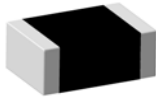


UHEI Series



Through material optimization, UHEI Series is with better electrical characteristics, such as: better efficiency performance, higher Q factor, and higher I_{rms}. Compared to HEI series, the RDC of UHEI series can also be reduced by 10% to 25%.

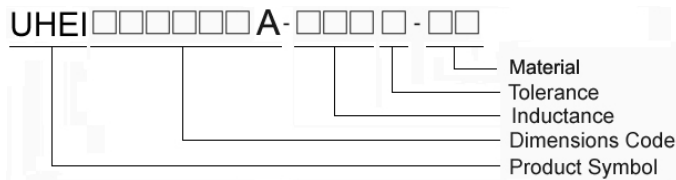
Features

- RoHS, Halogen Free and REACH Compliance
- High Efficiency
- Excellent Q, RDC and I_{rms}
- Low profile and miniature size down to 2.0*1.6*1.0mm

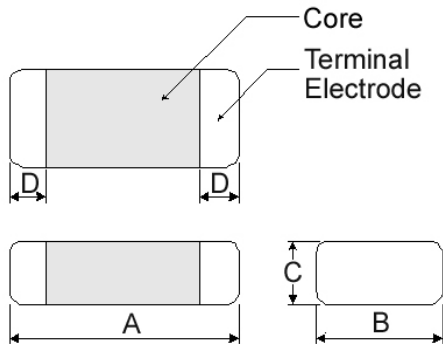
Applications

- Smartphones, tablets and wearable devices
- HDD, SSD and PC peripheral devices
- DSC, camcorders
- PND
- DC/DC converters

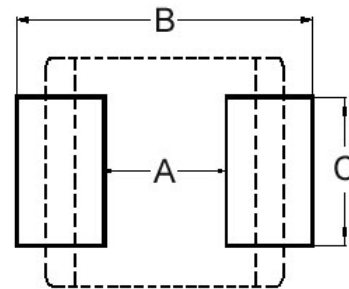
Product Identification



Shape and Dimensions



Recommended Pattern



Dimensions in mm

TYPE	A	B	C	D
201610A	2.0±0.2	1.60±0.2	1.0Max	0.5±0.3
252010A	2.5±0.3	2.00±0.3	1.0Max	0.6±0.3
252012A	2.5±0.3	2.00±0.3	1.2Max	0.6±0.3

Dimensions in mm

TYPE	A	B	C
201610A	0.9	2.0	1.6
252010A	1.2	2.8	2.0
252012A	1.2	2.8	2.0

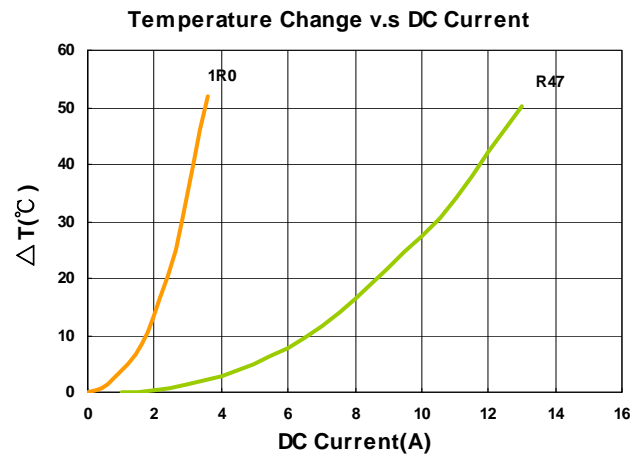
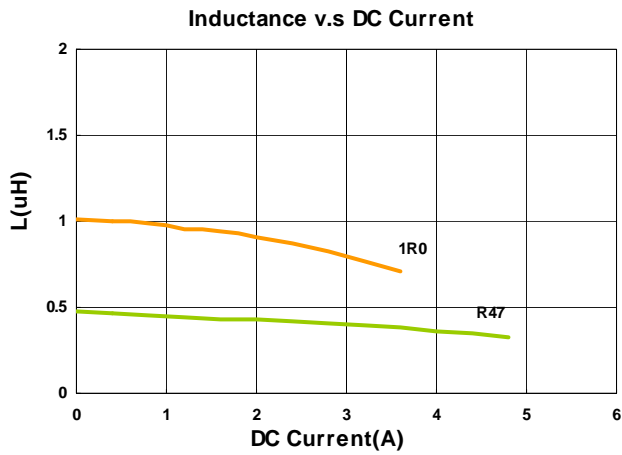
Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	RDC(mΩ) Max(Typ.)	Isat(A) Max(Typ.)	Irms(A) Max(Typ.)
UHEI201610A-R47M-Q9	0.47	20	2	36(30)	3.5(3.9)	3.1(3.5)
UHEI201610A-1R0M-Q9	1.0	20	2	60(50)	3.0(3.2)	2.7(3.0)

Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 30% from its value with current
- I rms for a 40°C temperature rise from 25°C ambient with current
- Measure Equipment :
 L : Agilent E4991/HP4287A+16197A, 2MHz 0.2V
 RDC : CHEN HWA502
 Isat : Agilent E4980A+HP42841A
 I rms : Agilent 6641 SYSTEM DC POWER SUPPLY

Test Instruments : E4991A Impedance / Material Analyzer



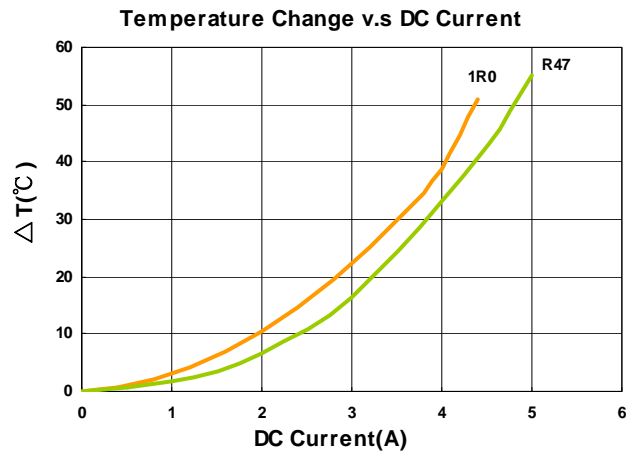
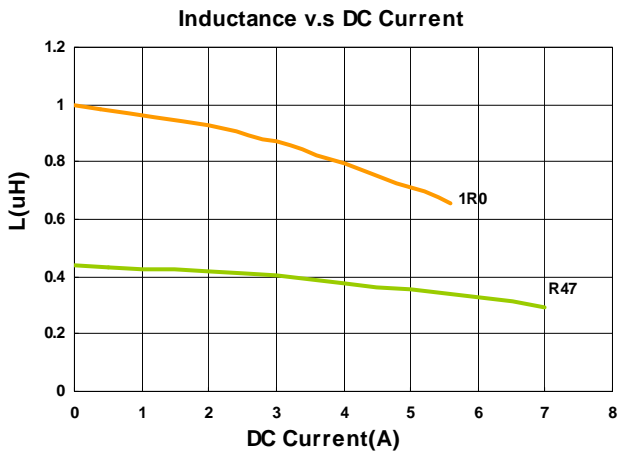
Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	RDC(mΩ) Max(Typ.)	Isat(A) Max(Typ.)	Irms(A) Max(Typ.)
UHEI252010A-R47M-Q9	0.47	20	2	27(21)	5.5(6.5)	3.5(4.0)
UHEI252010A-1R0M-Q9	1.0	20	2	46(39)	4.7(5.2)	4.0(4.2)

Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 30% from its value with current
- I rms for a 40°C temperature rise from 25°C ambient with current
- Measure Equipment :
 L : Agilent E4991/HP4287A+16197A, 2MHz 0.2V
 RDC : CHEN HWA502
 Isat : Agilent E4980A+HP42841A
 I rms : Agilent 6641 SYSTEM DC POWER SUPPLY

