

### TYPE D412C

**Inductance Range:** 2.2 - 100 $\mu$ H

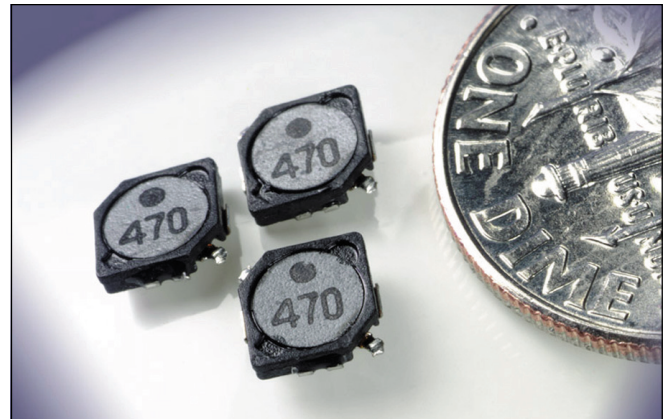
**Frequency Range:** 0.1 - 1MHz

### Description

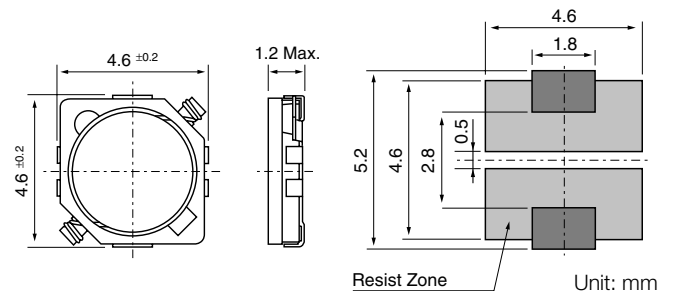
The TOKO D412C Series is an extremely low profile surface mount fixed inductor with a maximum height of 1.2mm. The product is magnetically shielded and designed for space constrained DC-DC converter applications in portable platforms including wireless handsets, PDA's, and consumer electronics.

### Features

- 4.6mm x 4.6mm 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.

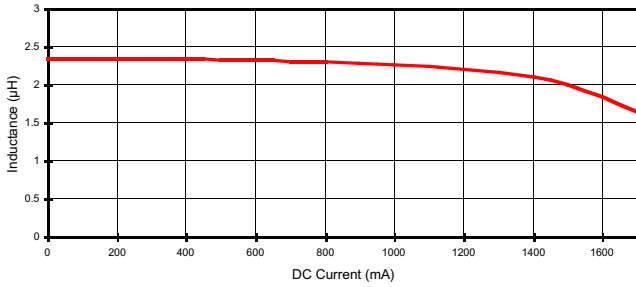
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TOKO Part Number	Inductance <sup>(1)</sup> ( $\mu$ H)	Tolerance (%)	DC <sup>(2)</sup> Resistance ( $\Omega$ ) max.	Inductance <sup>(3)</sup> Decrease Current		Temperature <sup>(3)</sup> Rise Current +40°C $\Delta$ T (A) max.
				-10% (A) max.	-30% (A) max.	
1002AS-2R2M=P5	2.2	$\pm 20$	0.11	1.03	1.28	1.25
1002AS-2R7M=P5	2.7	$\pm 20$	0.13	0.91	1.13	1.24
1002AS-3R3M=P5	3.3	$\pm 20$	0.14	0.83	1.04	1.22
1002AS-3R9M=P5	3.9	$\pm 20$	0.17	0.76	0.96	1.19
1002AS-4R7M=P5	4.7	$\pm 20$	0.19	0.71	0.91	1.04
1002AS-6R8M=P5	6.8	$\pm 20$	0.25	0.59	0.75	0.96
1002AS-8R2M=P5	8.2	$\pm 20$	0.29	0.56	0.72	0.89
1002AS-100M=P5	10	$\pm 20$	0.32	0.47	0.62	0.88
1002AS-120M=P5	12	$\pm 20$	0.41	0.46	0.56	0.74
1002AS-150M=P5	15	$\pm 20$	0.48	0.40	0.52	0.67
1002AS-220M=P5	22	$\pm 20$	0.78	0.31	0.40	0.55
1002AS-270M=P5	27	$\pm 20$	1.02	0.30	0.38	0.46
1002AS-330M=P5	33	$\pm 20$	1.17	0.26	0.35	0.43
1002AS-390M=P5	39	$\pm 20$	1.32	0.25	0.32	0.42
1002AS-470M=P5	47	$\pm 20$	1.52	0.23	0.26	0.38
1002AS-680M=P5	68	$\pm 20$	2.07	0.18	0.26	0.35
1002AS-820M=P5	82	$\pm 20$	2.64	0.17	0.23	0.29
1002AS-101M=P5	100	$\pm 20$	3.04	0.16	0.20	0.28

