

### TYPE D312C

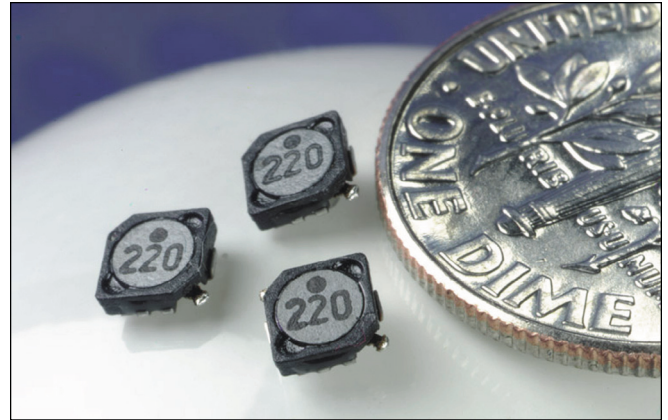
**Inductance Range:** 1.5 - 68 $\mu$ H  
**Frequency Range:** 0.1 - 1MHz

### Description

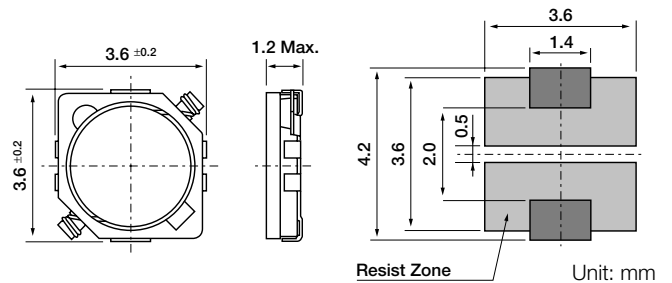
The TOKO D312C Series is an extremely low profile surface mount fixed inductor with a maximum height of 1.2mm. The product is magnetically shielded and designed for space constrained DC-DC converter applications in portable platforms including wireless handsets, PDA's, and consumer electronics.

### Features

- 3.6mm x 3.6mm footprint ( $\pm 0.2$ mm)
- 1.2mm maximum height
- Magnetically shielded
- 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.

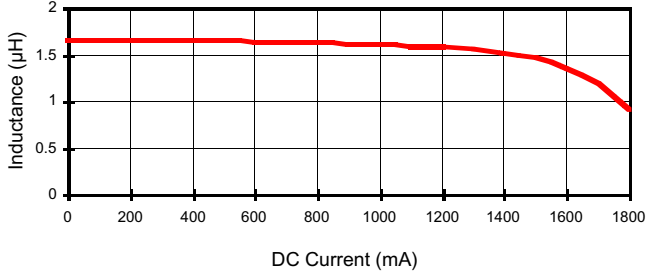
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TOKO Part Number	Inductance <sup>(1)</sup> ( $\mu$ H)	Tolerance (%)	DC <sup>(2)</sup> Resistance ( $\Omega$ ) max.	Inductance <sup>(3)</sup> Decrease Current		Temperature <sup>(3)</sup> Rise Current +40°C $\Delta$ T (A) max.
				-10% (A) max.	-30% (A) max.	
1001AS-1R5M=P5	1.5	$\pm 20$	0.12	1.10	1.29	1.11
1001AS-2R2M=P5	2.2	$\pm 20$	0.14	0.96	1.14	1.00
1001AS-2R7M=P5	2.7	$\pm 20$	0.18	0.82	0.98	0.91
1001AS-3R3M=P5	3.3	$\pm 20$	0.20	0.74	0.90	0.90
1001AS-3R9M=P5	3.9	$\pm 20$	0.23	0.68	0.83	0.87
1001AS-4R7M=P5	4.7	$\pm 20$	0.24	0.65	0.79	0.83
1001AS-6R8M=P5	6.8	$\pm 20$	0.31	0.54	0.68	0.80
1001AS-8R2M=P5	8.2	$\pm 20$	0.43	0.50	0.62	0.63
1001AS-100M=P5	10	$\pm 20$	0.48	0.46	0.56	0.61
1001AS-120M=P5	12	$\pm 20$	0.66	0.40	0.50	0.48
1001AS-150M=P5	15	$\pm 20$	0.80	0.36	0.45	0.47
1001AS-220M=P5	22	$\pm 20$	1.14	0.30	0.38	0.37
1001AS-270M=P5	27	$\pm 20$	1.37	0.26	0.33	0.36
1001AS-330M=P5	33	$\pm 20$	1.47	0.25	0.32	0.35
1001AS-390M=P5	39	$\pm 20$	1.77	0.23	0.29	0.34
1001AS-470M=P5	47	$\pm 20$	2.14	0.20	0.26	0.31
1001AS-680M=P5	68	$\pm 20$	3.33	0.16	0.21	0.24

