾	Tolerance (%)	Test Freq. (kHz)	DC Resistance (m Ω) max. ⁽²⁾	Inductance Decrease Current [-20%] (A) max. ⁽³⁾	Temperature Rise Current [+40°C] (A) max. ⁽³⁾	Absolute Max. Voltage (V)
FDU1250-R50M=P3	0.50	\pm 20	100	1.3	34.0	27.2	30
FDU1250-R56M=P3	0.56	\pm 20	100	1.6	32.0	25.7	30
FDU1250-R75M=P3	0.75	\pm 20	100	1.7	24.5	25.2	30
FDU1250-1R0M=P3	1.00	\pm 20	100	2.2	23.5	21.2	30
FDU1250-1R5M=P3	1.50	\pm 20	100	3.6	17.9	18.2	30

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

Typical Characteristics



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