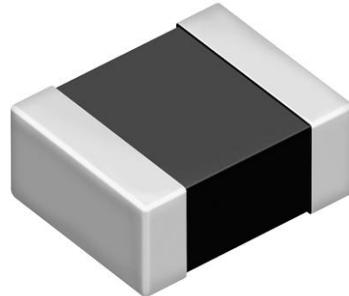


## DFE252012C Type

Metal Alloy chip power inductor

## DESCRIPTION

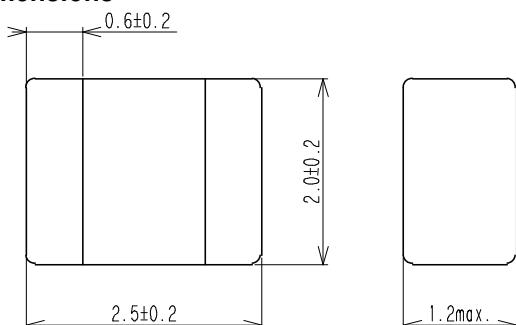
- TOKO DFE252012C is an extremely low profile and miniature size metal alloy chip power inductor with a maximum height of 1.2mm with 2520 footprint (2.5mm×2.0mm).
- The product is magnetically shielded and designed for space constrained DC-DC converter applications for portable platforms including SmartPhone, DSC,DVC, PDA ,DVD,HDD and Handheld Computers.



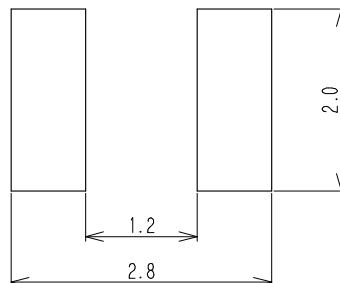
## Features

- Miniature size: 2520 footprint (2.5mm×2.0mm) and low profile(1.2mm max.height)
- Magnetically shielded
- Reflow solderable
- Lead-free product
- Operating temperature:-40～85°C (Including self temperature rise[ $\Delta T=40^{\circ}\text{C}$  max.])

## Dimensions



## Land pattern(Reference)



UNIT : mm

## ● Specifications

TOKO No.	Inductance [ $\mu\text{H}$ ]	Tolerance (%)	Test Frequency (MHz)	Rdc Max(Typ) [m $\Omega$ ]	Rated DC Current	
					[A] Max(Typ)	$\Delta L/L=30\%$
1239AS-H-R47M=P2	0.47	±20	1	39 (29)	3.8 (4.7)	3.7 (4.4)
1239AS-H-1R0M=P2	1.0	±20	1	59 (45)	3.0 (3.8)	3.0 (3.5)
1239AS-H-1R5M=P2	1.5	±20	1	72 (60)	2.6 (3.3)	2.4 (2.8)
1239AS-H-2R2M=P2	2.2	±20	1	108 (90)	2.2 (2.7)	2.0 (2.3)
1239AS-H-3R3M=P2	3.3	±20	1	144 (120)	1.8 (2.3)	1.5 (1.7)
1239AS-H-4R7M=P2	4.7	±20	1	240 (200)	1.5 (1.9)	1.3 (1.5)
1239AS-H-6R0M=P2	6.0	±20	1	275 (240)	1.4 (1.7)	1.1 (1.3)
1239AS-H-6R8M=P2	6.8	±20	1	375 (310)	1.3 (1.6)	0.95 (1.1)
1239AS-H-100M=P2	10	±20	1	460 (400)	0.96 (1.2)	0.85 (1.0)

Withstand voltage : 20V DC

\*<sup>1</sup> The saturation current value is specified when the decrease of the initial inductance value at 30%.  
(The reference ambient temperature is 20°C)

\*<sup>2</sup> The current at which a coil temperature to rise by 40°C. (The reference ambient temperature is 20°C)

\*<sup>3</sup> Withstand voltage is calculated by subtracting the input voltage from the output voltage across the inductor and shall not exceed 20V DC.  
Higher voltage operation will not be guaranteed by TOKO unless explicitly specified in writing.  
Exceeding this specific limit shall be done at the users sole-risk.