Test Instruments : E4991A Impedance / Material Analyzer



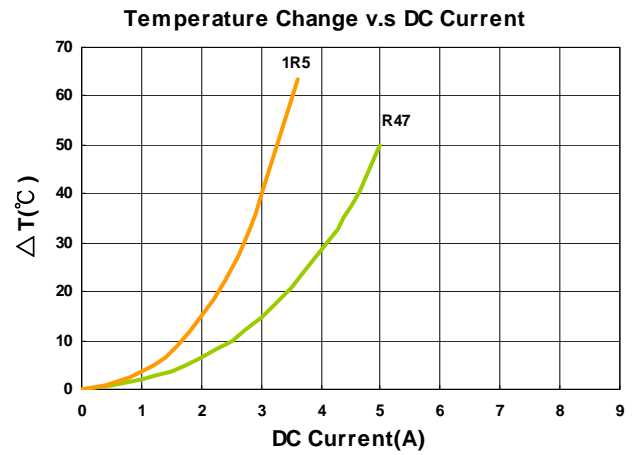
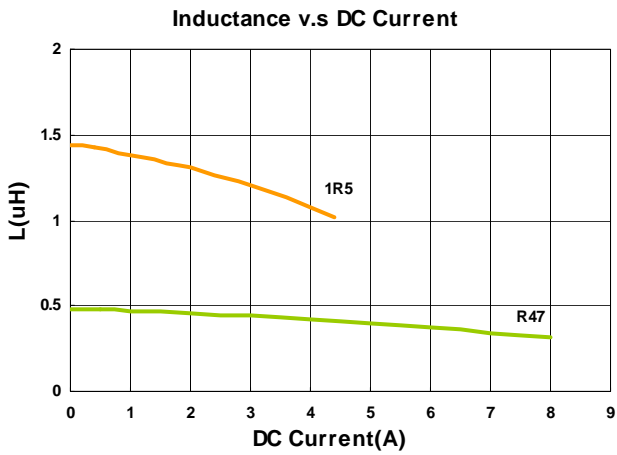
Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	RDC(mΩ) Max(Typ.)	Isat(A) Max(Typ.)	Irms(A) Max(Typ.)
UHEI252012A-R47M-Q9	0.47	20	2	26.5(22.5)	5.3(7.0)	4.0(4.5)
UHEI252012A-1R5M-Q9	1.5	20	2	59(51)	3.4(4.4)	2.7(3.0)

Note: When ordering, please specify tolerance code. Tolerance: M=±20%

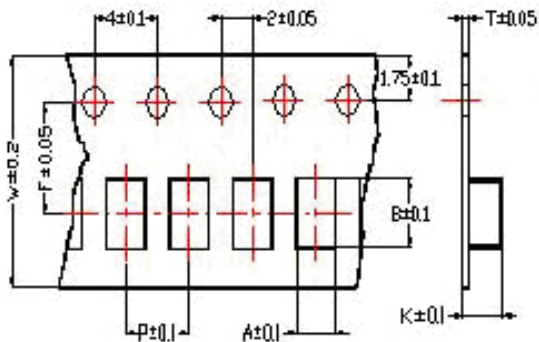
- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 30% from its value with current
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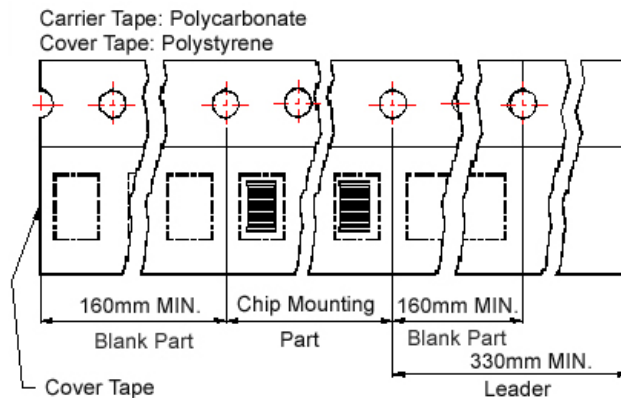


Packaging Specifications

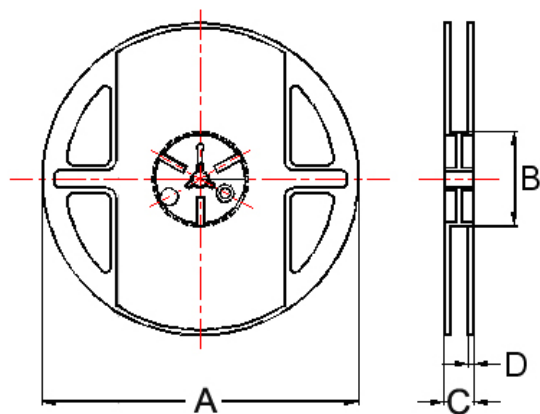
Tape Dimensions



Tape Material



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions							Reel Dimensions				Quantity PCS / REEL
	A	B	T	W	P	F	K	A	B	C	D	
201610A	1.80	2.20	0.22	8	4	3.5	1.15	178	60	12	1.5	3000
252010A	2.25	2.80	0.22	8	4	3.5	1.35	178	60	12	1.5	3000
252012A	2.25	2.80	0.22	8	4	3.5	1.35	178	60	12	1.5	3000