Pulse a YAGEO company

CHILISIN ELECTRONICS CORP.

Power Inductor AWVC Series

Automotive AEC-Q200

RoHS Compliant
Halogen Free
REACH Compliant





Power Circuit | Shield | Magnetic Resin LVx | Ferrite | High Current

Part Numbering

A	WVC	00	252012	1R0	M	00
Grade	Series Name	Control Code	Dimensions Code (mm)	Inductance (uH)	Tolerance	Internal Code

Dimensions Code	(mm)
201610	2.0x1.6x1.0
201612	2.0x1.6x1.2
252012	2.5x2.0x1.2
404018	4.0x4.0x1.9
505040	5.0x5.0x4.0
606028	6.0x6.0x2.8
606045	6.0x6.0x4.5

Inductance	(uH)
R47	0.47
1R0	1.0
101	100

Tolerance	
M	±20%
T	±30%

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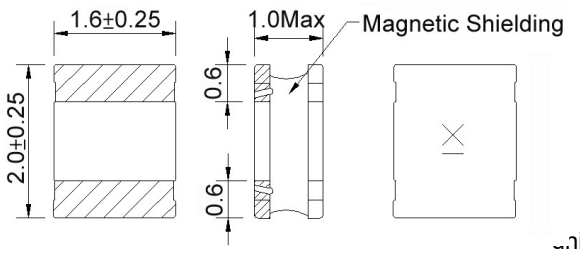
CHILISIN ELECTRONICS CORP.

Power Inductor AWVC Series

Automotive AEC-Q200

AWVC00201610 Type

■ Dimensions



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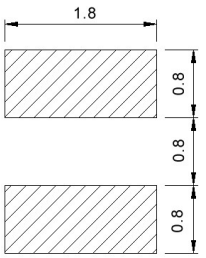
■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)±30%	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance (±%)	Marking
AWVC00201610R24□00	0.24	1MHz,200mV	0.026	3.20(2.80)	3.00(2.70)	20,30	M
AWVC002016101R0□00	1.0	1MHz,200mV	0.095	1.80(1.60)	1.80(1.60)	20,30	B
AWVC002016101R5□00	1.5	1MHz,200mV	0.14	1.60(1.40)	1.60(1.40)	20,30	C
AWVC002016102R2□00	2.2	1MHz,200mV	0.19	1.30(1.10)	1.30(1.10)	20,30	D
AWVC002016103R3□00	3.3	1MHz,200mV	0.295	0.96(0.86)	0.98(0.88)	20,30	E
AWVC002016104R7□00	4.7	1MHz,200mV	0.36	0.84(0.75)	0.90(0.81)	20,30	F
AWVC002016106R8□00	6.8	1MHz,200mV	0.64	0.66(0.59)	0.70(0.63)	20,30	G
AWVC00201610100□00	10	1MHz,200mV	1.0	0.54(0.48)	0.56(0.50)	20,30	H
AWVC00201610150□00	15	1MHz,200mV	1.5	0.39(0.35)	0.42(0.37)	20,30	K
AWVC00201610180□00	18	1MHz,200mV	1.6	0.39(0.35)	0.41(0.36)	20,30	J
AWVC00201610220□00	22	1MHz,200mV	1.7	0.38(0.34)	0.40(0.36)	20,30	I

Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%

1. Operating temperature range －40℃～125℃(Including self - temperature rise)
2. Isat for Inductance drop 30% from its value without current
3. Irms for a 40℃ temperature rise from 25℃ ambient with current
4. Measure Equipment:
   L: HP4285A+HP42841A
   RDC: DIGITAL MILLINHM METER CHROMA 16502, or equivalent
   Isat: Agilent HP4284A
   Irms: Agilent HP4284A

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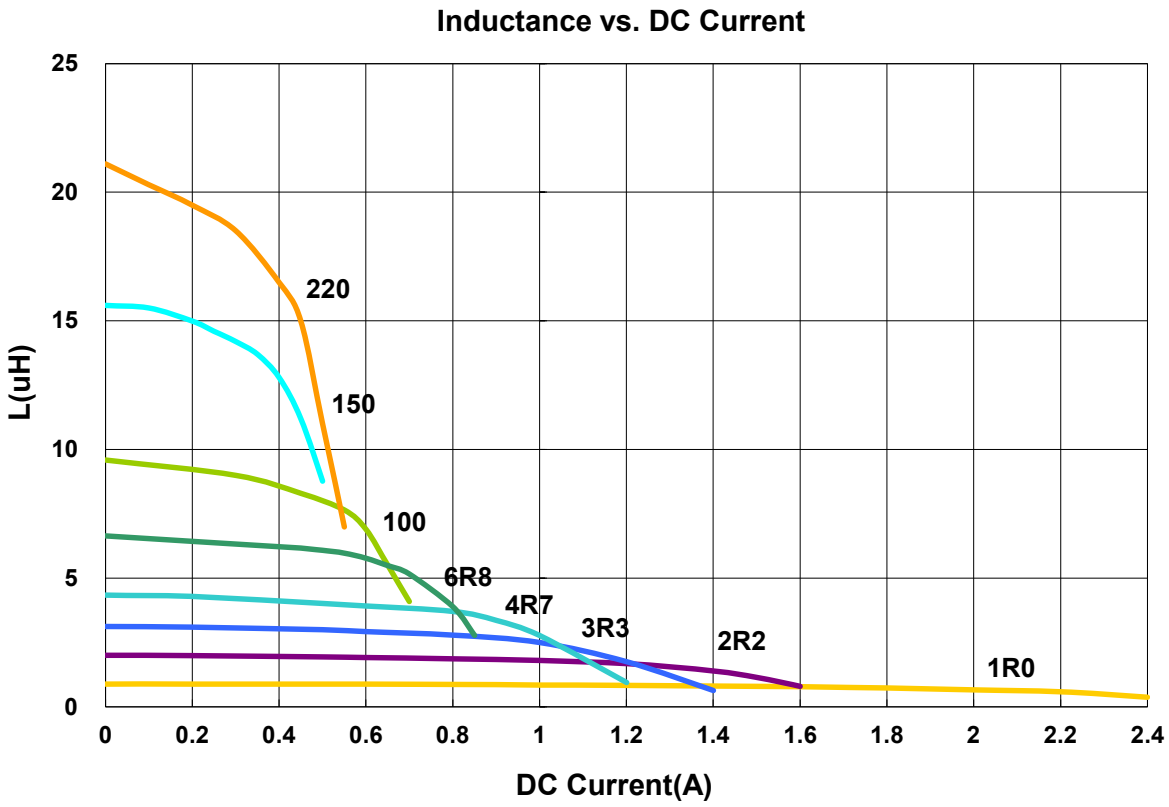
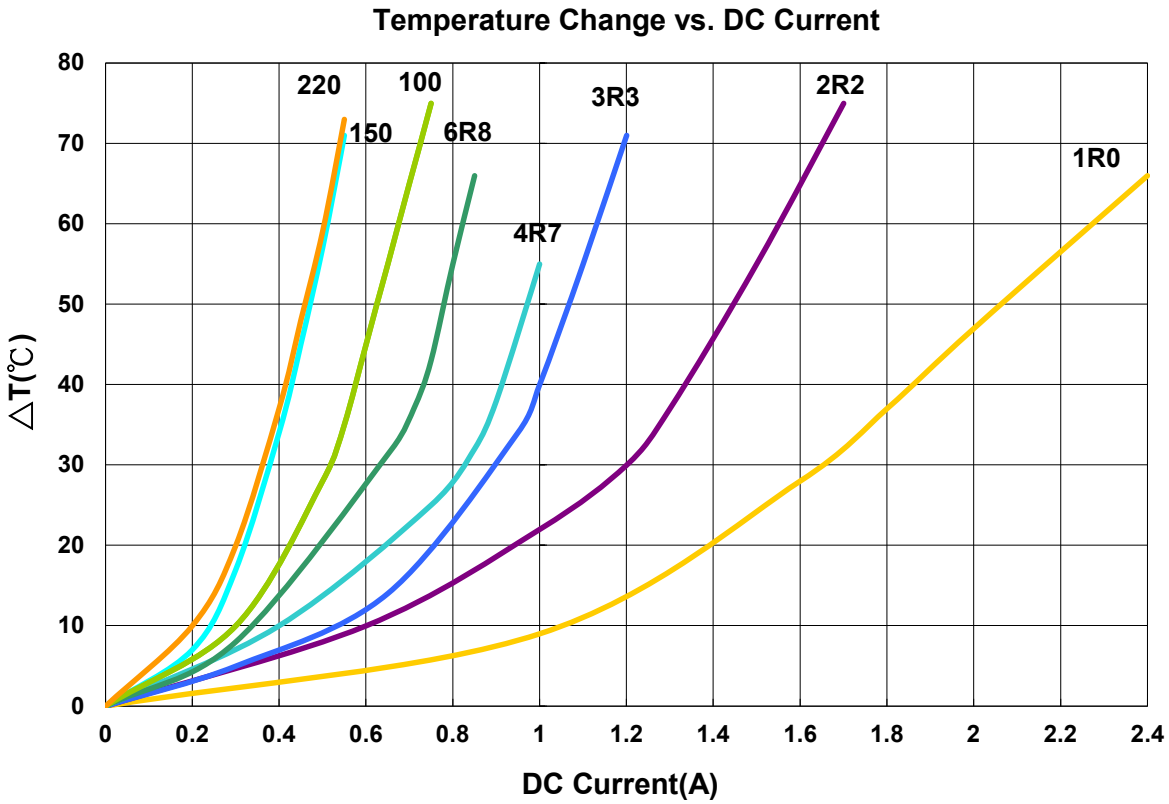
Power Inductor AWVC Series

