

High Current Power Inductors / AMPI_EC Series

Features

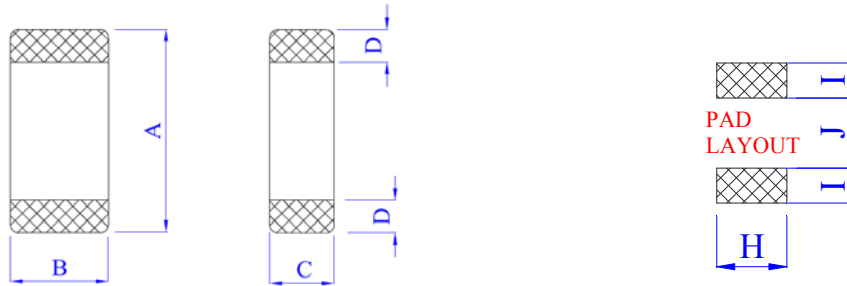
- High magnetic flux saturation density characteristics by metal magnetic material.
- Low DC resistance by flat wire and achieve high conversion efficiency and lower temperature rising.
- Magnetically shielded structure to accomplish high resolution in EMC protection.
- High mounting stability due to Chip shape.
- High reliability by original structure.
- Halogen free, Lead free, RoHS Compliance.



Applications

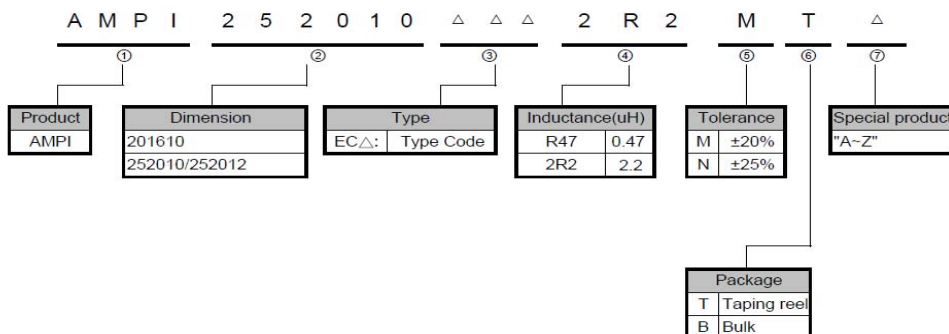
- DC/DC converter.
- Smartphone/PAD, HDD/SSD, DVC/DSC.
- Mobile display panels, portable game devices, compact power supply modules, other.

● Shape & Dimensions



TYPE	A (mm)	B (mm)	C (mm)	D (mm)	H (Ref.)	I (Ref.)	J (Ref.)
AMPI201610EC	2.0±0.25	1.6±0.25	1.0 MAX.	0.5±0.3	1.8	0.80	0.8
AMPI252010EC	2.5±0.2	2.0±0.2	1.0 MAX.	0.6±0.2	2.0	0.80	1.2
AMPI252012EC	2.5±0.2	2.0±0.2	1.2 MAX.	0.6±0.2	2.0	0.80	1.2

■ PRODUCT IDENTIFICATION



◆ AMPI201610EC Series Specification :

Part Number	Inductance (μH)	Test Freq. (MHz)	DCR ($\text{m}\Omega$) Max.	Saturation Current (A) Typ.	Temp. Rise Current (A) Typ.
AMPI201610ECR47□T	0.47	1.0	33.0	5.50	4.00
AMPI201610EC1R0□T	1.0	1.0	78.0	4.00	2.50
AMPI201610EC1R5□T	1.5	1.0	99.0	3.10	2.30
AMPI201610EC2R2□T	2.2	1.0	144.0	2.30	2.00

NOTE :

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

* □ Tolerance M : $\pm 20\%$

* Isat: For Inductance drop approximately 30% from its value without current.

* Irms: Typical Heat Rating D.C current would cause an approximately ΔT of 40°C .

◆ AMPI252010EC Series Specification :

Part Number	Inductance (μH)	Test Freq. (MHz)	DCR ($\text{m}\Omega$) Max.	Saturation Current (A) Typ.	Temp. Rise Current (A) Typ.
AMPI252010ECR33□T	0.33	1.0	27.0	7.40	4.90
AMPI252010ECR47□T	0.47	1.0	31.0	6.20	4.60
AMPI252010EC1R0□T	1.0	1.0	50.0	4.30	3.80
AMPI252010EC1R5□T	1.5	1.0	76.0	3.60	2.80
AMPI252010EC2R2□T	2.2	1.0	110.0	2.80	2.50
AMPI252010EC3R3□T	3.3	1.0	193.0	2.30	1.60
AMPI252010EC4R7□T	4.7	1.0	260.0	2.00	1.45
AMPI252010EC100□T	10.0	1.0	650.0	1.35	0.88

NOTE :

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

* □ Tolerance M : $\pm 20\%$

* Isat: For Inductance drop approximately 30% from its value without current.

* Irms: Typical Heat Rating D.C current would cause an approximately ΔT of 40°C .

◆ AMPI252012EC Series Specification :

Part Number	Inductance (μH)	Test Freq. (MHz)	DCR ($\text{m}\Omega$) Max.	Saturation Current (A) Typ.	Temp. Rise Current (A) Typ.
AMPI252012ECR33□T	0.33	1.0	24.0	8.00	5.50
AMPI252012ECR47□T	0.47	1.0	23.0	6.60	5.60
AMPI252012ECR68□T	0.68	1.0	28.0	5.70	5.50
AMPI252012EC1R0□T	1.0	1.0	44.0	5.30	4.00
AMPI252012EC1R5□T	1.5	1.0	66.0	4.60	3.10
AMPI252012EC2R2□T	2.2	1.0	89.0	3.40	2.70
AMPI252012EC3R3□T	3.3	1.0	157.0	2.70	2.10
AMPI252012EC4R7□T	4.7	1.0	195.0	2.30	1.75
AMPI252012EC6R8□T	6.8	1.0	340.0	2.05	1.40
AMPI252012EC100□T	10.0	1.0	530.0	1.60	1.10

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 .