TOKO

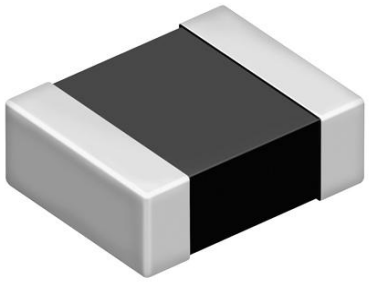
Halogen Free

DFE322512C Type

Metal Alloy chip power inductor

DESCRIPTION

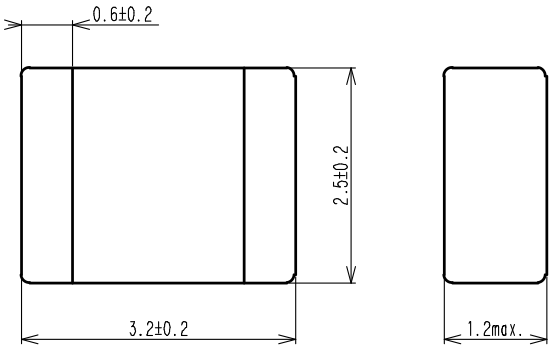
- TOKO DFE322512C is a small form factor/low profile miniature size metal alloy chip power inductor with a maximum height of 1.2mm and with 3225 footprint (3.2mm×2.5mm).
- The product is magnetically shielded and designed for space constrained DC-DC converter applications in portable platforms including SmartPhone, DSC,DVC, PDA ,DVD,HDD and Handheld Computers.



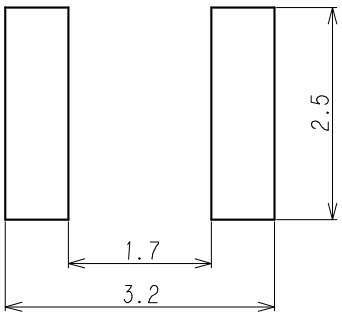
Features

- Miniature size: 3225 footprint (3.2mm×2.5mm) and low profile(1.2mm max.height)
- Magnetically shielded
- Reflow solderable
- Lead-free product
- Operating temperature:-40～85℃ (Including self temperature rise[ΔT=40℃ max.])

Dimensions



Land pattern (Reference)



UNIT : mm

●Specifications

TOKO No.	Inductance [μH]	Tolerance (%)	Test Frequency (MHz)	Rdc Max(Typ) [mΩ]	Rated DC Current [A] Max(Typ)	
					Δ L/L=30%	Δ T=40[℃]
1277AS-H-R47M	0.47	±20	1	31 (21)	4.7 (5.9)	3.7 (4.4)
1277AS-H-R68M	0.68	±20	1	35 (27)	4.2 (5.3)	3.5 (4.1)
1277AS-H-1R0M	1.0	±20	1	45 (34)	3.7 (4.6)	3.1 (3.7)
1277AS-H-1R5M	1.5	±20	1	65 (50)	3.0 (3.7)	2.6 (3.0)
1277AS-H-2R2M	2.2	±20	1	84 (70)	2.6 (3.2)	2.1 (2.5)
1277AS-H-3R3M	3.3	±20	1	126 (105)	2.1 (2.6)	1.8 (2.1)
1277AS-H-4R7M	4.7	±20	1	180 (150)	1.8 (2.2)	1.4 (1.7)
1277AS-H-6R8M	6.8	±20	1	276 (230)	1.5 (1.9)	1.2 (1.5)
1277AS-H-100M	10	±20	1	420 (350)	1.2 (1.5)	0.9 (1.1)

Withstand voltage : 20V DC

*1 The saturation current value is specified when the decrease of the initial inductance value at 30%. (The reference ambient temperature is 20℃)

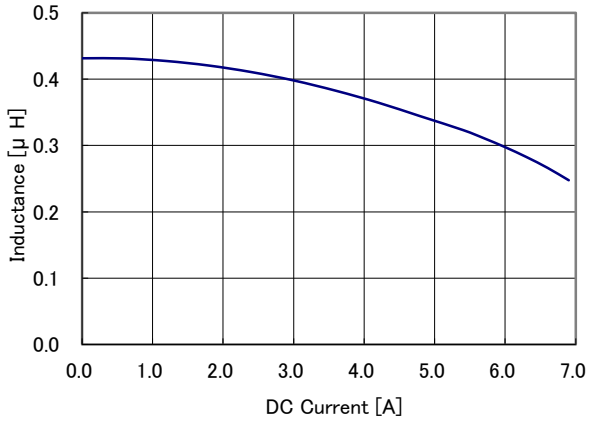
*2 The current at which a coil temperature to rise by 40℃. (The reference ambient temperature is 20℃)

*3 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.

