Power Inductor LVS Series

Automotive
AEC-Q200

RoHS Compliant
Halogen Free
REACH Compliant

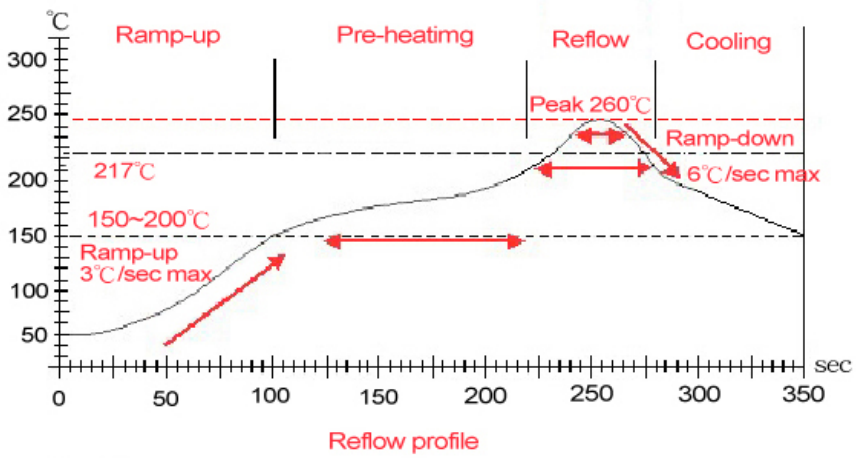


Power Circuit | Shield | Magnetic Resin LVx | Ferrite | High Current

■ Part Numbering

LVS	606045	L	-	1R0	M	-	AU
Series Name	Dimensions Code (mm)	Internal Code		Inductance (uH)	Tolerance		Internal Code
	404012 4.0x4.0x1.2	L Low DCR		R47 0.47	M ±20%		
	404018 4.0x4.0x1.8			1R0 1.0	T ±30%		
	505020 5.0x5.0x2.0			101 100			
	505040 5.0x5.0x4.0						
	606020 6.0x6.0x2.0						
	606028 6.0x6.0x2.8						
	606045 6.0x6.0x4.5						
	606045L 6.0x6.0x4.5						
	808040 8.0x8.0x4.0						
	808040L 8.0x8.0x4.0						

■ Recommend Reflow Profile



Reflow profile

Lead-Free(LF)

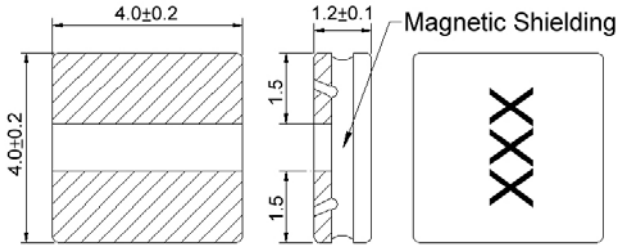
Item.	Ramp-up	Pre-heatimg	Reflow	Peak Temp	Cooling
Temp.scope	R.T. ~ 150℃	150℃ ~ 200℃	217℃	260±5℃	Peak Temp. ~ 150℃
Time spec.	—	60 ~ 180sec	60 ~ 150sec	20 ~ 40sec	—
Time result	—	75 ~ 100sec	90 ~ 120sec	5 ~ 10sec	—