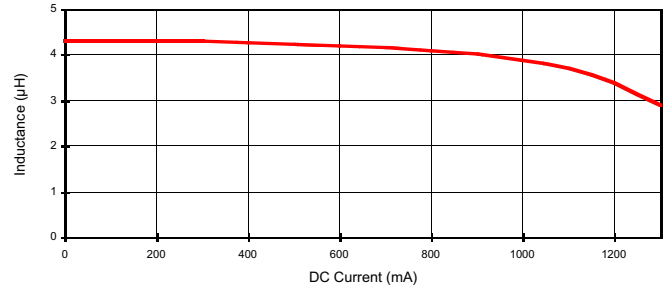
Note: =P5 is added to each part number to indicate tape and reel packaging.

### TYPICAL CHARACTERISTICS

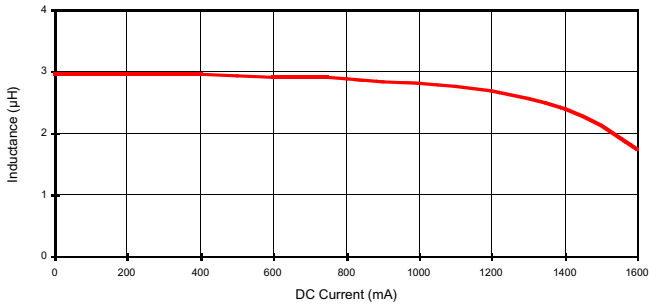
1002AS-2R2M (2.2 $\mu$ H)



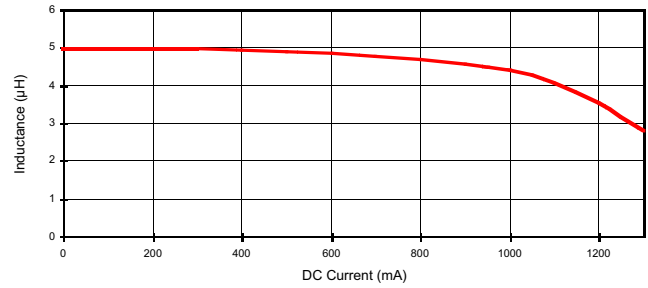
1002AS-3R9M (3.9 $\mu$ H)



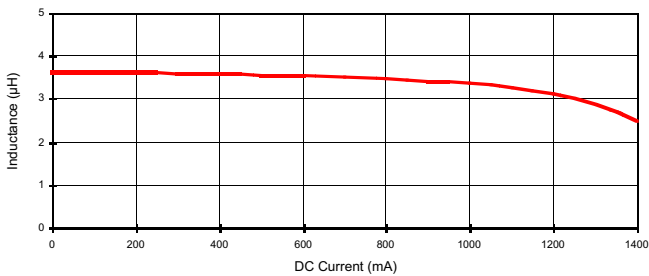
1002AS-2R7M (2.7 $\mu$ H)



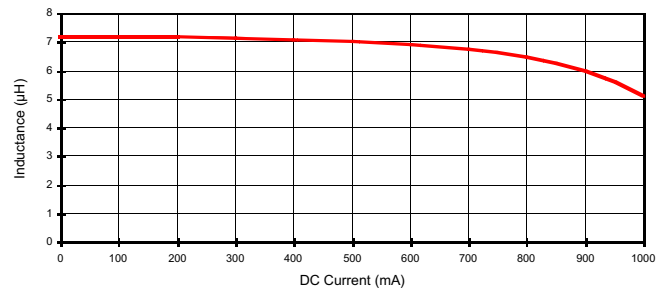
1002AS-4R7M (4.7 $\mu$ H)



1002AS-3R3M (3.3 $\mu$ H)