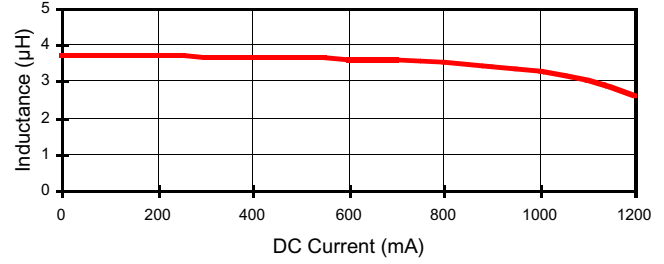
Note: =P5 is added to each part number to indicate tape and reel packaging.

**TYPICAL CHARACTERISTICS**

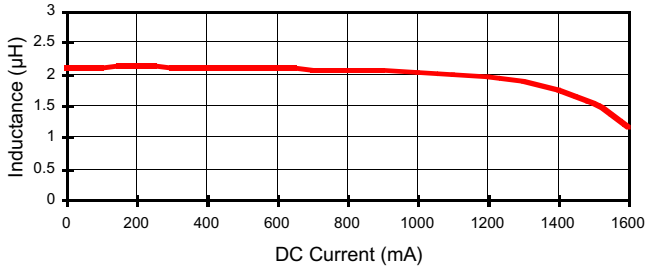
**1001AS-1R5M (1.5 $\mu$ H)**



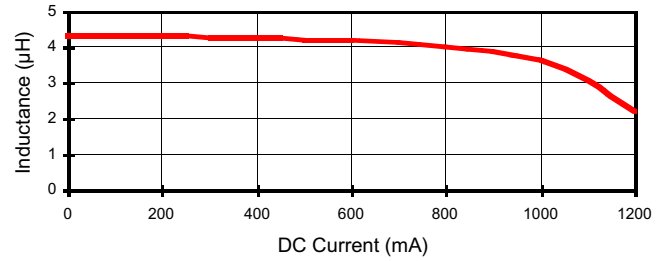
**1001AS-3R3M (3.3 $\mu$ H)**



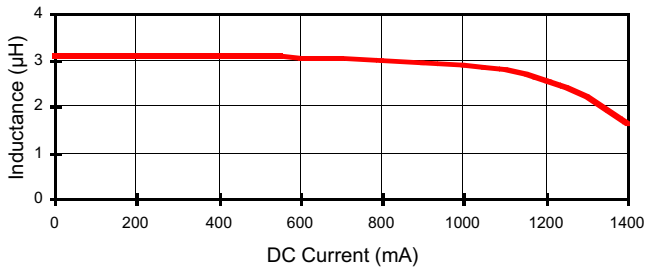
**1001AS-2R2M (2.2 $\mu$ H)**



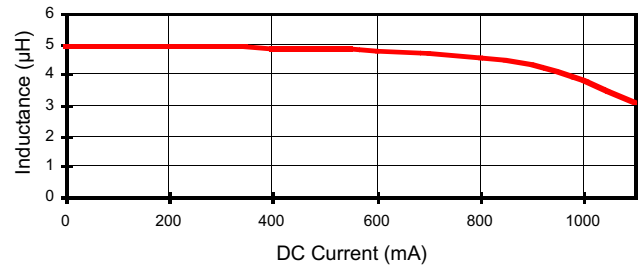
