



HIGH CURRENT POWER INDUCTORS / AMPI ED Type Series

• Features

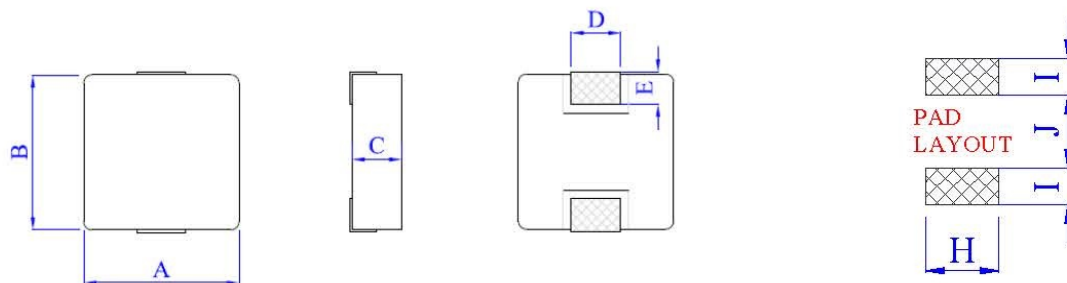
High performance realized by metal core
 Compact and low profile with max.3.0mm
 Low loss realized with low DCR and high Isat
 Applicable at high frequency up to 750KHz
 RoHS compliant

• Applications

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

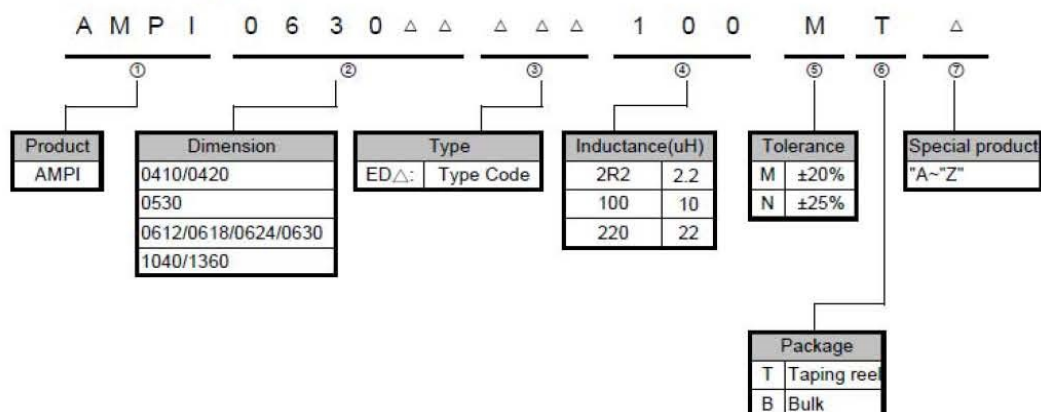


• Shape & Dimensions



TYPE	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	H (Ref.)	I (Ref.)	J (Ref.)
AMPI0410ED	4.2±0.25	4.4±0.35	1.0 MAX.	2.0±0.3	0.8±0.3	2.5	1.50	2.2
AMPI0420ED	4.1±0.2	4.6±0.2	2.0 MAX.	1.5±0.3	1.0±0.5	2.5	1.50	2.2
AMPI0530ED	5.2±0.2	5.4±0.3	2.8±0.2	2.2±0.3	1.2±0.2	2.5	1.90	2.2
AMPI0612ED	6.6±0.2	7.1±0.2	1.0±0.2	2.9±0.1	1.8±0.3	3.45	1.83	3.71
AMPI0618ED	6.6±0.2	7.1±0.3	1.6±0.2	3.0±0.3	1.6±0.5	3.5	2.35	3.7
AMPI0624ED	6.6±0.2	7.1±0.3	2.4 MAX.	3.0±0.3	1.6±0.5	3.5	2.35	3.7
AMPI0630ED	6.6±0.2	7.1±0.3	3.0 MAX.	3.0±0.3	1.6±0.5	3.5	2.35	3.7
AMPI1040ED	10.0±0.3	11.5 MAX.	3.8±0.2	3.0±0.5	2.0±0.5	4.1	4.10	5.4
AMPI1360ED	12.6±0.3	13.45±0.35	5.8±0.2	5.0±0.5	2.0±0.5	5.0	3.25	8.0