## Caution

1. このカタログの記載の製品について、極めて高い信頼性が要求される用途でのご使用をご検討の場合、またはこのカタログに記載された用途以外でのご使用をご検討の場合は、必ず事前に当社営業窓口までご相談下さい。
2. このカタログの記載内容は2014年4月現在のものです。記載内容を予告なく変更することがありますのでご了承ください。ご注文に際しては仕様・納入書などの取り交わしをお願いします。
1. Please be sure that you carefully discuss your planned purchase with our sales division if you intend to use the products in this catalog or if you intend to use products for applications other than those listed in this catalog.
2. Contents of this catalog are effective as of Apr. 2014. Note that the contents of this catalog are subject to change without notice. When placing your order, please confirm the specifications and delivery conditions.

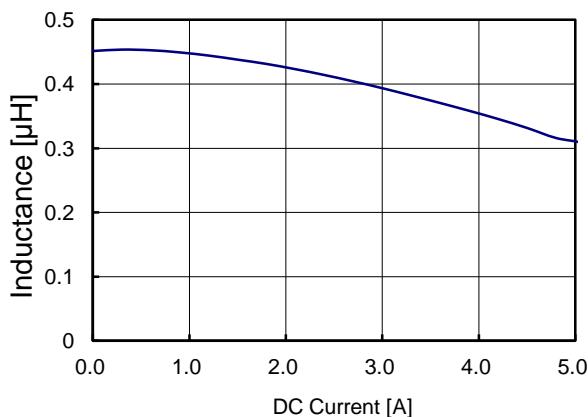
**DFE252012C Type**

CHARACTERISTICS/特性例

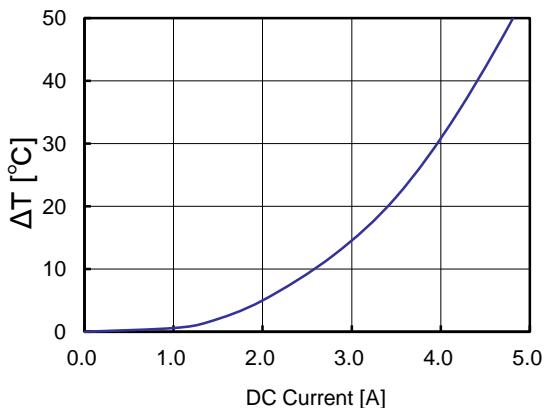
(1 / 4)