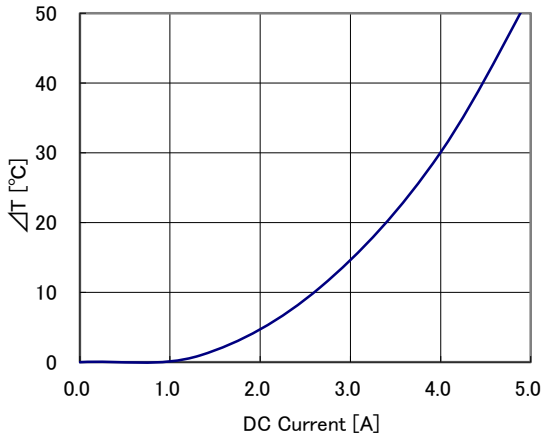
DFE322512C Type CHARACTERISTICS/特性例 （1 / 4）

1277AS-H-R47M

Inductance vs DC Current

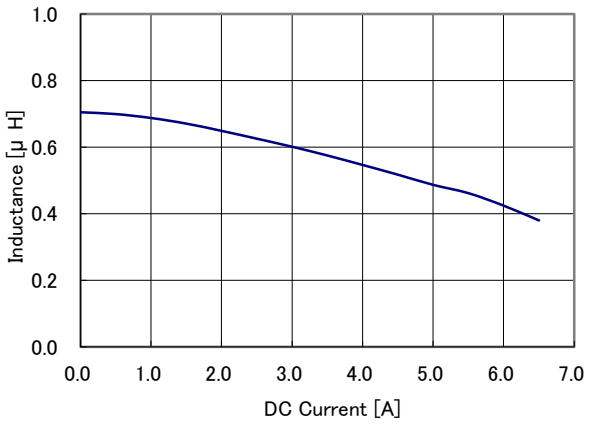


Temperature Rise vs DC Current

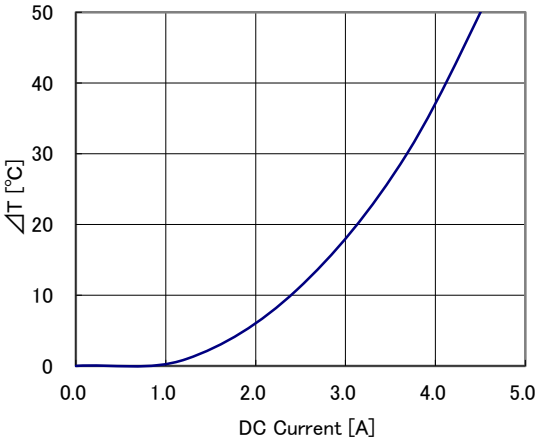


1277AS-H-R68M

Inductance vs DC Current