■ PRODUCT IDENTIFICATION





HIGH CURRENT POWER INDUCTORS / AMPI ED Type Series

● Features

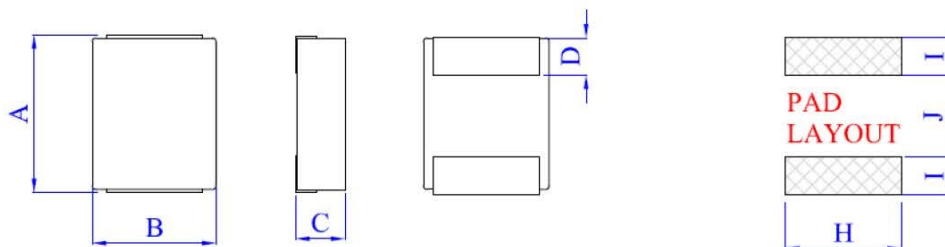
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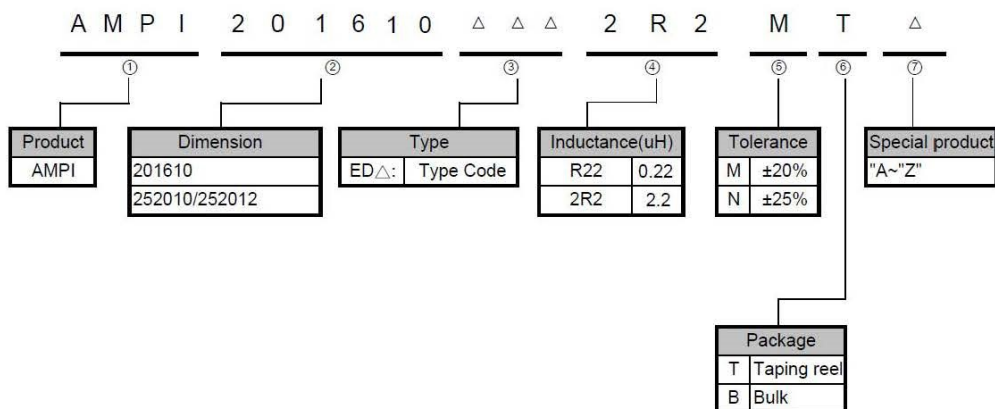


● Shape & Dimensions



TYPE	A (mm)	B (mm)	C (mm)	D (mm)	H (Ref.)	I (Ref.)	J (Ref.)
AMPI201610ED	2.0±0.2	1.6±0.2	1.0 MAX.	0.5±0.2	1.6	0.70	0.9
AMPI252010ED	2.5±0.2	2.0±0.2	1.0 MAX.	0.6±0.2	2.0	0.80	1.2
AMPI252012ED	2.5±0.2	2.0±0.2	1.2 MAX.	0.6±0.2	2.0	0.80	1.2

■ PRODUCT IDENTIFICATION



◆ AMPI0410ED Series Specification :

Part Number	Inductance (μ H)	Test Freq. (KHz)	DCR (m Ω) Max.	Saturation Current (A) Typ.	Temp. Rise Current (A) Typ.
AMPI0410ED100□T	10	100	336	1.6	1.4

NOTE :

* The operating temperature range is -40°C to +125°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

◆ AMPI0420ED Series Specification :