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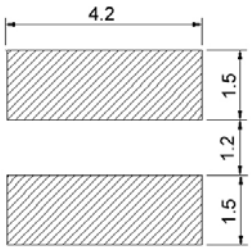
LVS404012 - AU Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (mΩ)±30%	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance (±%)	Marking
LVS404012-1R0□-AU	1.0	100kHz,1V	48	2.50(2.20)	1.70(1.50)	20,30	1R0
LVS404012-1R5□-AU	1.5	100kHz,1V	58	2.10(1.80)	1.60(1.40)	20,30	1R5
LVS404012-2R2□-AU	2.2	100kHz,1V	65	1.70(1.50)	1.50(1.30)	20,30	2R2
LVS404012-3R3□-AU	3.3	100kHz,1V	90	1.30(1.10)	1.40(1.20)	20,30	3R3
LVS404012-4R7□-AU	4.7	100kHz,1V	110	1.10(0.90)	1.20(1.00)	20,30	4R7
LVS404012-6R8□-AU	6.8	100kHz,1V	135	0.90(0.81)	1.00(0.94)	20,30	6R8
LVS404012-100□-AU	10	100kHz,1V	190	0.78(0.70)	0.90(0.81)	20,30	100
LVS404012-150□-AU	15	100kHz,1V	250	0.65(0.58)	0.85(0.76)	20,30	150
LVS404012-220□-AU	22	100kHz,1V	400	0.52(0.46)	0.75(0.67)	20,30	220
LVS404012-330□-AU	33	100kHz,1V	600	0.44(0.39)	0.70(0.63)	20,30	330
LVS404012-470□-AU	47	100kHz,1V	930	0.35(0.31)	0.50(0.45)	20,30	470

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

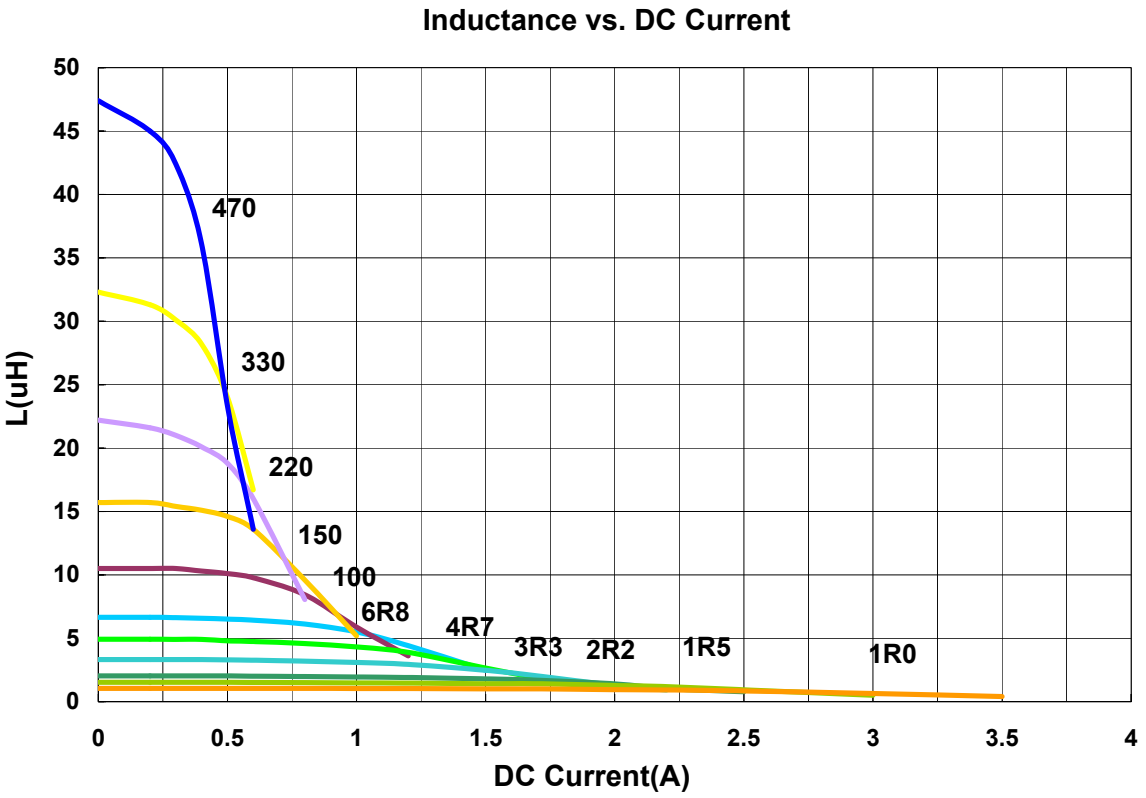
1. Operating temperature range - 40℃ ~ 125℃(Including self - temperature rise)
2. Isat for Inductance drop 30% from its value with current
3. Irms for a 40℃ temperature rise from 25℃ ambient with current
4. Measure Equipment:
   L: Agilent HP4284A+Agilent HP42841A
   RDC: DIGITAL MILLINHM METER CHROMA 16502, or equivalent
   Isat: Agilent HP4284A
   Irms: Agilent HP4284A