Automotive
AEC-Q200

AWVC00201610 Type

■ Characteristics Graph





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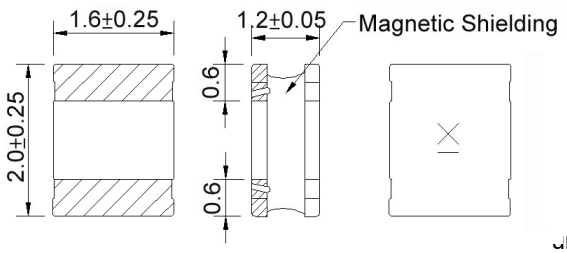
CHILISIN ELECTRONICS CORP.

Power Inductor AWVC Series

Automotive
AEC-Q200

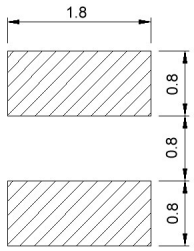
AWVC00201612 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)±30%	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance (±%)	Marking
AWVC00201612R50□00	0.5	1MHz,200mV	0.051	2.60(2.30)	2.30(2.00)	20,30	B
AWVC002016121R0□00	1.0	1MHz,200mV	0.083	1.90(1.70)	1.80(1.60)	20,30	C
AWVC002016122R2□00	2.2	1MHz,200mV	0.159	1.30(1.20)	1.30(1.20)	20,30	E
AWVC002016123R3□00	3.3	1MHz,200mV	0.22	1.10(0.99)	1.00(0.95)	20,30	F
AWVC002016124R7□00	4.7	1MHz,200mV	0.33	0.92(0.82)	0.90(0.81)	20,30	G
AWVC00201612100□00	10	1MHz,200mV	0.58	0.62(0.55)	0.58(0.52)	20,30	I
AWVC00201612150□00	15	1MHz,200mV	0.9	0.48(0.43)	0.45(0.40)	20,30	J
AWVC00201612220□00	22	1MHz,200mV	1.4	0.40(0.36)	0.40(0.36)	20,30	K

Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%

1. Operating temperature range －40℃～125℃(Including self - temperature rise)
2. Isat for Inductance drop 30% from its value without current
3. Irms for a 40℃ temperature rise from 25℃ ambient with current
4. Measure Equipment:
   L: HP4285A+HP42841A
   RDC: DIGITAL MILLINHM METER CHROMA 16502, or equivalent
   Isat: Agilent HP4284A
   Irms: Agilent HP4284A

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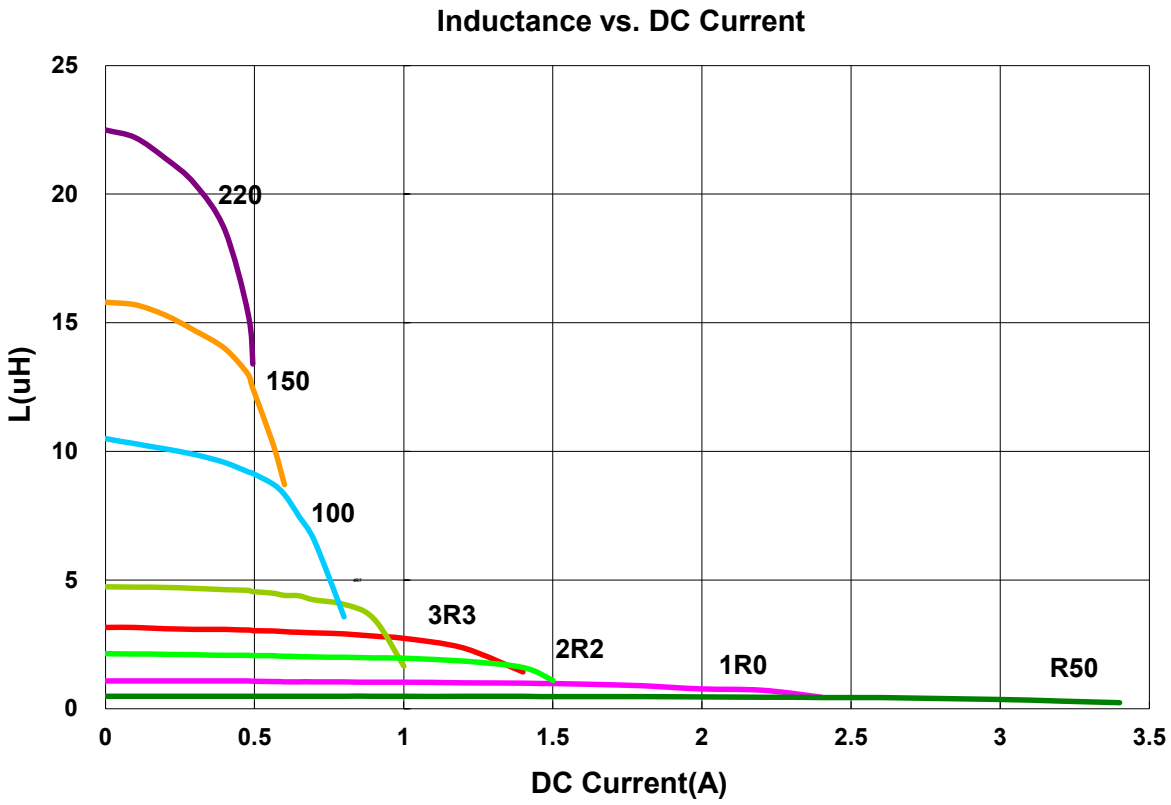
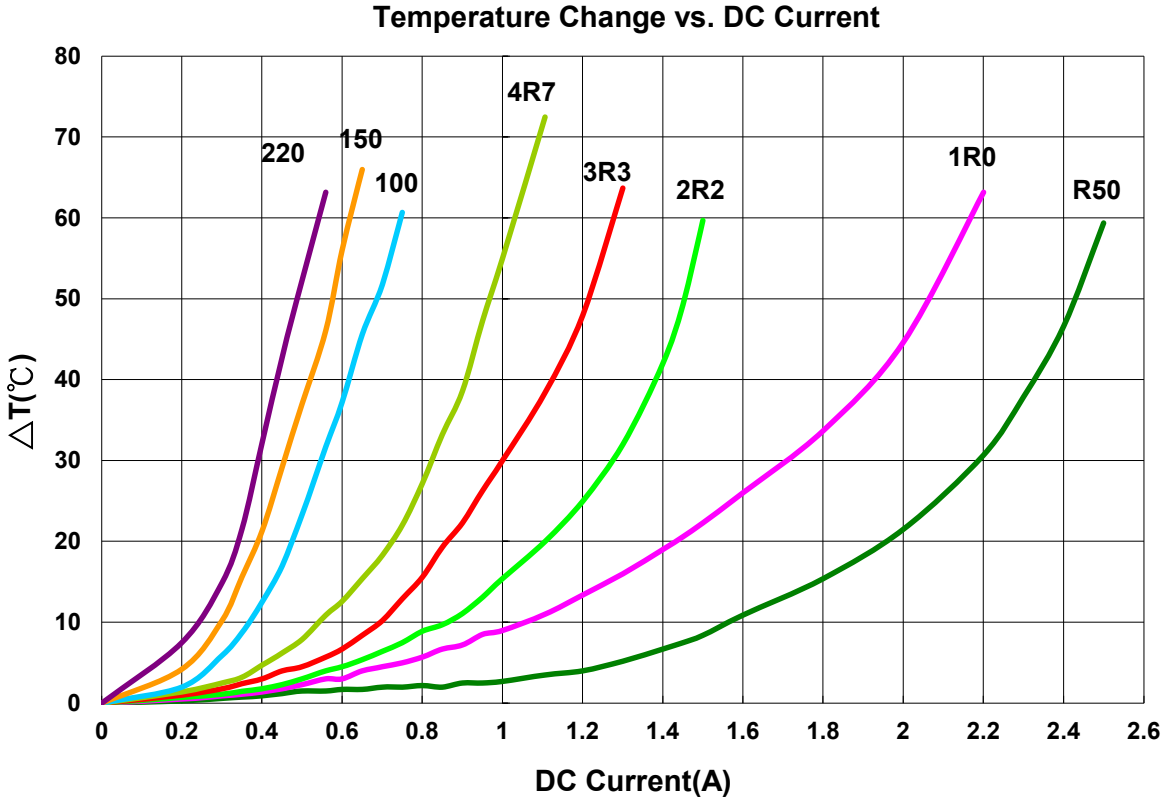
Power Inductor AWVC Series