Part Number	Inductance (μ H)	Test Freq. (KHz)	DCR (m Ω) Max.	Saturation Current (A) Typ.	Temp. Rise Current (A) Typ.
AMPI0420EDR10□T	0.10	100	4.0	27.0	13.0
AMPI0420EDR22□T	0.22	100	6.6	21.0	9.5
AMPI0420EDR47□T	0.47	100	14.0	11.0	7.5
AMPI0420EDR56□T	0.56	100	16.0	11.0	7.0
AMPI0420EDR68□T	0.68	100	18.0	8.6	7.0
AMPI0420ED1R0□T	1.0	100	27.0	7.0	4.5
AMPI0420ED1R2□T	1.2	100	27.0	6.5	4.5
AMPI0420ED1R5□T	1.5	100	46.0	6.0	4.0
AMPI0420ED2R2□T	2.2	100	58.0	5.0	3.0
AMPI0420ED3R3□T	3.3	100	87.0	4.0	2.5
AMPI0420ED4R7□T	4.7	100	105.0	3.0	2.2
AMPI0420ED6R8□T	6.8	100	135.0	3.0	2.0
AMPI0420ED100□T	10	100	258.0	2.0	1.6

NOTE :

* The operating temperature range is -40°C to +125°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

◆ AMPI0530ED Series Specification :

Part Number	Inductance (μ H)	Test Freq. (KHz)	DCR (m Ω) Max.	Saturation Current (A) Typ.	Temp. Rise Current (A) Typ.
AMPI0530EDR20□T	0.20	100	3.9	17.0	14.0
AMPI0530EDR47□T	0.47	100	8.0	15.0	11.0
AMPI0530EDR68□T	0.68	100	12.0	13.0	9.0
AMPI0530ED1R0□T	1.0	100	14.0	11.0	8.1
AMPI0530ED1R2□T	1.2	100	16.0	11.0	8.1
AMPI0530ED1R5□T	1.5	100	25.0	10.0	7.2
AMPI0530ED2R2□T	2.2	100	29.0	7.5	5.5
AMPI0530ED3R3□T	3.3	100	38.0	6.0	4.8
AMPI0530ED4R7□T	4.7	100	60.0	5.0	4.5
AMPI0530ED6R8□T	6.8	100	90.0	4.0	3.5
AMPI0530ED100□T	10	100	125.0	3.5	2.5

NOTE :

* The operating temperature range is -40°C to +125°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

◆ AMPI0612ED Series Specification :

Part Number	Inductance (μ H)	Test Freq. (KHz)	DCR (m Ω) Max.	Saturation Current (A) Typ.	Temp. Rise current (A) Typ.
AMPI0612EDR56□T	0.56	100	15.5	11.0	8.0
AMPI0612EDR68□T	0.68	100	17.5	9.0	7.0
AMPI0612ED1R0□T	1.0	100	29.0	7.5	6.0
AMPI0612ED2R2□T	2.2	100	58.0	5.0	4.0
AMPI0612ED3R3□T	3.3	100	92.0	4.0	3.5
AMPI0612ED4R7□T	4.7	100	122.0	3.5	2.8
AMPI0612ED6R8□T	6.8	100	210.0	2.8	2.1
AMPI0612ED100□T	10	100	280.0	2.2	2.0

NOTE :

* The operating temperature range is -40°C to +125°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

◆ AMPI0618ED Series Specification :

Part Number	Inductance (μ H)	Test Freq. (KHz)	DCR (m Ω) Max.	Saturation Current (A) Typ.	Temp. Rise current (A) Typ.
AMPI0618EDR68□T	0.68	100	12.7	17.0	9.0
AMPI0618ED1R0□T	1.0	100	17.0	14.0	7.0
AMPI0618ED1R5□T	1.5	100	26.0	12.0	6.5
AMPI0618ED2R2□T	2.2	100	35.0	8.0	5.0
AMPI0618ED3R3□T	3.3	100	60.0	8.0	3.5
AMPI0618ED4R7□T	4.7	100	70.0	5.0	3.5
AMPI0618ED6R8□TA	6.8	100	110.0	4.5	2.8
AMPI0618ED100□T	10	100	155.0	2.5	2.3