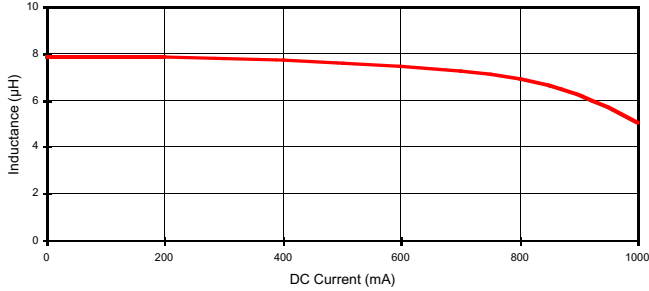


1002AS-6R8M (6.8 $\mu$ H)

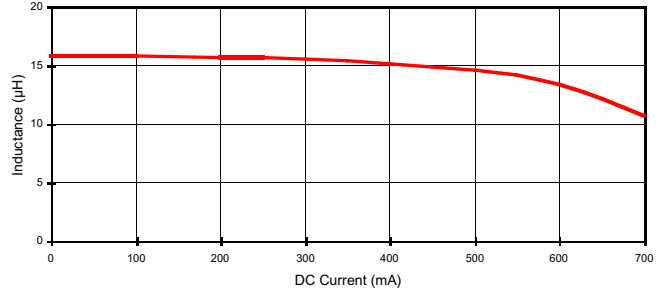


**TYPICAL CHARACTERISTICS**

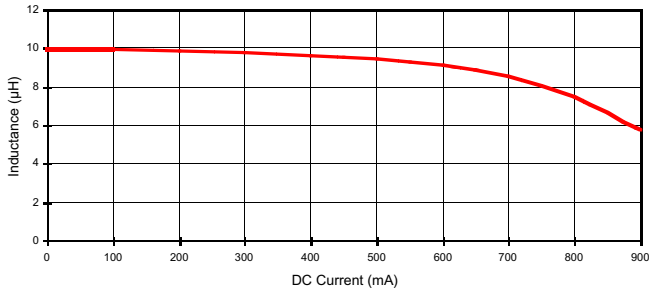
**1002AS-8R2M (8.2μH)**



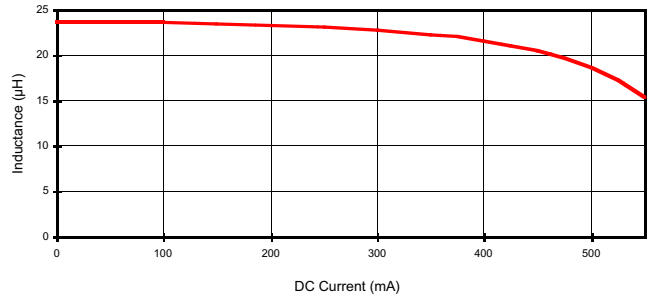
**1002AS-150M (15μH)**



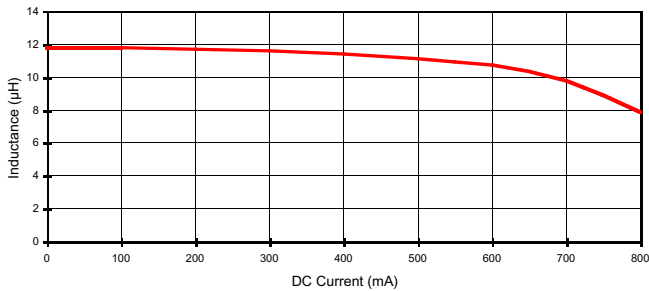
**1002AS-100M (10μH)**



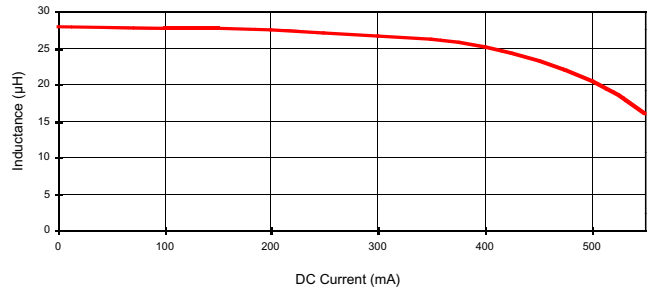
**1002AS-220M (22μH)**



**1002AS-120M (12μH)**

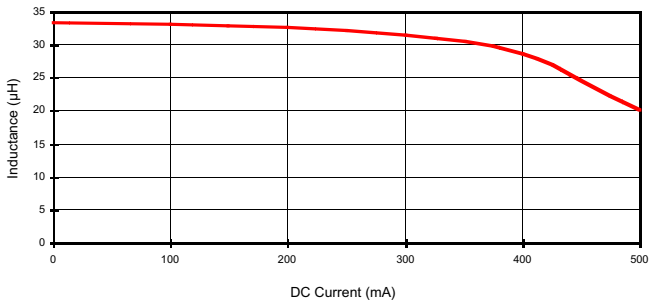