Automotive
AEC-Q200

AWVC00201612 Type

■ Characteristics Graph





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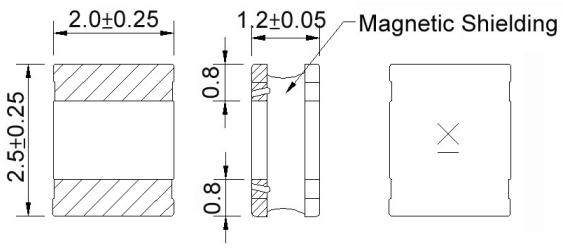
CHILISIN ELECTRONICS CORP.

Power Inductor AWVC Series

Automotive AEC-Q200

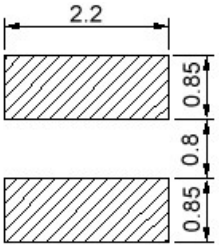
AWVC00252012 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)±30%	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance (±%)	Marking
AWVC00252012R68□00	0.68	1MHz,200mV	0.035	2.80(2.50)	2.60(2.30)	20,30	N

Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%

1. Operating temperature range －40℃～125℃(Including self - temperature rise)
2. Isat for Inductance drop 30% from its value without current.
3. Irms for a 40℃ temperature rise from 25℃ ambient with current
4. Measure Equipment:
   L: HP4285A+HP42841A
   RDC: DIGITAL MILLINHM METER CHROMA 16502, or equivalent
   Isat: Agilent HP4284A
   Irms: Agilent HP4284A

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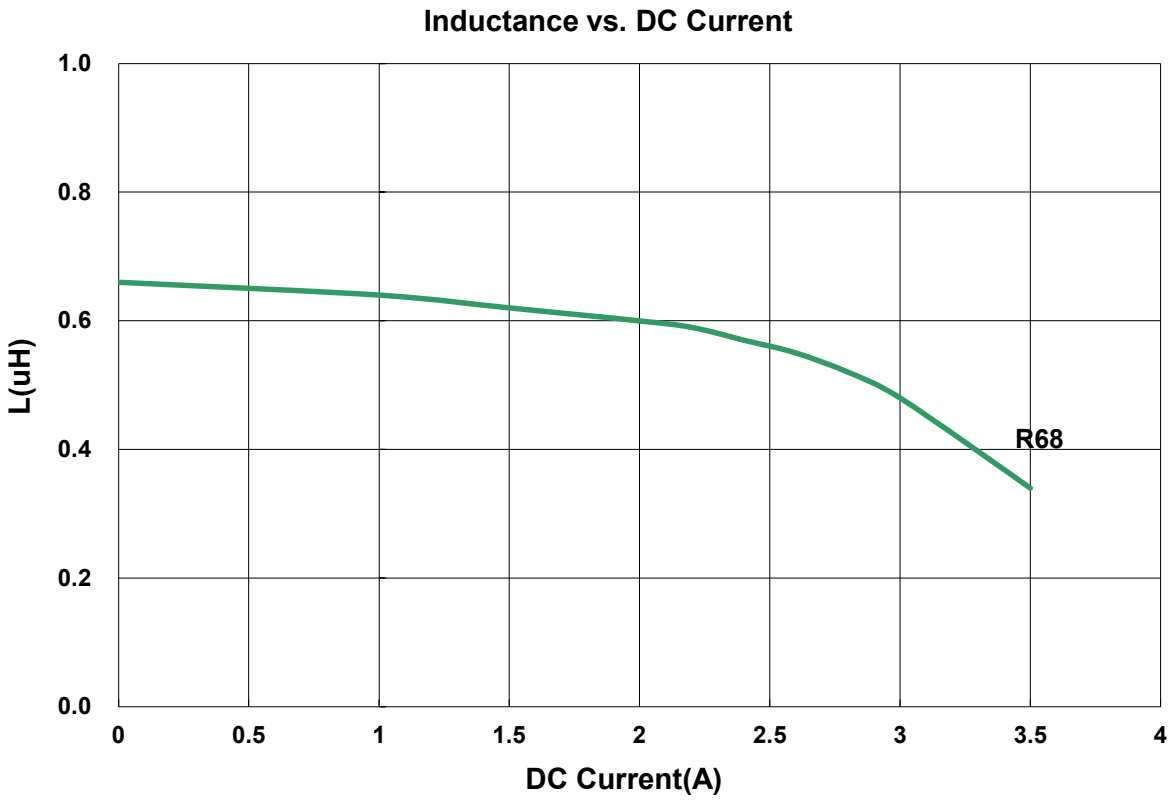
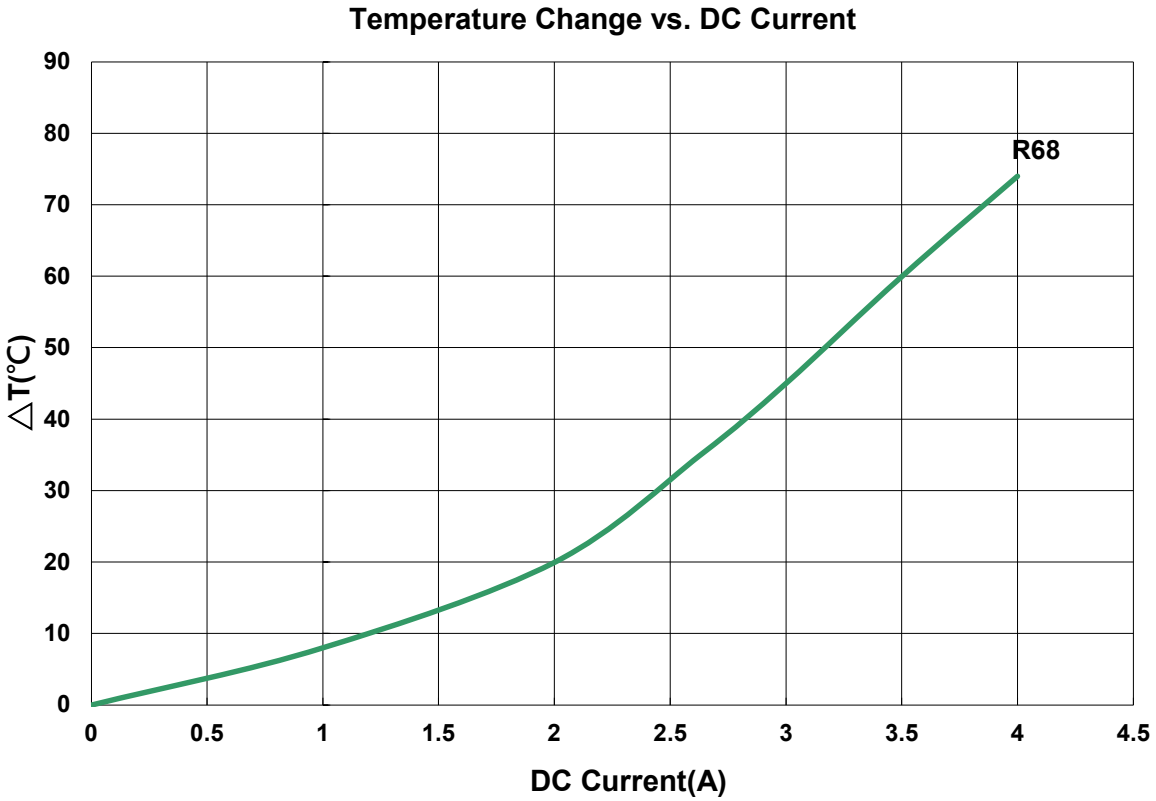
Power Inductor AWVC Series

