

High Current Power Inductors / AMPI_ECH Series

Features

- High performance realized by metal core.
- Compact and low profile with max. 3.0 mm.
- Low loss realized with low DCR and high Isat.
- Applicable at high frequency up to 750 KHz.
- RoHS compliant.

Applications

- DC/DC converter for CPU in Notebook PC.
- Thin type on-board power supply module for exchanger VRM for server.



Shape & Dimensions

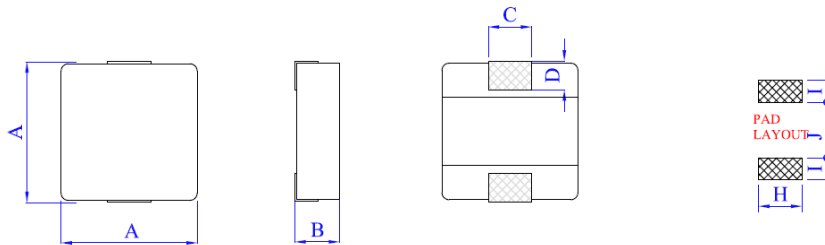


Fig.1

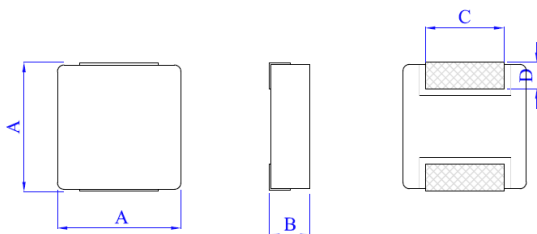
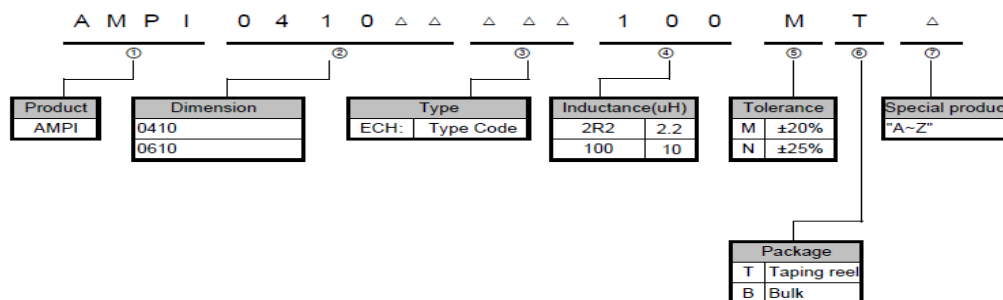


Fig.2

TYPE	Figure	A (mm)	B (mm)	C (mm)	D (mm)	H (Ref.)	I (Ref.)	J (Ref.)
AMPI0410ECH	1	4.0±0.2	0.8±0.2	1.8±0.2	0.8±0.2	2.0	1.1	2.2
AMPI0610ECH	2	6.1±0.3	0.8±0.2	4.0±0.3	1.75±0.3	4.5	2.35	2.8

PRODUCT IDENTIFICATION



◆ AMPI0410ECH Series Specification :

Part Number	Inductance (μ H)	Test Freq. (KHz)	DCR ($m\Omega$) Max.	Saturation Current (A) Typ.	Temp. Rise Current (A) Typ.
AMPI0410ECH2R2□T	2.2	100	100.0	3.5	3.0
AMPI0410ECH4R7□T	4.7	100	160.0	2.6	2.3
AMPI0410ECH100□T	10	100	285 \pm 20%	1.6	1.4

NOTE :

* The operating temperature range is -40°C to $+125^{\circ}\text{C}$ (Including self-temperature rise).

* □ Tolerance M : $\pm 20\%$

* I_{sat} : For Inductance drop approximately 30% from its value without current.

* I_{rms} : Typical Heat Rating D.C current would cause an approximately ΔT of 40°C .

◆ AMPI0610ECH Series Specification :

Part Number	Inductance (μ H)	Test Freq. (KHz)	DCR ($m\Omega$) Max.	Saturation Current (A) Typ.	Temp. Rise Current (A) Typ.
AMPI0610ECH6R8□T	6.8	100	197.0	2.5	2.0
AMPI0610ECH100□T	10	100	310.0	2.1	1.6

NOTE :

* The operating temperature range is -40°C to $+125^{\circ}\text{C}$ (Including self-temperature rise).

* □ Tolerance M : $\pm 20\%$

* I_{sat} : For Inductance drop approximately 30% from its value without current.

* I_{rms} : Typical Heat Rating D.C current would cause an approximately ΔT of 40°C .