

FDSD0420W Type

Metal Alloy power inductor



【Outline】

SMT Type and magnetically shielded power inductor

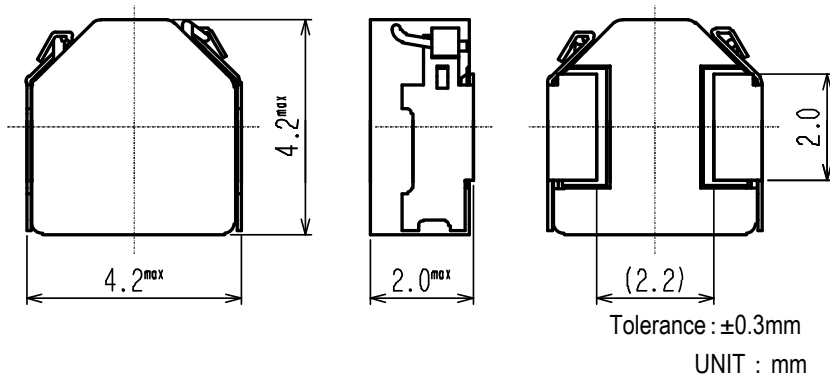
【Application】

DC-DC converter applications for portable platforms including SmartPhone, DSC, DVC, PDA, HDD and Handheld Computers.

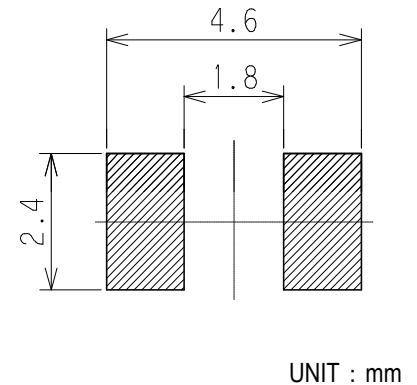
【Features】

- Metal Alloy Structure
- High Current Capability
- Low Magnetic Flux Leakage and Audible Noise Reduction
- RoHS compliant & Halogen Free

【Dimensions】



【Recommended Pad Layout】



【Specifications】

| TOKO No. | Inductance [μH] | Tolerance (%) | Test Frequency (kHz) | Rdc Max.(Typ.) [m Ω] | Rated DC Current [A] Max.(Typ.) | |
|------------------|---------------------------------|------------------|----------------------------|------------------------------------|------------------------------------|----------------------------------|
| | | | | | $\Delta L/L=30\%$ *1 | $\Delta T=40[^\circ\text{C}]$ *2 |
| FDSD0420W-H-150M | 15 | ± 20 | 100 | 350 (290) | 1.9 (2.5) | 1.1 (1.3) |
| FDSD0420W-H-220M | 22 | ± 20 | 100 | 540 (450) | 1.5 (2.0) | 0.82 (0.97) |
| FDSD0420W-H-330M | 33 | ± 20 | 100 | 780 (650) | 1.2 (1.6) | 0.69 (0.81) |
| FDSD0420W-H-470M | 47 | ± 20 | 100 | 1050 (880) | 1.0 (1.3) | 0.59 (0.69) |
| | | | | | | |
| | | | | | | |
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| | | | | | | |

