

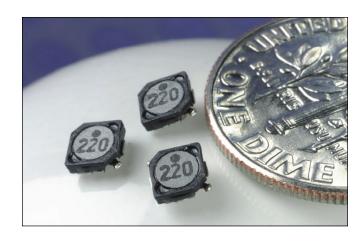
SURFACE MOUNT FIXED INDUCTOR

TYPE D312F

Inductance Range: 1.0 - 47μH *Frequency Range:* 0.1 - 1MHz

Description

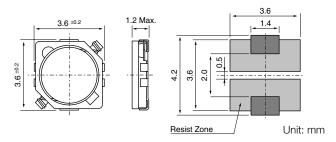
The TOKO D312F Series is an extremely low profile surface mount fixed inductor with a maximum height of 1.2mm. The product is specifically designed for space constrained DC-DC converter applications in portable platforms including wireless handsets, PDA's, and consumer electronics.



Features

- 3.6mm x 3.6mm footprint (±0.2mm)
- 1.2mm maximum height
- Reflow solderable
- Packaged on 2000 piece reels
- Lead-free terminations

Dimensions & Recommended Patterns:



STANDARD PARTS SELECTION GUIDE

- (1) Inductance is measured by LCR-meter 4284A (Agilent) or equivalent.
- (2) DC resistance is measured by Digital Multimeter TR6871 (Advantest) or equivalent.
- (3) Maximum allowable DC current is that which causes a 30% inductance reduction from the initial value, or coil temperature to rise by 40°C, whichever is smaller. (Reference ambient temperature 20°C). Rated DC current for a 10% inductance reduction is provided as well.

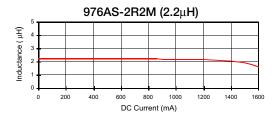
TYPE D312F

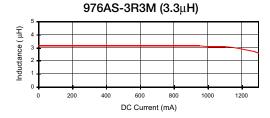
| TOKO Part | Inductance ⁽¹⁾ (μΗ) | Tolerance (%) | DC (2) Resistance | Inductance ⁽³⁾ Decrease Current | | Temperature (3) Rise Current |
|---------------|--------------------------------|------------------|----------------------|---|------------------|---------------------------------|
| Number | | | (Ω) max. | -10% (A) max. | -30% (A) max. | +40°C ∆T (A) max. |
| 976AS-1R0N=P5 | 1.0 | ±30 | 0.12 | 1.48 | 1.76 | 1.12 |
| 976AS-1R5M=P5 | 1.5 | ±20 | 0.14 | 1.31 | 1.56 | 1.07 |
| 976AS-2R2M=P5 | 2.2 | ±20 | 0.17 | 1.08 | 1.20 | 0.90 |
| 976AS-3R3M=P5 | 3.3 | ±20 | 0.26 | 0.92 | 1.00 | 0.68 |
| 976AS-4R7M=P5 | 4.7 | ±20 | 0.38 | 0.74 | 0.83 | 0.66 |
| 976AS-6R8M=P5 | 6.8 | ±20 | 0.48 | 0.63 | 0.71 | 0.48 |
| 976AS-8R2M=P5 | 8.2 | ±20 | 0.56 | 0.58 | 0.67 | 0.44 |
| 976AS-100M=P5 | 10 | ±20 | 0.79 | 0.50 | 0.56 | 0.47 |
| 976AS-120M=P5 | 12 | ±20 | 0.90 | 0.46 | 0.53 | 0.43 |
| 976AS-150M=P5 | 15 | ±20 | 1.01 | 0.43 | 0.49 | 0.36 |
| 976AS-220M=P5 | 22 | ±20 | 1.46 | 0.35 | 0.41 | 0.34 |
| 976AS-270M=P5 | 27 | ±20 | 1.98 | 0.32 | 0.38 | 0.29 |
| 976AS-330M=P5 | 33 | ±20 | 2.26 | 0.29 | 0.33 | 0.28 |
| 976AS-470M=P5 | 47 | ±20 | 3.28 | 0.23 | 0.28 | 0.20 |

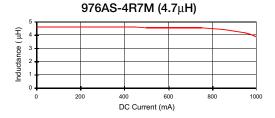
Note: **=P5** is added to each part number to indicate tape and reel packaging.

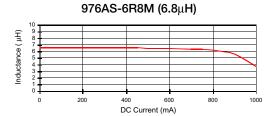


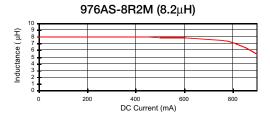
TYPICAL CHARACTERISTICS

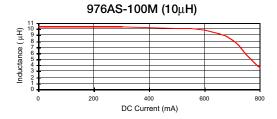




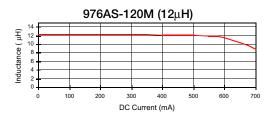


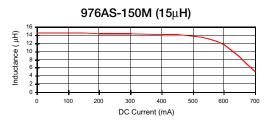


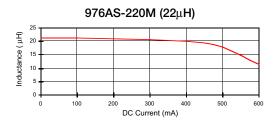


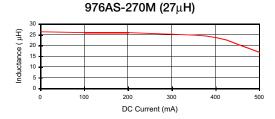


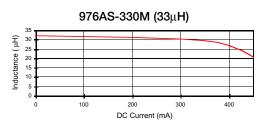
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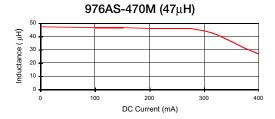














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