Automotive
AEC-Q200

AWVC00252012 Type

■ Characteristics Graph





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Pulse a YAGEO company

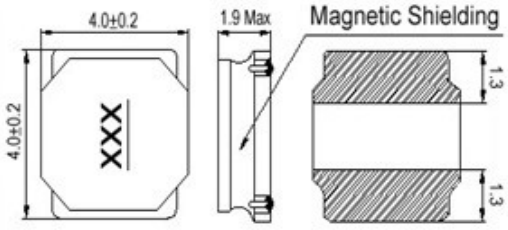
CHILISIN ELECTRONICS CORP.

Power Inductor AWVC Series

Automotive
AEC-Q200

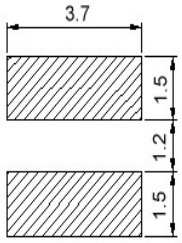
AWVC00404018 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)±30%	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance (±%)	Marking
AWVC004040181R2□00	1.2	100kHz,1V	0.027	3.70(3.30)	3.60(3.20)	20,30	1R2
AWVC004040184R7□00	4.7	100kHz,1V	0.077	2.00(1.80)	1.80(1.60)	20,30	4R7
AWVC004040186R8□00	6.8	100kHz,1V	0.105	1.50(1.30)	1.35(1.20)	20,30	6R8
AWVC00404018100□00	10	100kHz,1V	0.160	1.40(1.20)	1.20(1.00)	20,30	100
AWVC00404018150□00	15	100kHz,1V	0.245	1.05(0.94)	0.95(0.85)	20,30	150
AWVC00404018220□00	22	100kHz,1V	0.335	0.90(0.81)	0.88(0.79)	20,30	220

Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%

1. Operating temperature range －40℃～125℃(Including self - temperature rise)
2. Isat for Inductance drop 30% from its value without current
3. Irms for a 40℃ temperature rise from 25℃ ambient with current
4. Measure Equipment:
   L: HP4285A+HP42841A
   RDC: DIGITAL MILLINHM METER CHROMA 16502, or equivalent
   Isat: Agilent HP4284A
   Irms: Agilent HP4284A

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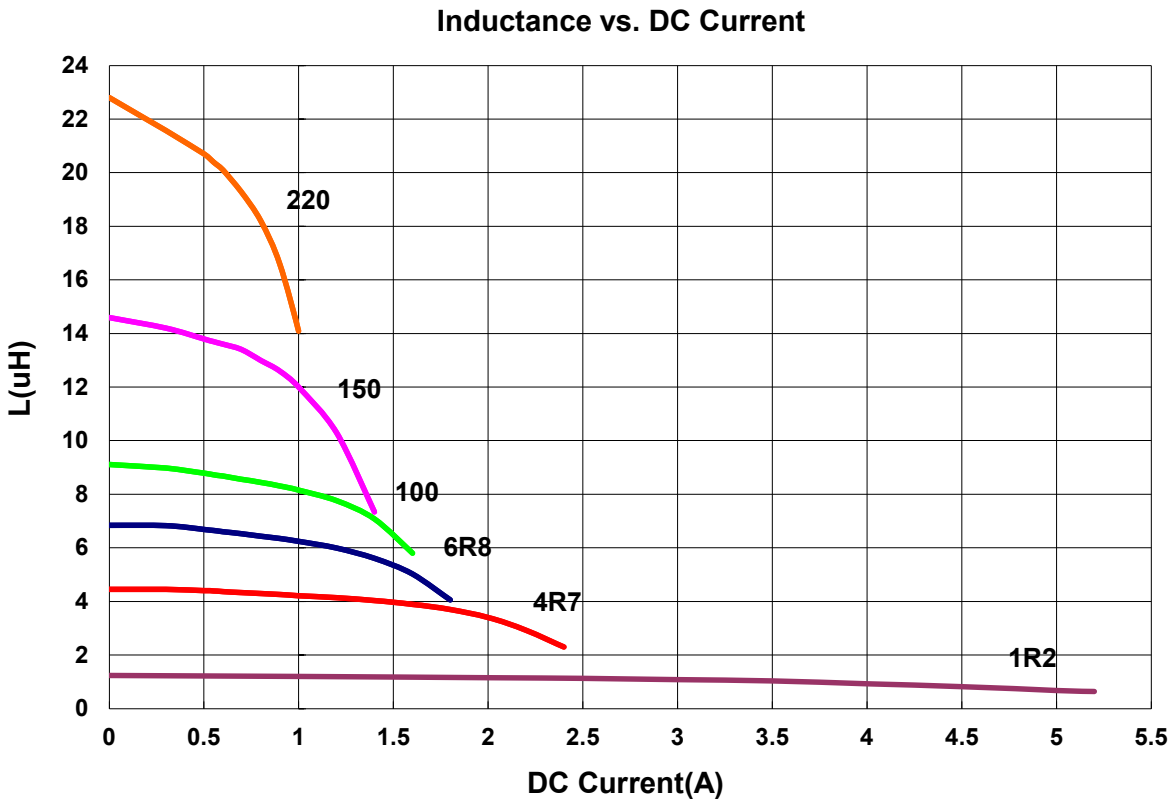
CHILISIN ELECTRONICS CORP.