1239AS-H-R47M

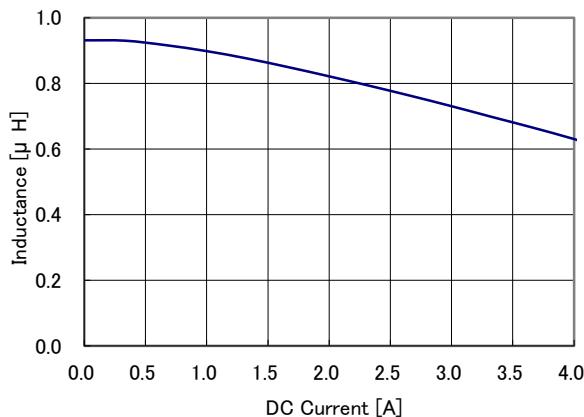
Inductance vs DC Current



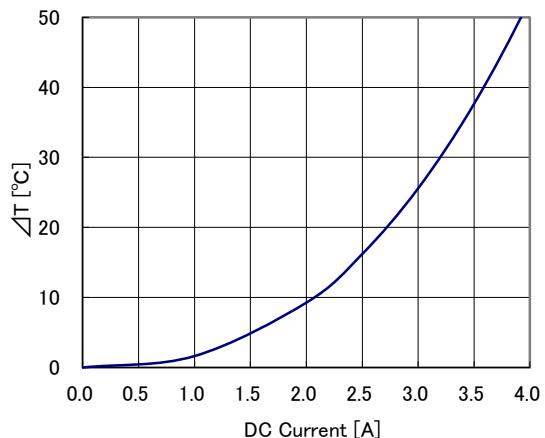
Temperature Rise vs DC Current

1239AS-H-1R0M

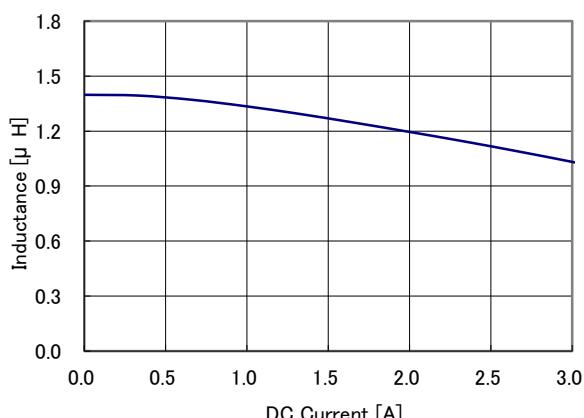
Inductance vs DC Current



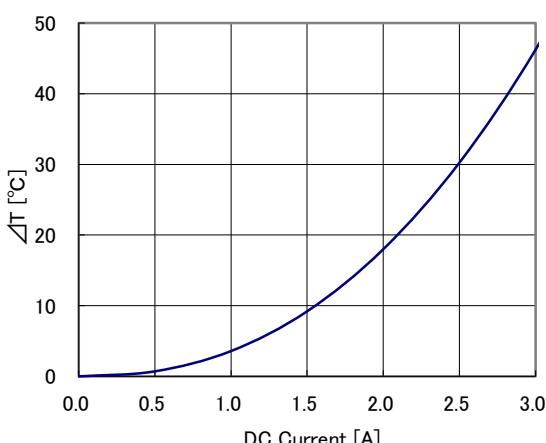
Temperature Rise vs DC Current