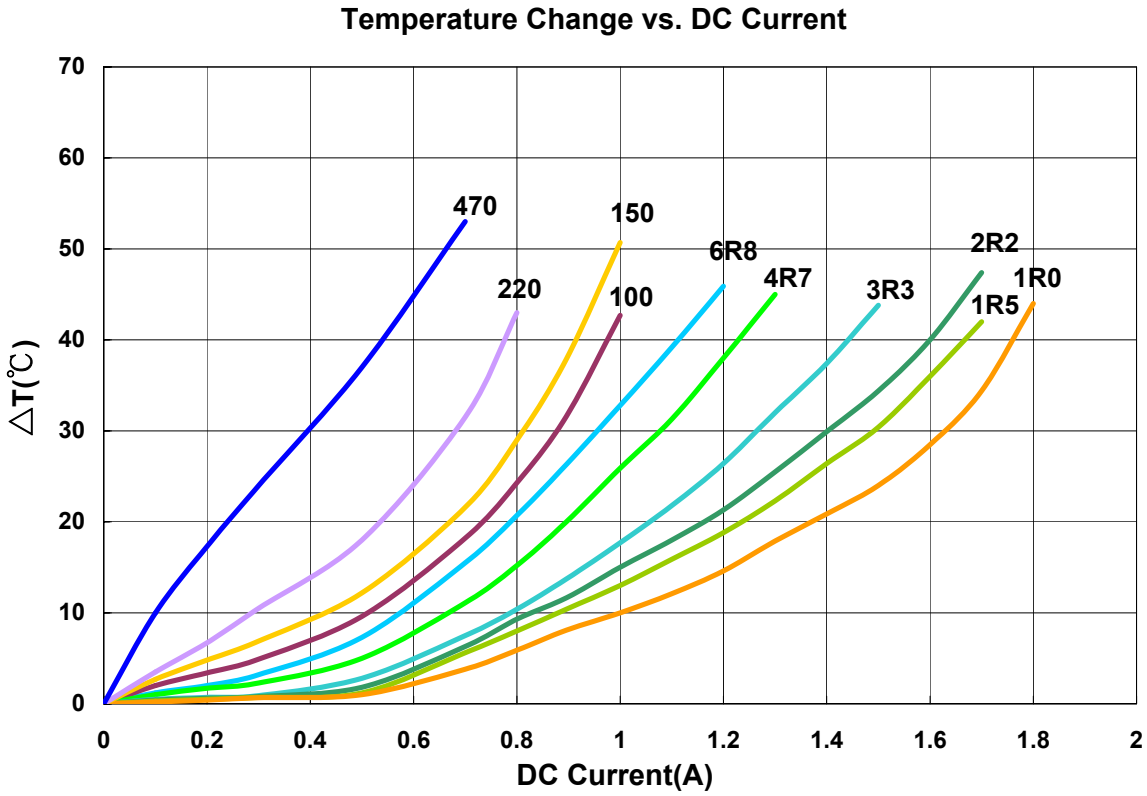
Power Inductor LVS Series

Automotive
AEC-Q200

LVS404012 - AU Type

■ Characteristics Graph



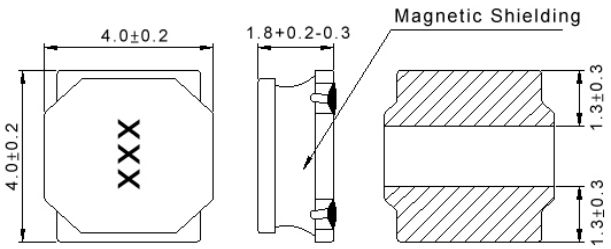


Power Inductor LVS Series

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AEC-Q200

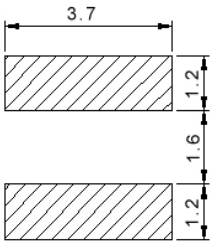
LVS404018 - AU Type

Dimensions



unit:mm

Recommended Land Pattern



unit:mm

Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (mΩ)±20%	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance (±%)	Marking
LVS404018-1R0□-AU	1	100kHz,1V	32	4.10(3.60)	2.80(2.50)	20,30	1R0
LVS404018-1R5□-AU	1.5	100kHz,1V	40	3.30(2.90)	2.60(2.30)	20,30	1R5
LVS404018-1R8□-AU	1.8	100kHz,1V	55	2.80(2.50)	2.50(2.20)	20,30	1R8
LVS404018-2R2□-AU	2.2	100kHz,1V	60	2.80(2.50)	2.50(2.20)	20,30	2R2
LVS404018-2R3□-AU	2.3	100kHz,1V	60	2.80(2.50)	2.50(2.20)	20,30	2R3
LVS404018-3R3□-AU	3.3	100kHz,1V	70	2.20(1.90)	2.10(1.80)	20,30	3R3