Withstand voltage : 30V DC

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

*2 The current at which a coil temperature to rise by 40°C

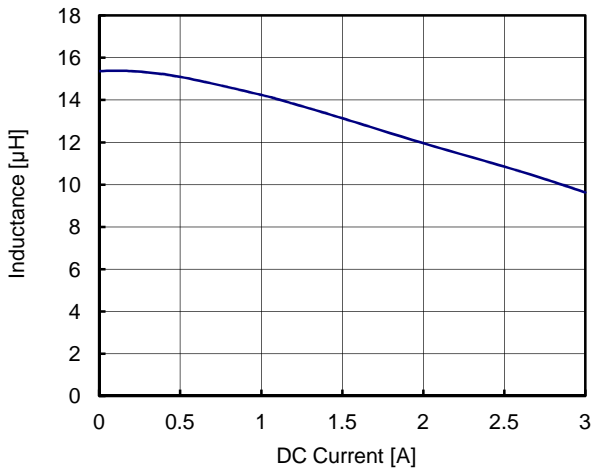
FDSD0420W Type

CHARACTERISTICS

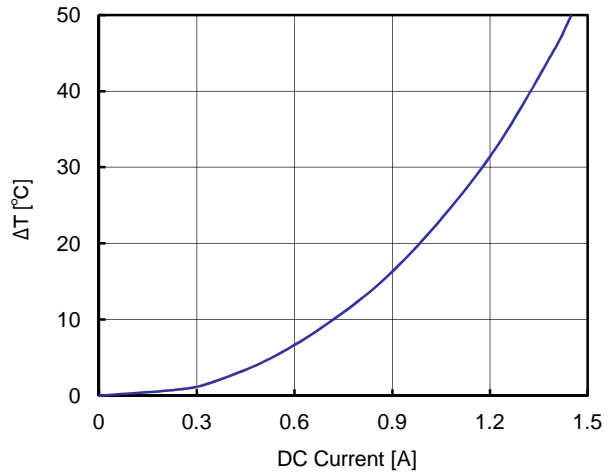
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FDSD0420W-H-150M