**1001AS-3R9M (3.9 $\mu$ H)**



**1001AS-2R7M (2.7 $\mu$ H)**

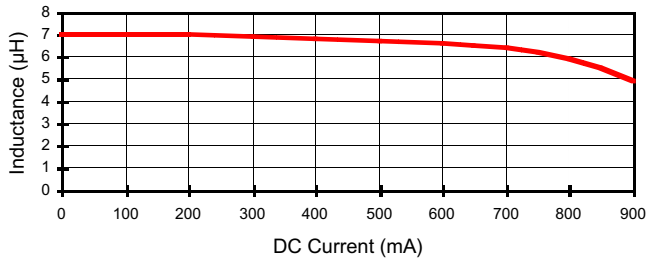


**1001AS-4R7M (4.7 $\mu$ H)**

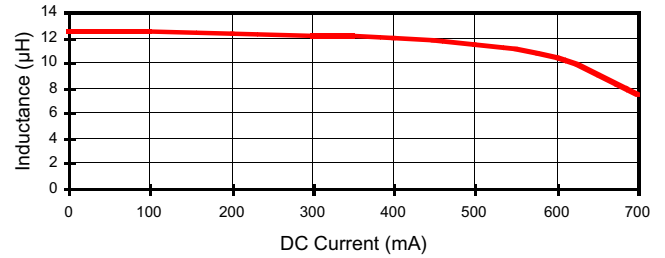


### TYPICAL CHARACTERISTICS

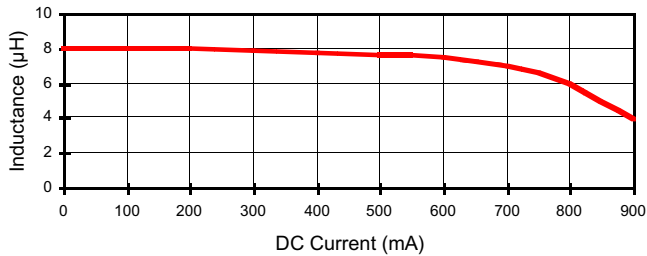
1001AS-6R8M (6.8 $\mu$ H)



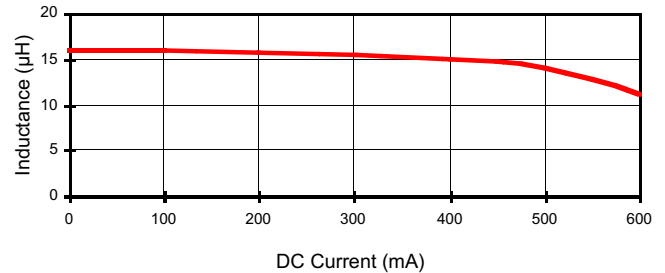
1001AS-120M (12 $\mu$ H)



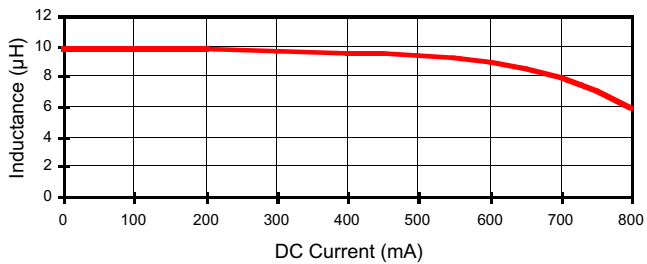
1001AS-8R2M (8.2 $\mu$ H)