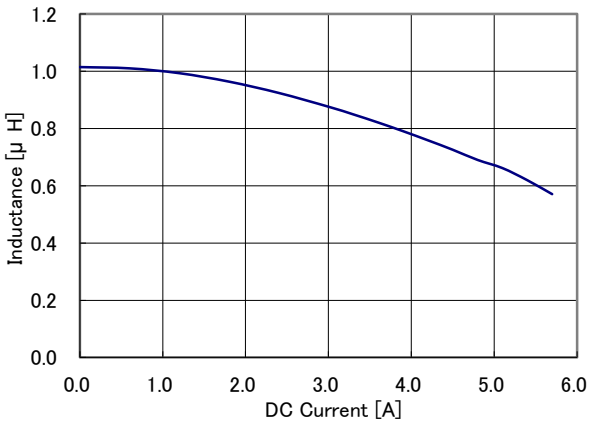


Temperature Rise vs DC Current

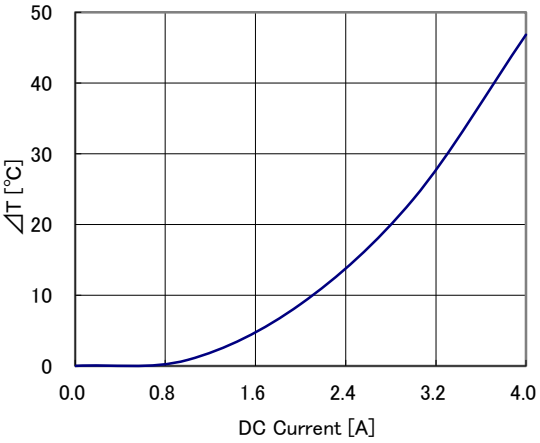


1277AS-H-1R0M

Inductance vs DC Current



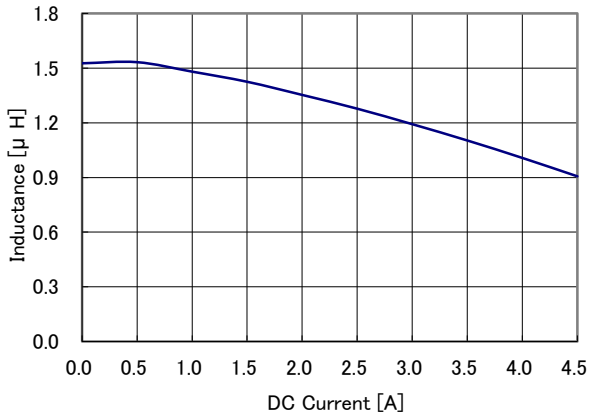
Temperature Rise vs DC Current



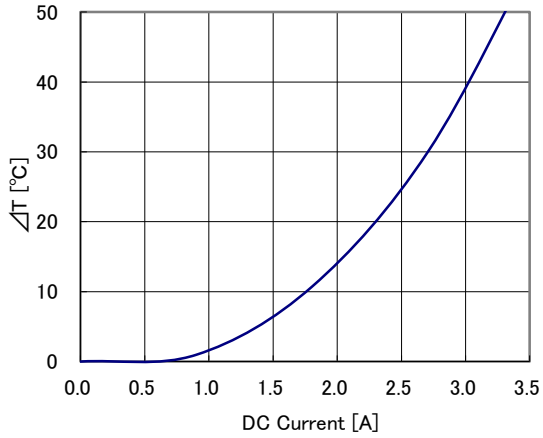
DFE322512C Type CHARACTERISTICS/特性例 （2 / 4）