LVS404018-3R6□-AU	3.6	100kHz,1V	75	2.10(1.80)	1.90(1.70)	20,30	3R6
LVS404018-3R9□-AU	3.9	100kHz,1V	75	2.10(1.80)	1.90(1.70)	20,30	3R9
LVS404018-4R7□-AU	4.7	100kHz,1V	90	2.00(1.80)	1.70(1.50)	20,30	4R7
LVS404018-6R8□-AU	6.8	100kHz,1V	110	1.60(1.40)	1.50(1.30)	20,30	6R8
LVS404018-100□-AU	10	100kHz,1V	170	1.40(1.20)	1.20(1.00)	20,30	100
LVS404018-150□-AU	15	100kHz,1V	250	1.00(0.90)	1.00(0.90)	20,30	150
LVS404018-220□-AU	22	100kHz,1V	350	0.90(0.81)	0.85(0.76)	20,30	220
LVS404018-330□-AU	33	100kHz,1V	530	0.80(0.72)	0.70(0.63)	20,30	330
LVS404018-470□-AU	47	100kHz,1V	720	0.70(0.63)	0.56(0.50)	20,30	470
LVS404018-680□-AU	68	100kHz,1V	1000	0.56(0.50)	0.45(0.40)	20,30	680
LVS404018-101□-AU	100	100kHz,1V	1500	0.46(0.41)	0.38(0.34)	20,30	101
LVS404018-151□-AU	150	100kHz,1V	2500	0.35(0.31)	0.30(0.27)	20,30	151
LVS404018-221□-AU	220	100kHz,1V	4000	0.28(0.25)	0.23(0.20)	20,30	221