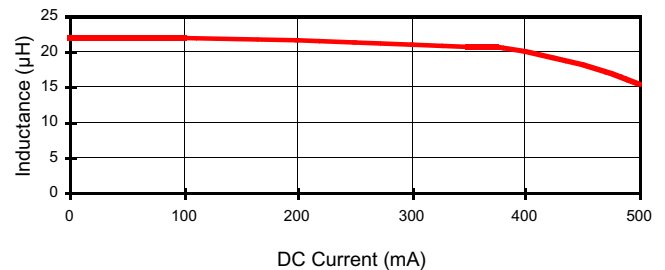
1001AS-150M (15 $\mu$ H)



1001AS-100M (10 $\mu$ H)

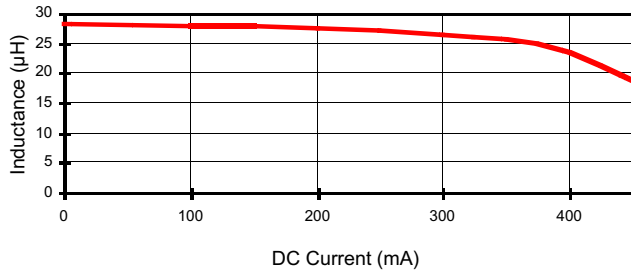


1001AS-220M (22 $\mu$ H)

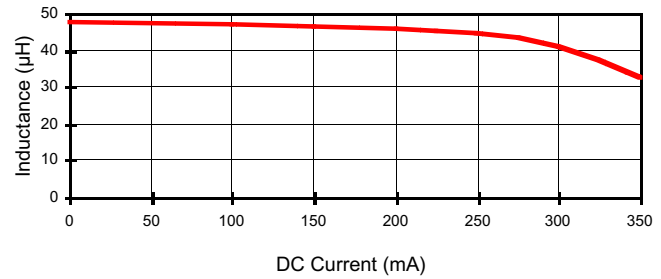


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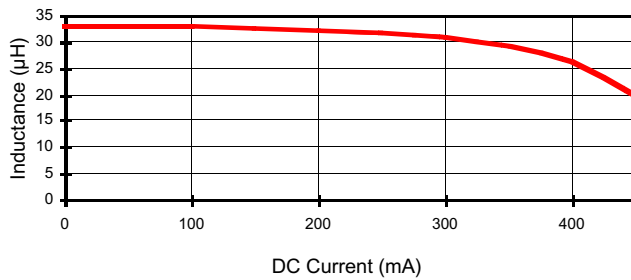
1001AS-270M (27 $\mu$ H)



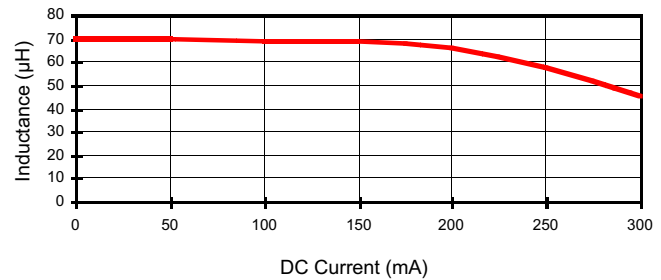
1001AS-470M (47 $\mu$ H)



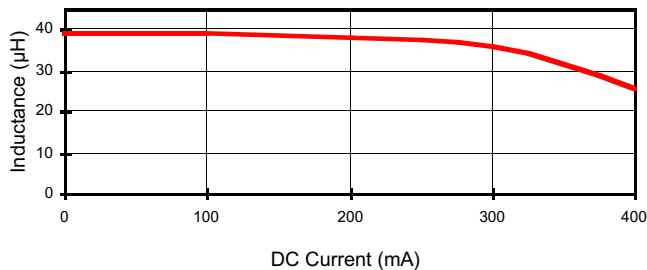
1001AS-330M (33 $\mu$ H)



1001AS-680M (68 $\mu$ H)



1001AS-390M (39 $\mu$ H)



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