Inductance vs DC Current

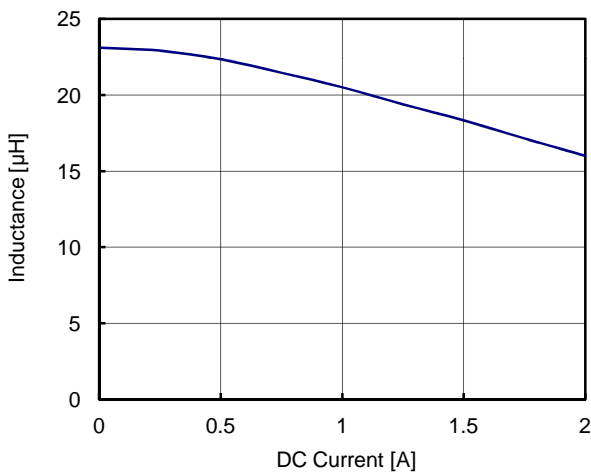


Temperature Rise vs DC Current

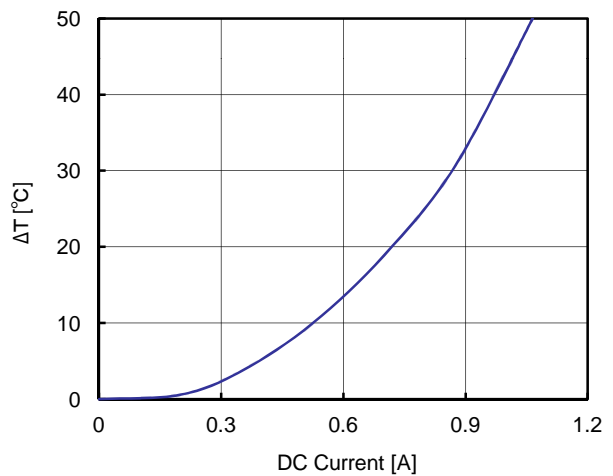


FDSD0420W-H-220M

Inductance vs DC Current

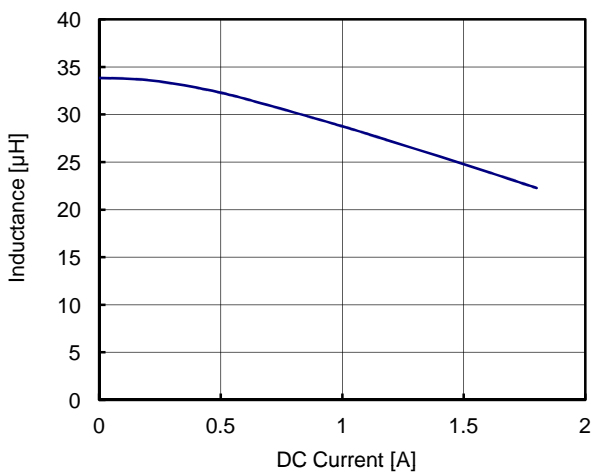


Temperature Rise vs DC Current

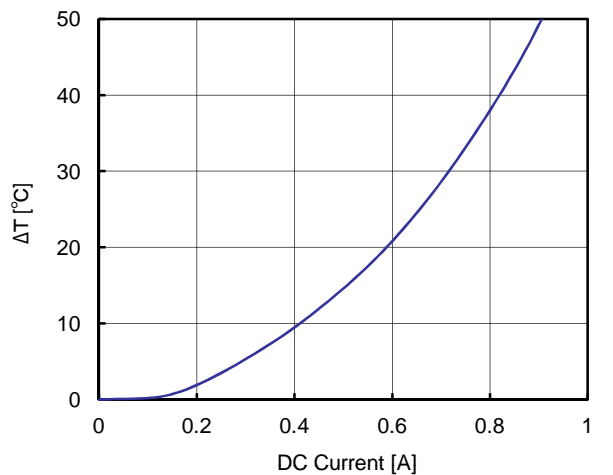


FDSD0420W-H-330M

Inductance vs DC Current



Temperature Rise vs DC Current



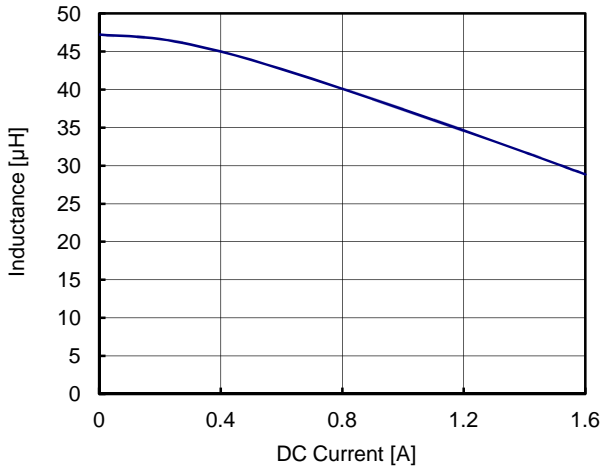
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CHARACTERISTICS

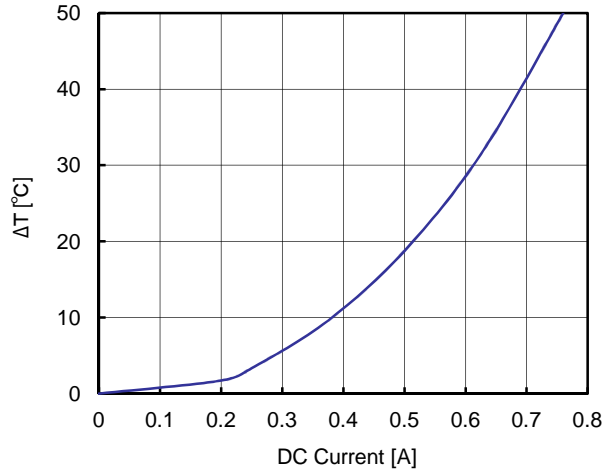
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FDSD0420W-H-470M

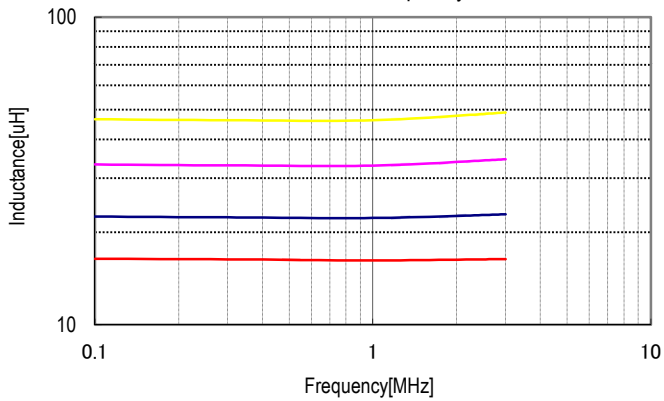
Inductance vs DC Current



Temperature Rise vs DC Current

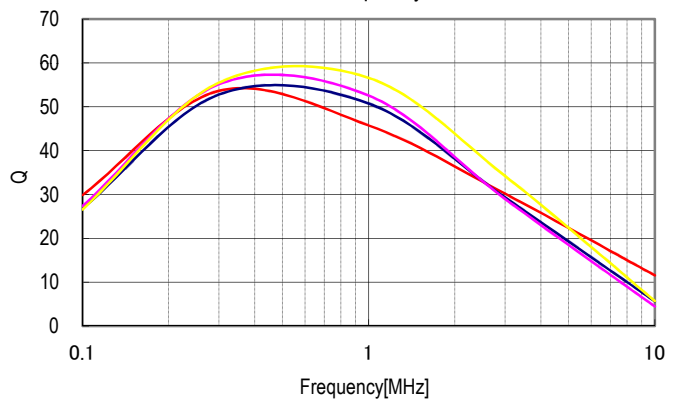


Inductance vs Frequency



— 15uH — 22uH — 33uH — 47uH

Q vs Frequency



— 15uH — 22uH — 33uH — 47uH