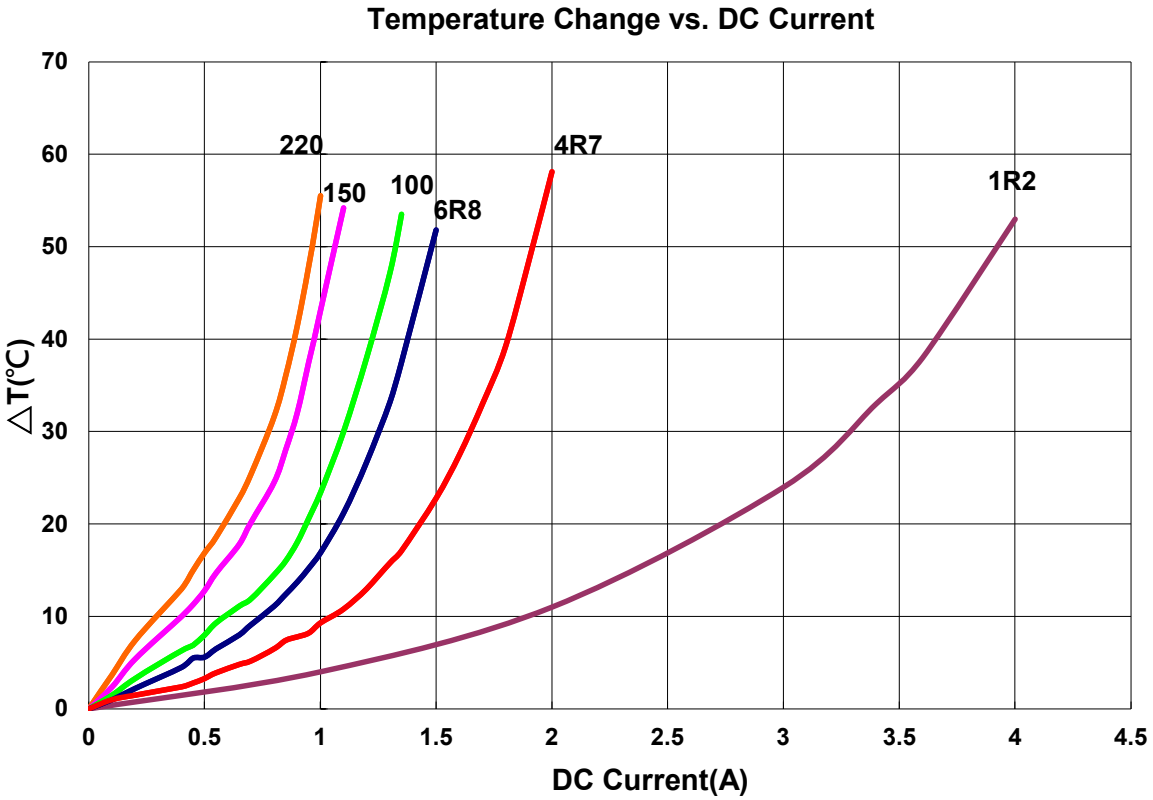
Power Inductor AWVC Series

Automotive
AEC-Q200

AWVC00404018 Type

■ Characteristics Graph





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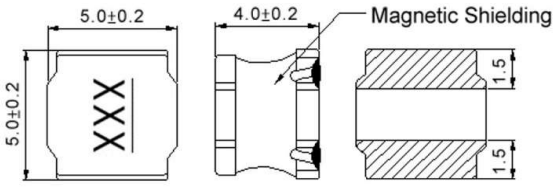
CHILISIN ELECTRONICS CORP.

Power Inductor AWVC Series

Automotive
AEC-Q200

AWVC00505040 Type

■ Dimensions



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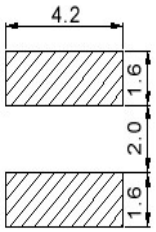
■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)±30%	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance (±%)	Marking
AWVC005050401R0□00	1.0	100kHz,1V	0.012	8.8(7.9)	5.9(5.3)	20,30	1R0
AWVC005050401R5□00	1.5	100kHz,1V	0.014	7.9(7.1)	5.4(4.8)	20,30	1R5
AWVC005050402R2□00	2.2	100kHz,1V	0.020	6.8(6.1)	4.5(4.0)	20,30	2R2
AWVC005050402R7□00	2.7	100kHz,1V	0.026	6.0(5.4)	4.2(3.7)	20,30	2R7
AWVC005050403R3□00	3.3	100kHz,1V	0.026	5.3(4.7)	4.2(3.7)	20,30	3R3
AWVC005050404R7□00	4.7	100kHz,1V	0.032	4.4(3.9)	3.2(2.8)	20,30	4R7
AWVC005050406R8□00	6.8	100kHz,1V	0.050	3.8(3.4)	3.0(2.7)	20,30	6R8
AWVC005050408R2□00	8.2	100kHz,1V	0.065	3.3(2.9)	2.4(2.1)	20,30	8R2
AWVC00505040100□00	10	100kHz,1V	0.070	3.0(2.70)	2.3(2.0)	20,30	100
AWVC00505040150□00	15	100kHz,1V	0.115	2.4(2.1)	1.8(1.6)	20,30	150
AWVC00505040220□00	22	100kHz,1V	0.160	2.0(1.80)	1.6(1.4)	20,30	220
AWVC00505040151□00	150	100kHz,1V	1.180	0.74(0.66)	0.58(0.52)	20,30	151
AWVC00505040181□00	180	100kHz,1V	1.250	0.67(0.60)	0.54(0.48)	20,30	181
AWVC00505040221□00	220	100kHz,1V	1.450	0.65(0.58)	0.50(0.45)	20,30	221

Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%

1. Operating temperature range －40℃～125℃(Including self - temperature rise)
2. Isat for Inductance drop 30% from its value without current
3. Irms for a 40℃ temperature rise from 25℃ ambient with current
4. Measure Equipment:
   L: HP4285A+HP42841A
   RDC: DIGITAL MILLINHM METER CHROMA 16502, or equivalent
   Isat: Agilent HP4284A
   Irms: Agilent HP4284A

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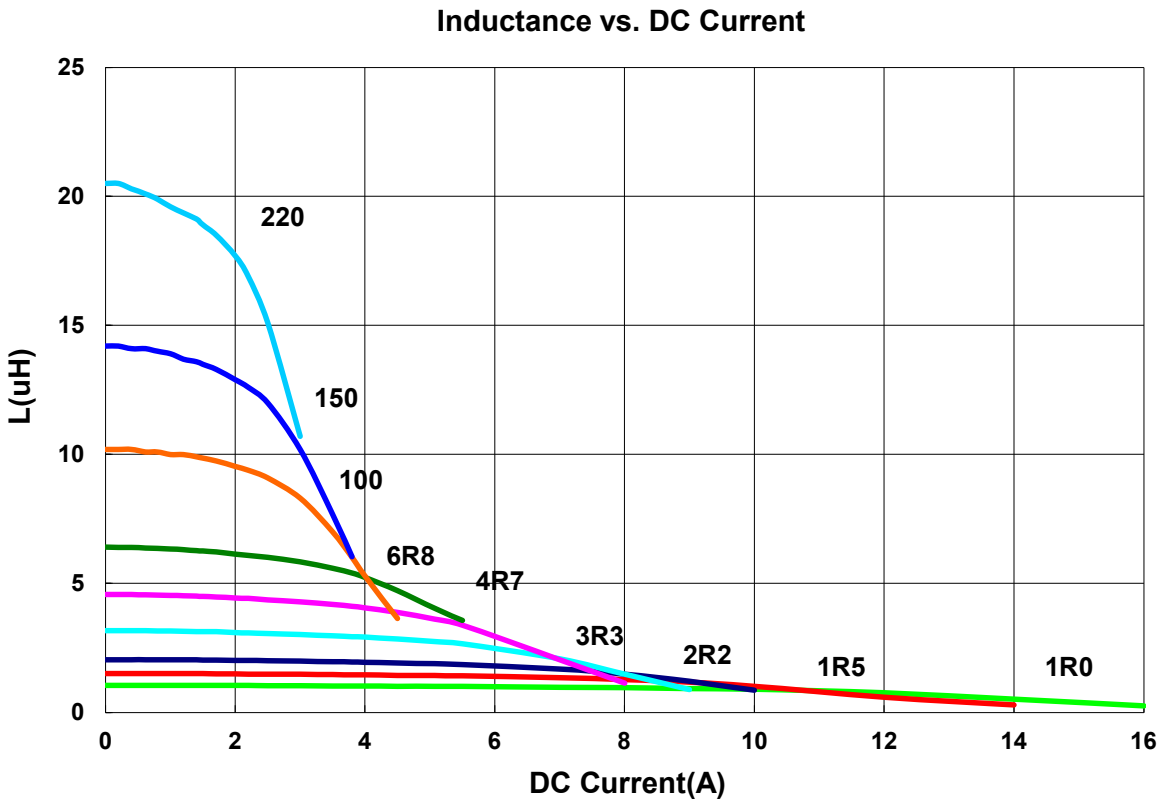
CHILISIN ELECTRONICS CORP.