1277AS-H-1R5M

Inductance vs DC Current

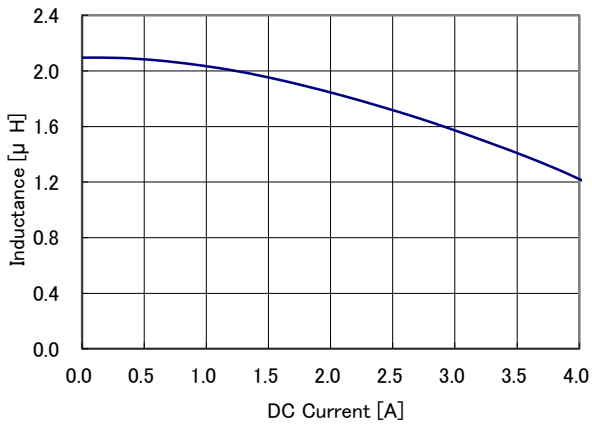


Temperature Rise vs DC Current

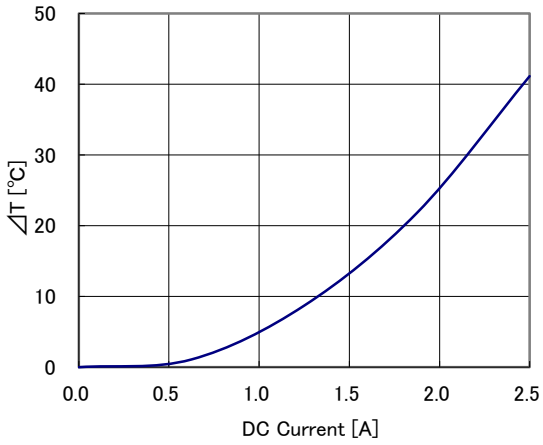


1277AS-H-2R2M

Inductance vs DC Current

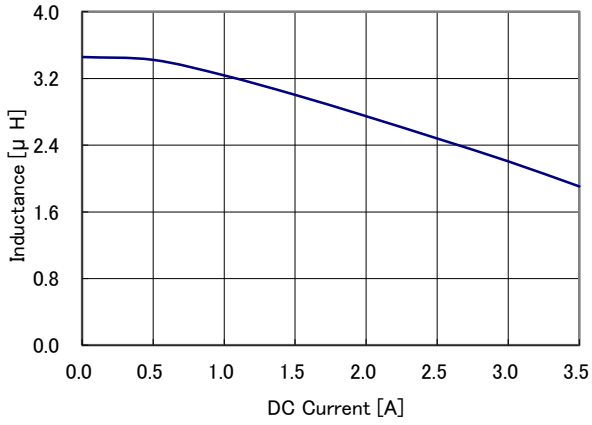


Temperature Rise vs DC Current

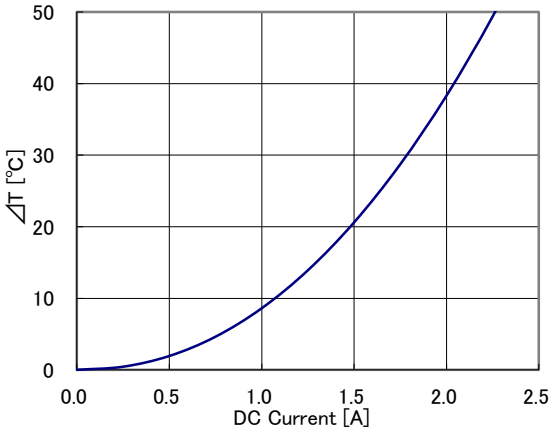


1277AS-H-3R3M

Inductance vs DC Current



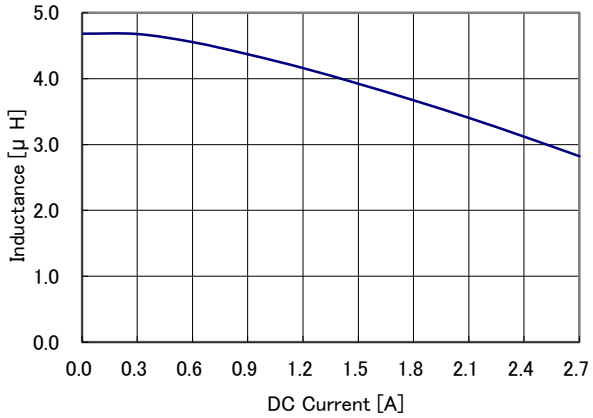
Temperature Rise vs DC Current



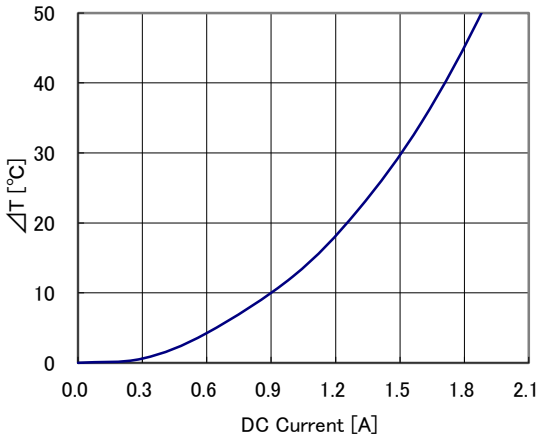
DFE322512C Type CHARACTERISTICS/特性例 （3 / 4）