1239AS-H-1R5M

Inductance vs DC Current



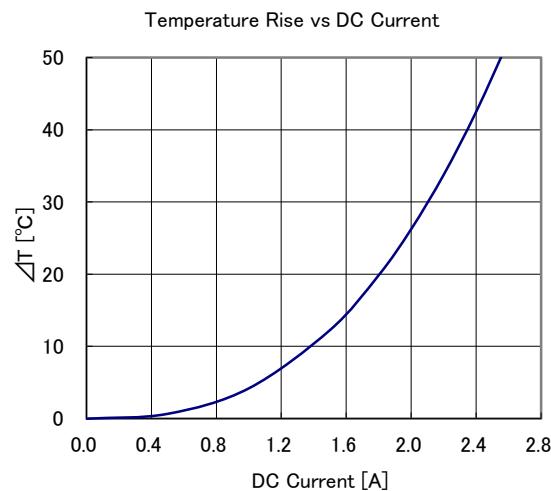
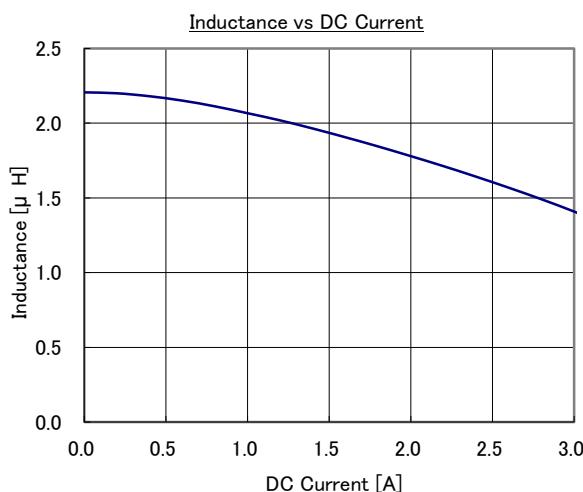
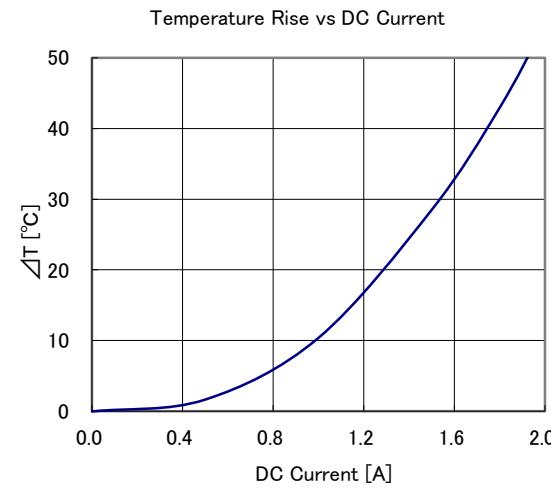
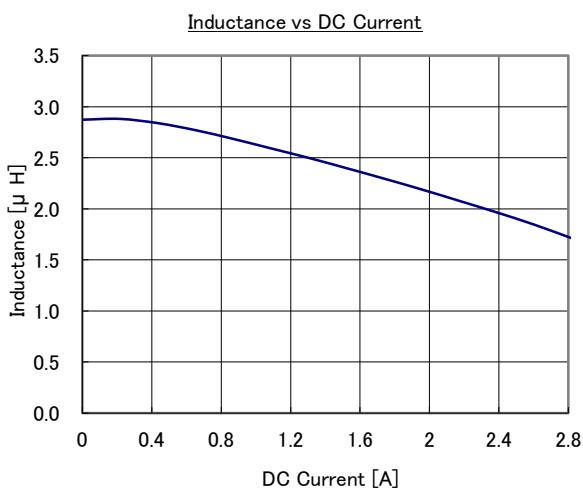
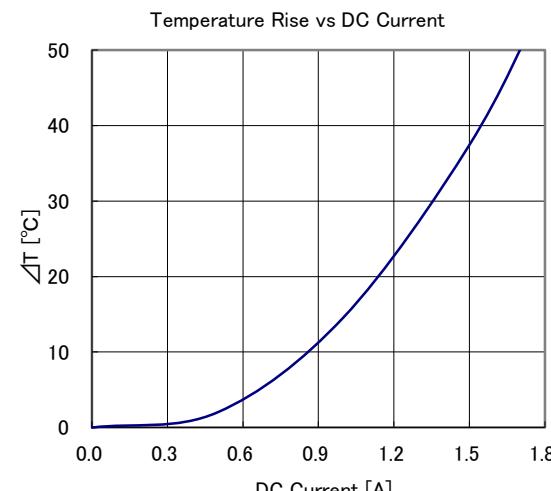
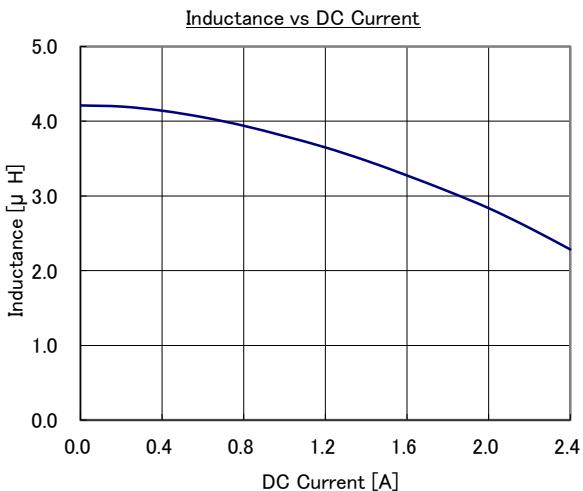
Temperature Rise vs DC Current