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

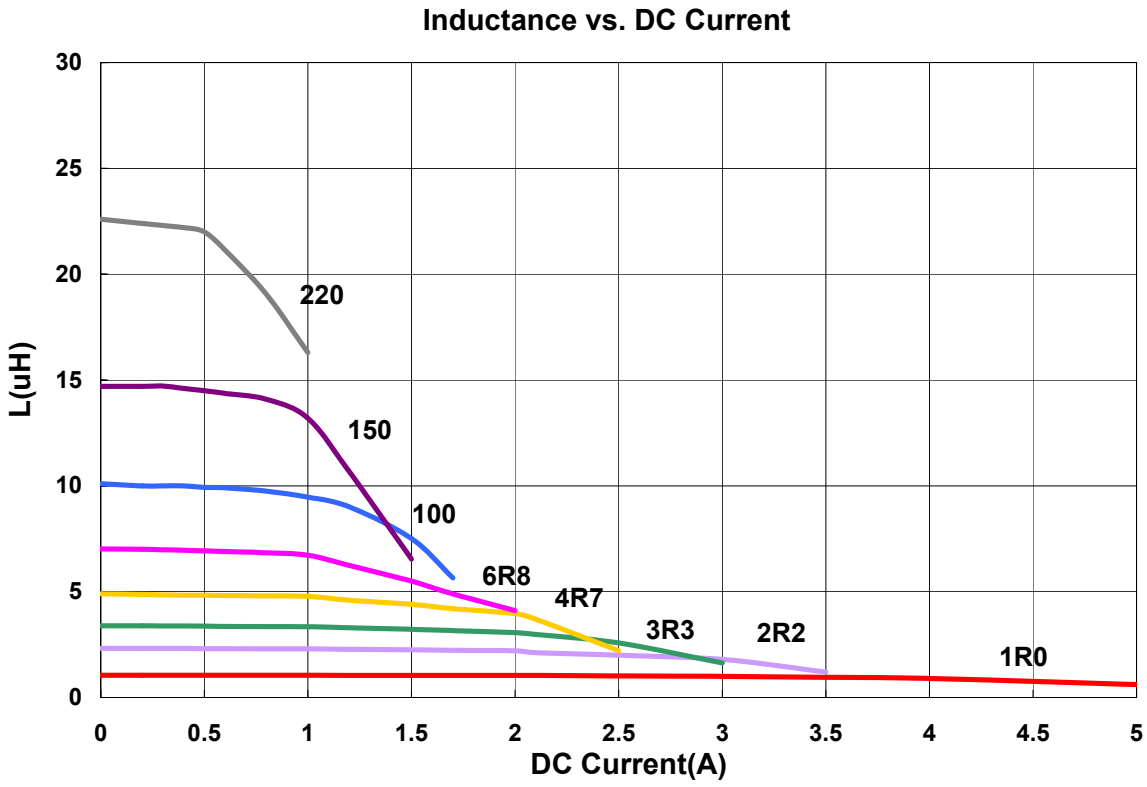
1. Operating temperature range - 40℃ ~ 125℃(Including self - temperature rise)
2. Isat for Inductance drop 30% from its value with current
3. Irms for a 40℃ temperature rise from 25℃ ambient with current
4. Measure Equipment:
   L: Agilent HP4284A+Agilent HP42841A
   RDC: DIGITAL MILLINHM METER CHROMA 16502, or equivalent
   Isat: Agilent HP4284A
   Irms: Agilent HP4284A