**1002AS-270M (27μH)**

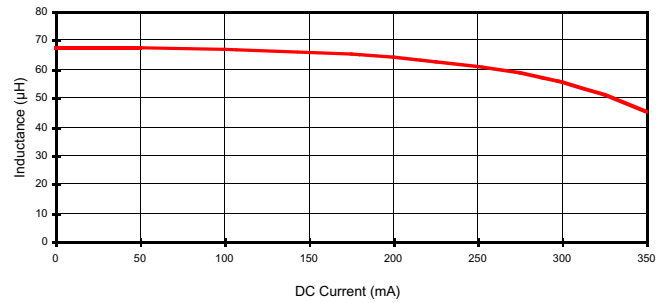


### TYPICAL CHARACTERISTICS

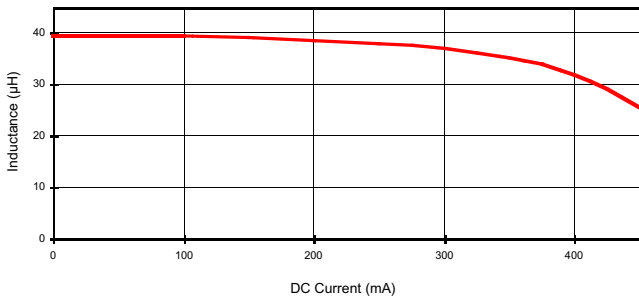
1002AS-330M (33 $\mu$ H)



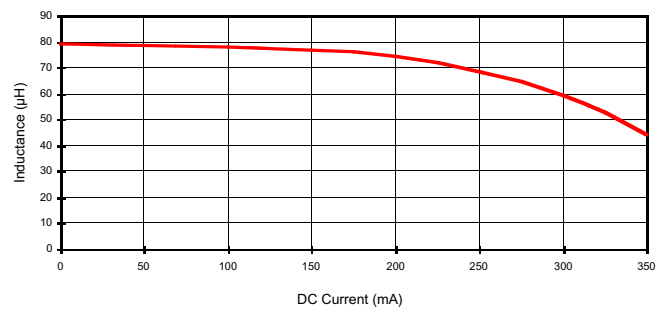
1002AS-680M (68 $\mu$ H)



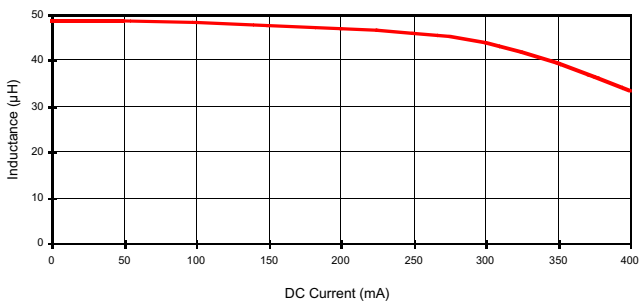
1002AS-390M (39 $\mu$ H)



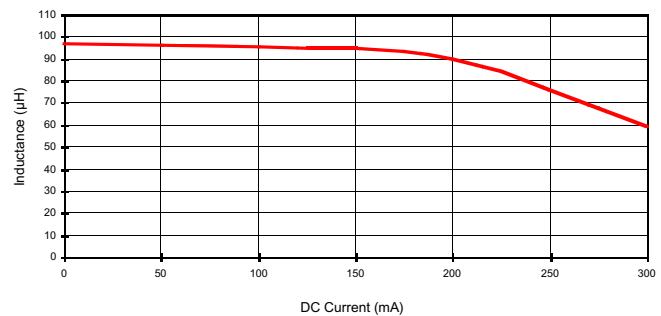
1002AS-820M (82 $\mu$ H)



1002AS-470M (47 $\mu$ H)



1002AS-101M (100 $\mu$ H)



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