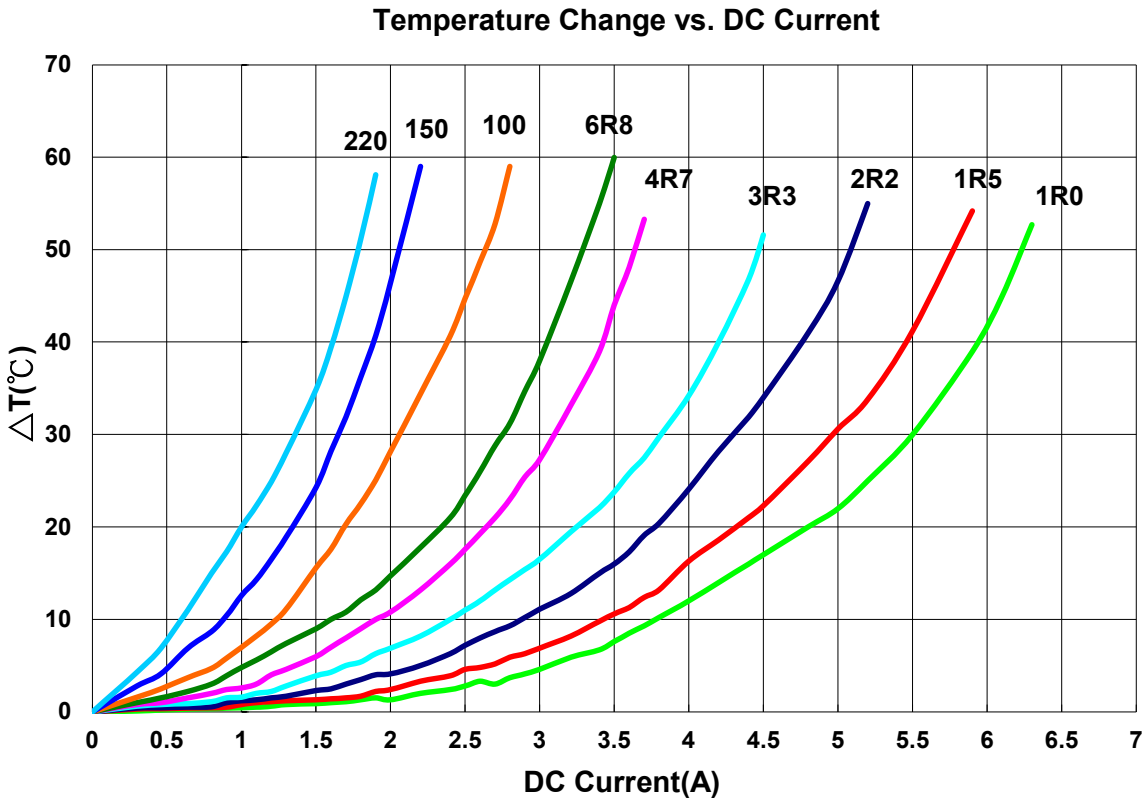
Power Inductor AWVC Series

Automotive
AEC-Q200

AWVC00505040 Type

■ Characteristics Graph





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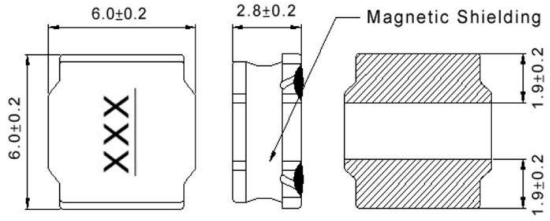
CHILISIN ELECTRONICS CORP.

Power Inductor AWVC Series

Automotive
AEC-Q200

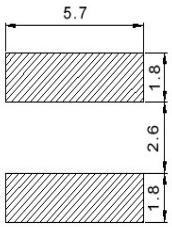
AWVC00606028 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)±30%	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance (±%)	Marking
AWVC006060283R3□00	3.3	100kHz,1V	0.027	4.5(4.00)	4.0(3.60)	20,30	3R3
AWVC00606028100□00	10	100kHz,1V	0.065	2.6(2.30)	2.5(2.20)	20,30	100
AWVC00606028150□00	15	100kHz,1V	0.093	2.1(1.80)	2.0(1.80)	20,30	150
AWVC00606028220□00	22	100kHz,1V	0.135	1.7(1.50)	1.65(1.40)	20,30	220

Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%

1. Operating temperature range －40℃～125℃(Including self - temperature rise)
2. Isat for Inductance drop 30% from its value without current
3. Irms for a 40℃ temperature rise from 25℃ ambient with current
4. Measure Equipment:
   L: HP4285A+HP42841A
   RDC: DIGITAL MILLINHM METER CHROMA 16502, or equivalent
   Isat: Agilent HP4284A
   Irms: Agilent HP4284A