NOTE :

* The operating temperature range is -40°C to +125°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

◆ AMPI0624ED Series Specification :

Part Number	Inductance (μ H)	Test Freq. (KHz)	DCR (m Ω) Max.	Saturation Current (A) Typ.	Temp. Rise Current (A) Typ.
AMPI0624EDR22□T	0.22	100	3.0	34.0	21.0
AMPI0624EDR33□T	0.33	100	4.1	26.0	18.0
AMPI0624EDR47□T	0.47	100	5.1	22.0	15.0
AMPI0624EDR56□T	0.56	100	6.5	17.0	13.0
AMPI0624EDR68□T	0.68	100	7.0	16.0	12.0
AMPI0624ED1R0□T	1.0	100	13.5	16.0	9.0
AMPI0624ED1R5□T	1.5	100	20.0	15.0	9.0
AMPI0624ED2R2□T	2.2	100	28.0	12.0	7.0
AMPI0624ED3R3□T	3.3	100	39.0	8.5	5.5
AMPI0624ED4R7□T	4.7	100	50.0	7.5	5.0
AMPI0624ED6R8□T	6.8	100	65.0	6.0	4.0
AMPI0624ED100□T	10	100	101.0	5.0	3.1
AMPI0624ED150□T	15	100	160.0	3.3	2.5

NOTE :

* The operating temperature range is -40°C to +125°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

◆ AMPI0630ED Series Specification :

Part Number	Inductance (μ H)	Test Freq. (KHz)	DCR ($m\Omega$) Max.	Saturation Current (A) Typ.	Temp. Rise current (A) Typ.
AMPI0630EDR22□T	0.22	100	3.0	42.0	24.0
AMPI0630EDR24□T	0.24	100	3.1	31.0	23.0
AMPI0630EDR33□T	0.33	100	3.5	30.0	21.0
AMPI0630EDR47□T	0.47	100	4.1	20.0	18.0
AMPI0630EDR56□T	0.56	100	4.5	18.0	16.5
AMPI0630EDR68□T	0.68	100	5.3	17.0	16.0
AMPI0630EDR82□T	0.82	100	6.0	17.0	14.0
AMPI0630ED1R0□T	1.0	100	7.4	15.0	12.0
AMPI0630ED1R5□T	1.5	100	12.1	14.0	10.0
AMPI0630ED2R2□T	2.2	100	15.0	10.0	8.0
AMPI0630ED3R3□T	3.3	100	22.0	9.5	6.5
AMPI0630ED4R7□T	4.7	100	33.0	6.5	5.5
AMPI0630ED6R8□T	6.8	100	50.0	6.0	4.5
AMPI0630ED8R2□T	8.2	100	60.0	6.0	4.2
AMPI0630ED100□T	10	100	68.0	5.5	4.0
AMPI0630ED150□T	15	100	115.0	4.5	3.0
AMPI0630ED220□T	22	100	200.0	3.0	2.3
AMPI0630ED330□T	33	100	310.0	3.0	2.0

NOTE :

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* □ Tolerance M : $\pm 20\%$

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

◆ AMPI1040ED Series Specification :

Part Number	Inductance (μ H)	Test Freq. (KHz)	DCR ($m\Omega$) Max.	Saturation Current (A) Typ.	Temp. Rise Current (A) Typ.
AMPI1040EDR47MT	0.47	100	1.7	40.0	30.0
AMPI1040EDR56MT	0.56	100	1.8	33.0	25.0
AMPI1040EDR68MT	0.68	100	2.4	30.0	23.0
AMPI1040ED1R0MT	1.0	100	3.3	28.0	19.0
AMPI1040ED1R5MT	1.5	100	4.2	26.0	16.0
AMPI1040ED2R2MT	2.2	100	7.0	18.0	12.0
AMPI1040ED3R3MT	3.3	100	11.8	16.0	11.0
AMPI1040ED4R7MT	4.7	100	20.0	15.5	9.0
AMPI1040ED6R8MT	6.8	100	25.0	12.0	8.5
AMPI1040ED8R2MT	8.2	100	27.0	9.0	8.0
AMPI1040ED100MT	10	100	30.0	8.5	7.8
AMPI1040ED150MT	15	100	45.0	7.0	6.5
AMPI1040ED220MT	22	100	66.0	5.5	5.0
AMPI1040ED330MT	33	100	92.0	5.5	4.4
AMPI1040ED470MT	47	100	145.0	3.5	3.3
AMPI1040ED680MT	68	100	195.0	3.0	2.0