**DFE252012C Type**

CHARACTERISTICS/特性例

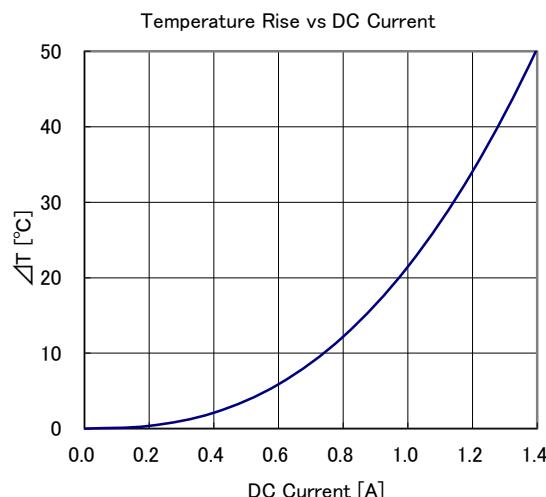
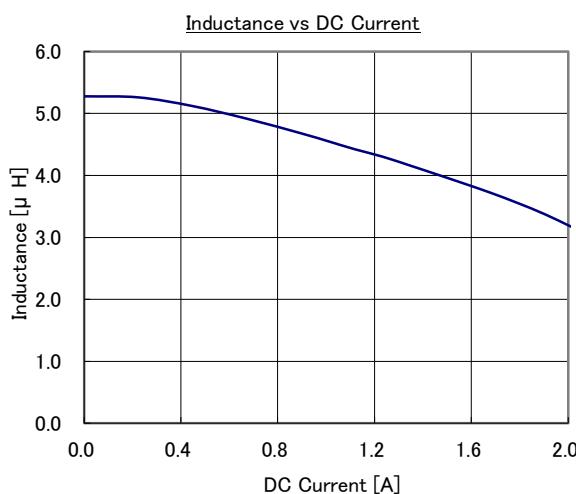
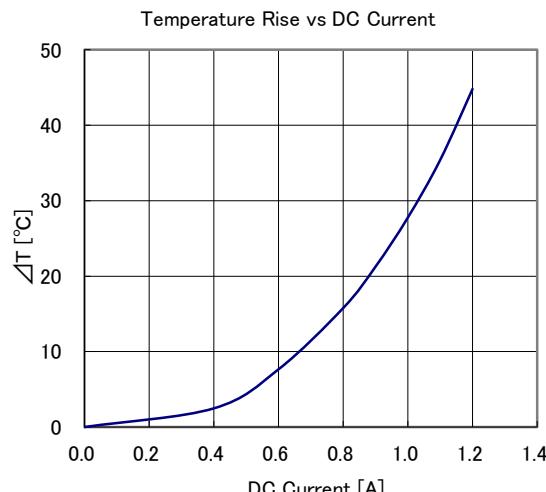
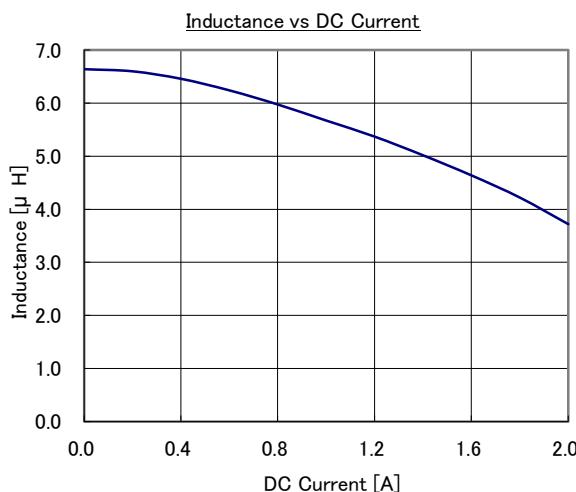
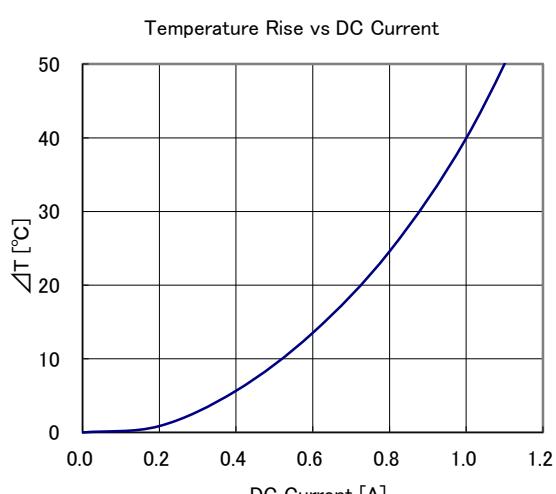
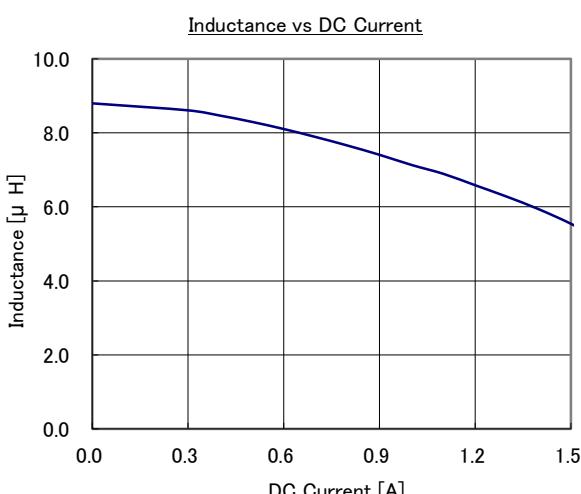
( 2 / 4 )

1239AS-H-2R2M1239AS-H-3R3M1239AS-H-4R7M

**DFE252012C Type**

## CHARACTERISTICS/特性例

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1239AS-H-6R0M1239AS-H-6R8M1239AS-H-100M

**DFE252012C Type**

## CHARACTERISTICS/特性例

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