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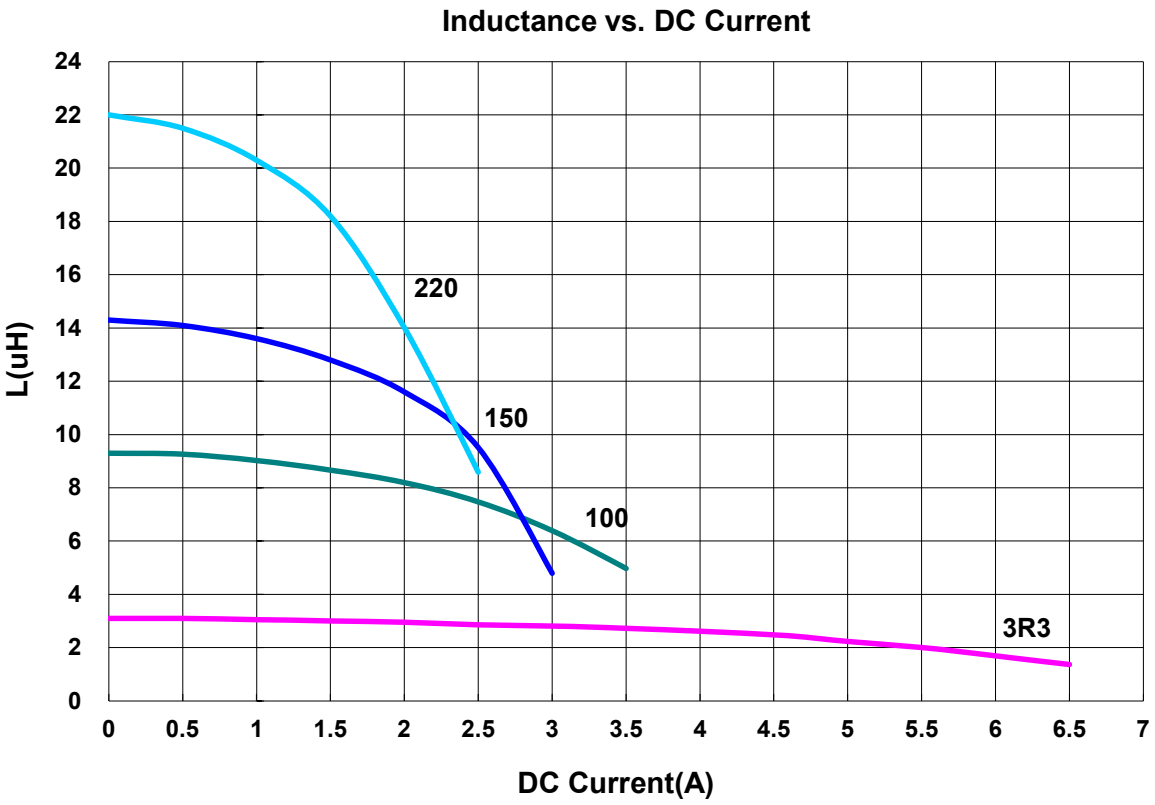
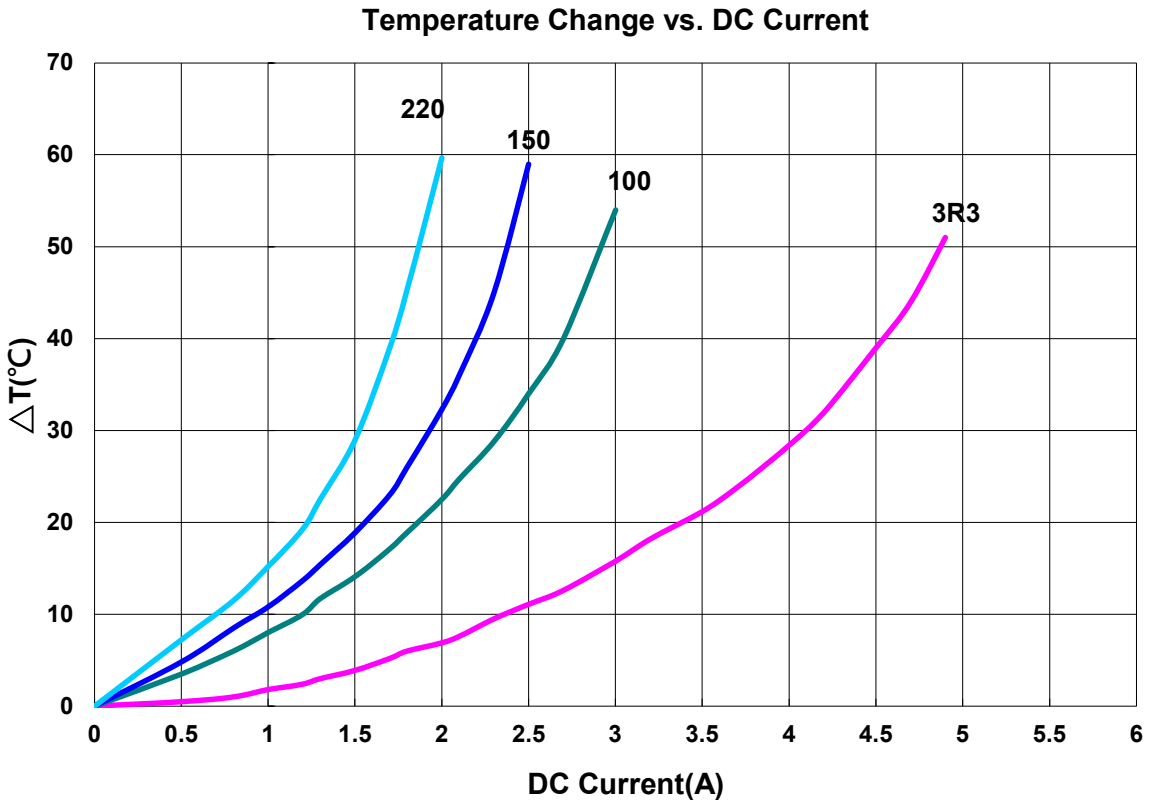
Power Inductor AWVC Series

Automotive
AEC-Q200

AWVC00606028 Type

■ Characteristics Graph





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Pulse a YAGEO company

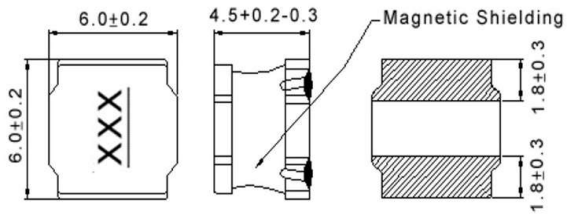
CHILISIN ELECTRONICS CORP.

Power Inductor AWVC Series

Automotive
AEC-Q200

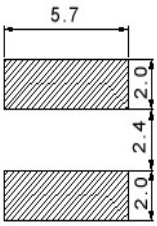
AWVC00606045 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)±30%	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance (±%)	Marking
AWVC006060451R0□00	1	100kHz,1V	0.010	13(11.50)	7.3(6.50)	20,30	1R0
AWVC006060451R5□00	1.5	100kHz,1V	0.012	12(10.50)	6.6(5.90)	20,30	1R5
AWVC006060452R2□00	2.2	100kHz,1V	0.018	9.5(8.50)	5.2(4.60)	20,30	2R2
AWVC006060453R3□00	3.3	100kHz,1V	0.022	7.8(7.00)	4.4(3.90)	20,30	3R3
AWVC006060454R7□00	4.7	100kHz,1V	0.030	6.8(6.10)	4.0(3.60)	20,30	4R7
AWVC006060456R8□00	6.8	100kHz,1V	0.042	5.7(5.10)	3.3(2.90)	20,30	6R8
AWVC00606045100□00	10	100kHz,1V	0.060	4.6(4.10)	2.6(2.30)	20,30	100
AWVC00606045150□00	15	100kHz,1V	0.090	3.8(3.40)	2.2(1.90)	20,30	150
AWVC00606045220□00	22	100kHz,1V	0.130	3.3(2.90)	1.9(1.70)	20,30	220

Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%

1. Operating temperature range －40℃～125℃(Including self - temperature rise)
2. Isat for Inductance drop 30% from its value without current
3. Irms for a 40℃ temperature rise from 25℃ ambient with current
4. Measure Equipment:
   L: HP4285A+HP42841A
   RDC: DIGITAL MILLINHM METER CHROMA 16502, or equivalent
   Isat: Agilent HP4284A
   Irms: Agilent HP4284A

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Pulse a YAGEO company

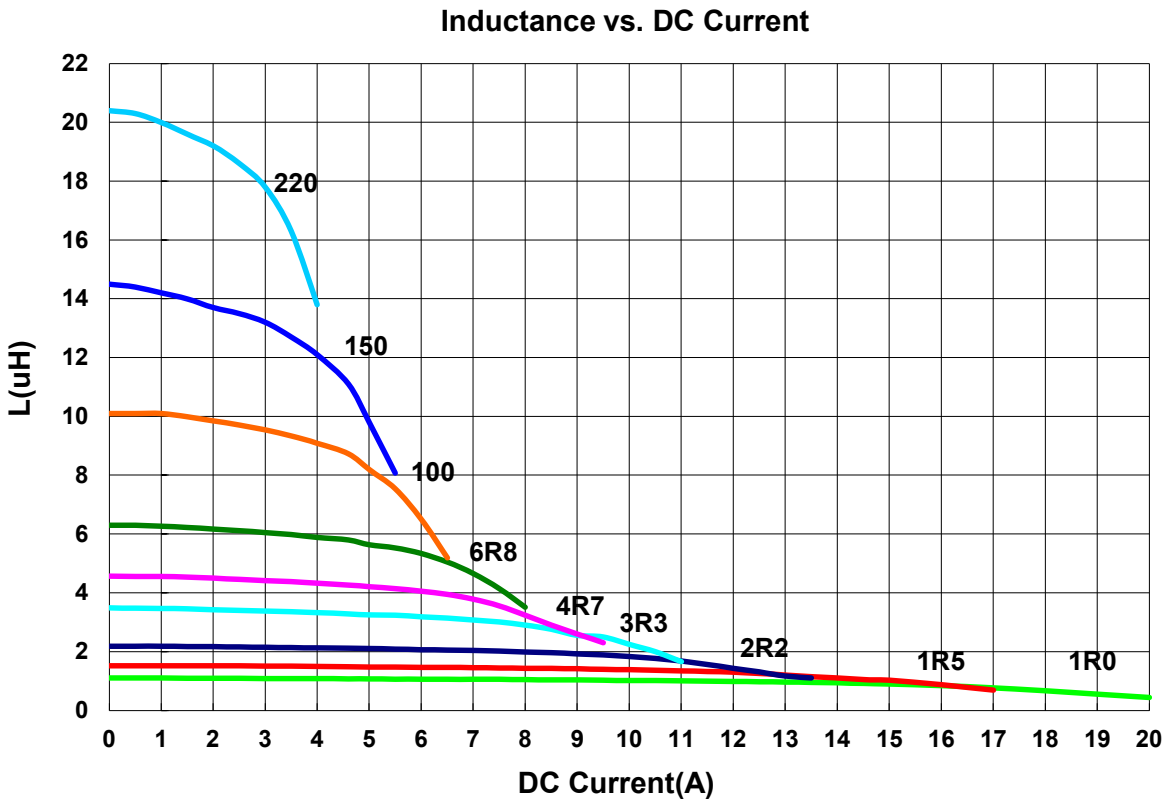
CHILISIN ELECTRONICS CORP.