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

◆ AMPI1360ED Series Specification :

Part Number	Inductance (μ H)	Test Freq. (KHz)	DCR ($m\Omega$) Max.	Saturation Current (A) Typ.	Temp. Rise Current (A) Typ.
AMPI1360ED2R2□T	2.2	100	3.6	30.0	23.0
AMPI1360ED3R3□T	3.3	100	6.8	28.0	15.0
AMPI1360ED4R7□T	4.7	100	9.0	24.0	20.0
AMPI1360ED5R6□T	5.6	100	11.0	22.5	18.0
AMPI1360ED6R8□T	6.8	100	13.5	19.0	12.0
AMPI1360ED8R2□T	8.2	100	16.0	13.5	11.0
AMPI1360ED100□T	10	100	20.7	12.5	10.0
AMPI1360ED120□T	12	100	23.0	10.0	7.0
AMPI1360ED150□T	15	100	29.0	9.0	6.0
AMPI1360ED180□T	18	100	35.0	8.0	5.0
AMPI1360ED220□T	22	100	39.5	7.5	5.0
AMPI1360ED270□T	27	100	56.0	6.5	4.0
AMPI1360ED330□T	33	100	75.0	6.0	4.0
AMPI1360ED470□T	47	100	90.0	5.5	3.5
AMPI1360ED680□T	68	100	140.0	4.5	3.0

NOTE :

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

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◆ AMPI201610ED Series Specification :

Part Number	Inductance (μ H)	Test Freq. (MHz)	DCR ($m\Omega$) Max.	Saturation Current (A) Typ.	Temp. Rise current (A) Typ.
AMPI201610EDR24□T	0.24	1.0	23	4.5	5.4
AMPI201610ED1R0□T	1.00	1.0	90	2.1	2.8
AMPI201610ED2R2□T	2.20	1.0	195	1.3	1.8

NOTE :

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* □ Tolerance M : $\pm 20\%$

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

◆ AMPI252010ED Series Specification :

Part Number	Inductance (μ H)	Test Freq. (MHz)	DCR ($m\Omega$) Max.	Saturation Current (A) Typ.	Temp. Rise current (A) Typ.
AMPI252010EDR33□T	0.33	1.0	23	4.8	5.0
AMPI252010EDR47□T	0.47	1.0	34	4.2	4.4
AMPI252010ED1R0□T	1.00	1.0	54	2.8	3.1
AMPI252010ED1R5□T	1.50	1.0	91	2.0	2.5
AMPI252010ED2R2□T	2.20	1.0	130	1.8	2.0

NOTE :

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

◆ AMPI252012ED Series Specification :

Part Number	Inductance (μ H)	Test Freq. (MHz)	DCR ($m\Omega$) Max.	Saturation Current (A) Typ.	Temp. Rise current (A) Typ.
AMPI252012EDR33□T	0.33	1.0	17	4.3	5.6
AMPI252012EDR47□T	0.47	1.0	25	3.8	4.5
AMPI252012EDR68□T	0.68	1.0	43	3.0	4.0
AMPI252012ED1R0□T	1.00	1.0	53	2.8	3.1
AMPI252012ED2R2□T	2.20	1.0	113	1.8	2.3
AMPI252012ED3R3□T	3.30	1.0	180	1.5	1.8
AMPI252012ED4R7□T	4.70	1.0	240	1.3	1.5

NOTE :

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