1277AS-H-4R7M

Inductance vs DC Current

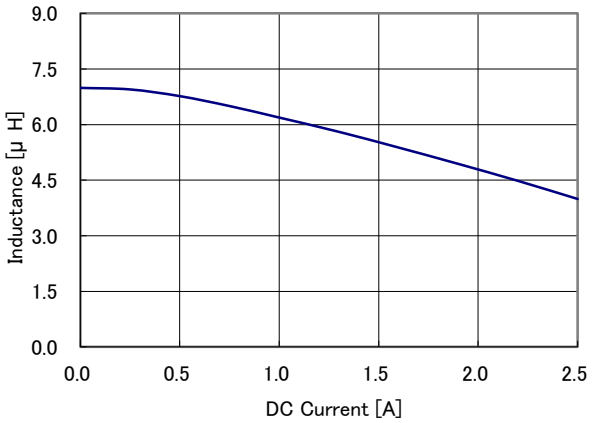


Temperature Rise vs DC Current

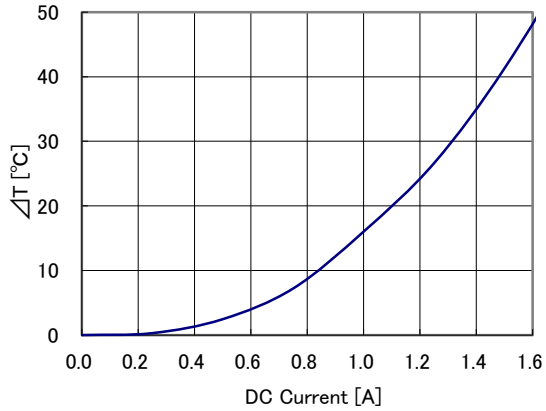


1277AS-H-6R8M

Inductance vs DC Current

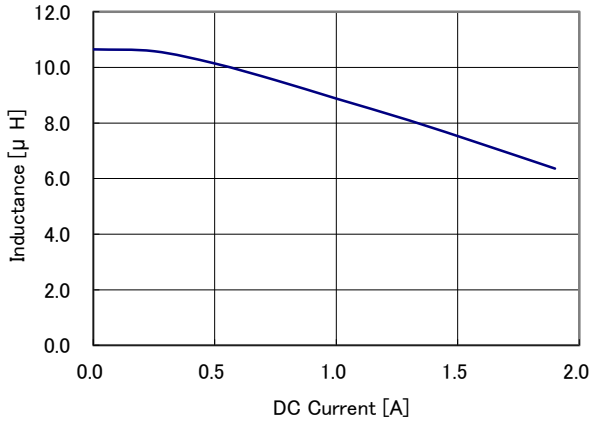


Temperature Rise vs DC Current

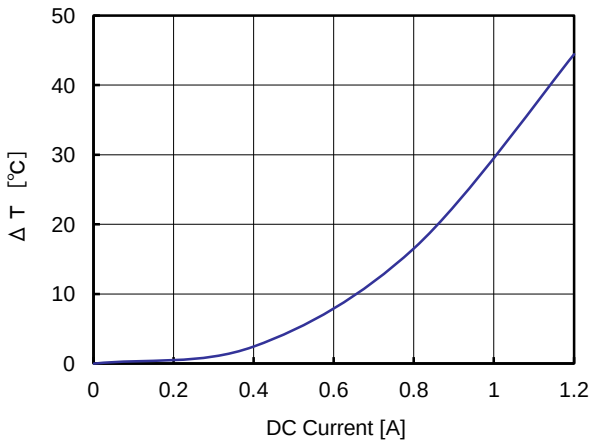


1277AS-H-100M

Inductance vs DC Current

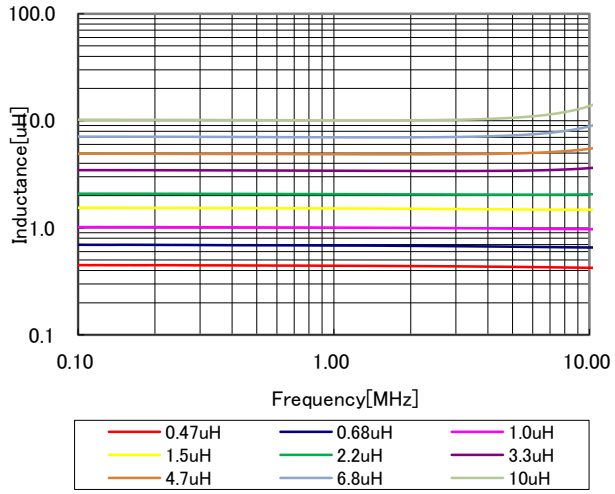


Temperature Rise vs DC Current

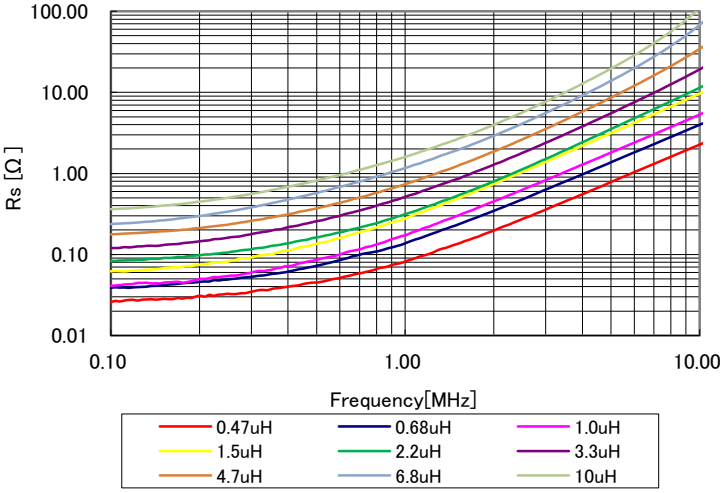


DFE322512C Type CHARACTERISTICS/特性例 （4 / 4）

Inductance vs Frequency



Rs vs Frequency



Q vs Frequency