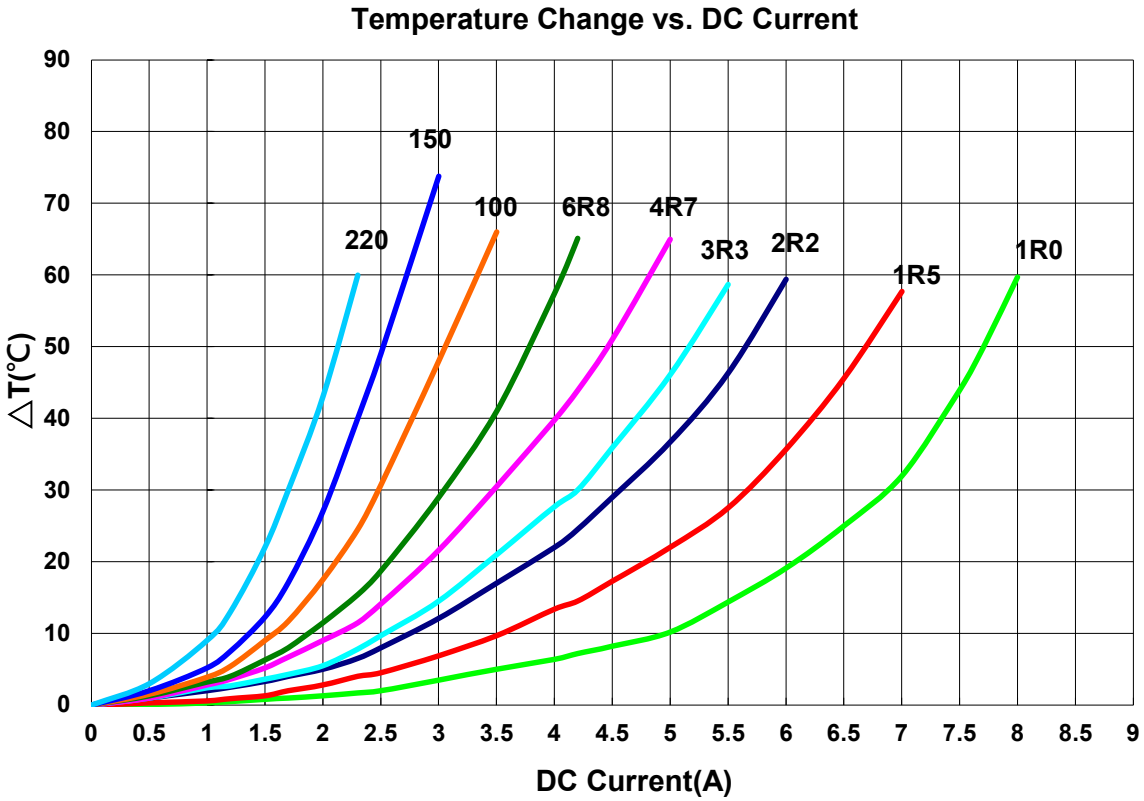
Power Inductor AWVC Series

Automotive
AEC-Q200

AWVC00606045 Type

■ Characteristics Graph





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Power Inductor AWVC Series

Automotive
AEC-Q200

Packaging

Tape Dimensions

Figure 1

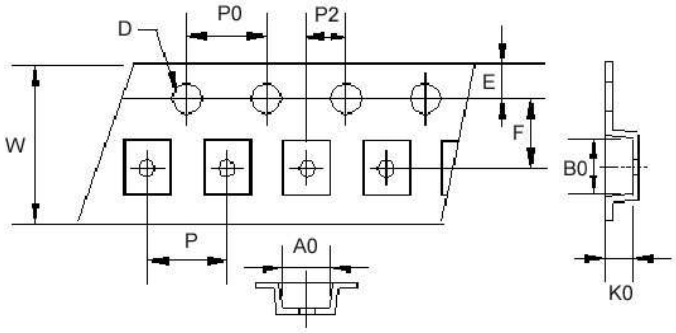
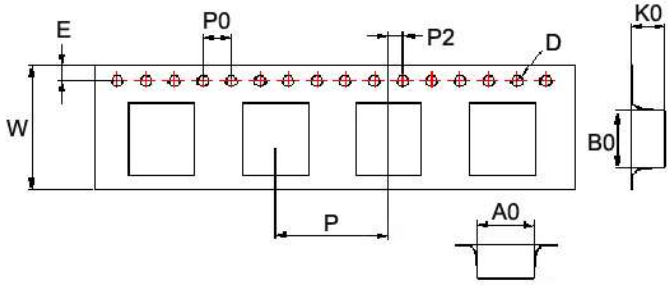


Figure 2



Reel Dimensions

Figure 1

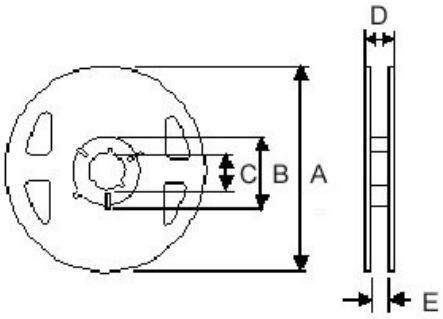
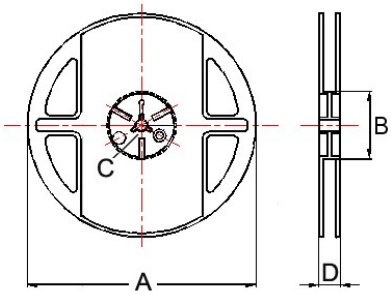


Figure 2



Dimensions in mm

TYPE	Fig	Tape Dimensions										Reel Dimensions					Quantity
		A0	B0	K0	D	E	F	W	P	P0	P2	A	B	C	D	E	PCS / Reel
AWVC00201610	1	1.9	2.2	1.15	1.55	1.75	3.5	8	4	4	2	180	60	13	14.4	8.4	2000
AWVC00201612	1	1.9	2.2	1.3	1.55	1.75	3.5	8	4	4	2	180	60	13	14.4	8.4	2000
AWVC00252012	1	2.40	2.70	1.35	1.55	1.75	3.5	8	4	4	2	180	60	13	14.4	8.4	2000
AWVC00404018	2	4.25	4.25	2.1	1.55	1.75	5.5	12	8	4	2	178	60	13	13.2	-	800
AWVC00505040	2	5.2	5.2	4.2	1.55	1.75	5.5	12	8	4	2	330	100	13	13.4	-	1500
AWVC00606028	2	6.25	6.25	3.00	1.55	1.75	7.5	16	12	4	2	330	100	13	16	-	1500
AWVC00606045	2	6.2	6.2	4.65	1.55	1.75	5.5	12	8	4	2	330	100	13	13.4	-	1000

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