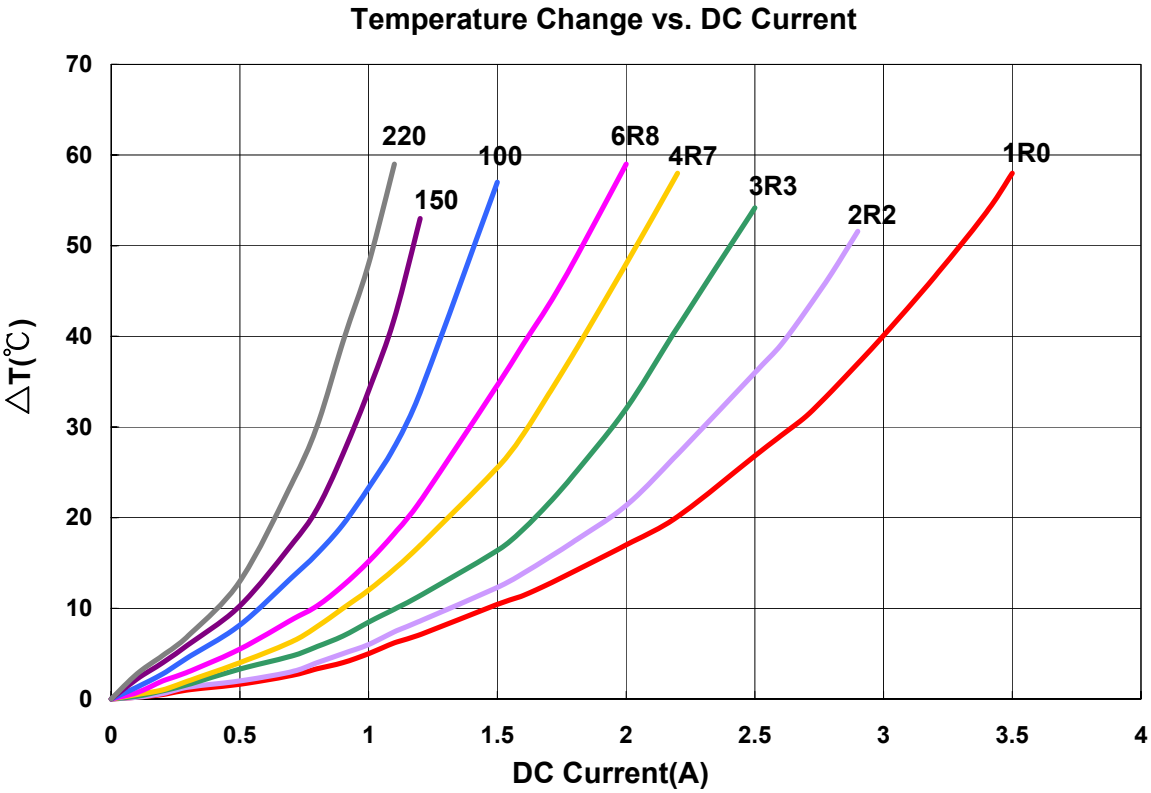
Power Inductor LVS Series

Automotive
AEC-Q200

LVS404018 - AU Type

■ Characteristics Graph



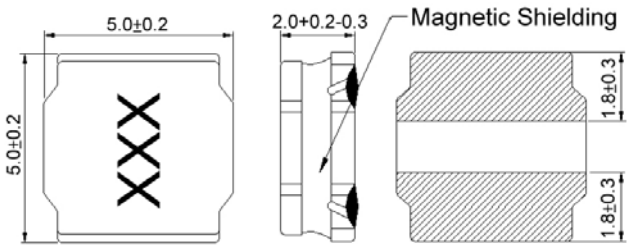


Power Inductor LVS Series

Automotive
AEC-Q200

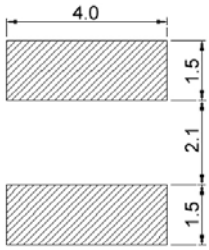
LVS505020 - AU Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (mΩ)±20%	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance (±%)	Marking
LVS505020-1R0□-AU	1.0	100kHz,1V	21	5.10(4.50)	4.00(3.60)	30	1R0
LVS505020-1R2□-AU	1.2	100kHz,1V	21	4.80(4.30)	3.80(3.40)	30	1R2
LVS505020-1R5□-AU	1.5	100kHz,1V	26	4.20(3.70)	3.50(3.10)	20,30	1R5
LVS505020-2R2□-AU	2.2	100kHz,1V	35	3.40(3.00)	3.20(2.80)	20,30	2R2
LVS505020-2R7□-AU	2.7	100kHz,1V	38	3.40(3.00)	3.20(2.80)	20,30	2R7
LVS505020-3R3□-AU	3.3	100kHz,1V	48	3.05(2.70)	2.80(2.50)	20,30	3R3
LVS505020-4R7□-AU	4.7	100kHz,1V	60	2.20(1.90)	2.90(2.60)	20,30	4R7
LVS505020-5R6□-AU	5.6	100kHz,1V	82	2.05(1.80)	2.00(1.80)	20,30	5R6
LVS505020-6R8□-AU	6.8	100kHz,1V	90	2.00(1.80)	1.80(1.60)	20,30	6R8
LVS505020-100□-AU	10	100kHz,1V	120	1.60(1.44)	1.60(1.40)	20,30	100
LVS505020-150□-AU	15	100kHz,1V	190	1.30(1.17)	1.20(1.00)	20,30	150
LVS505020-220□-AU	22	100kHz,1V	260	1.00(0.90)	1.00(0.90)	20,30	220
LVS505020-330□-AU	33	100kHz,1V	460	0.80(0.72)	0.75(0.67)	20,30	330
LVS505020-470□-AU	47	100kHz,1V	580	0.65(0.58)	0.65(0.58)	20,30	470

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

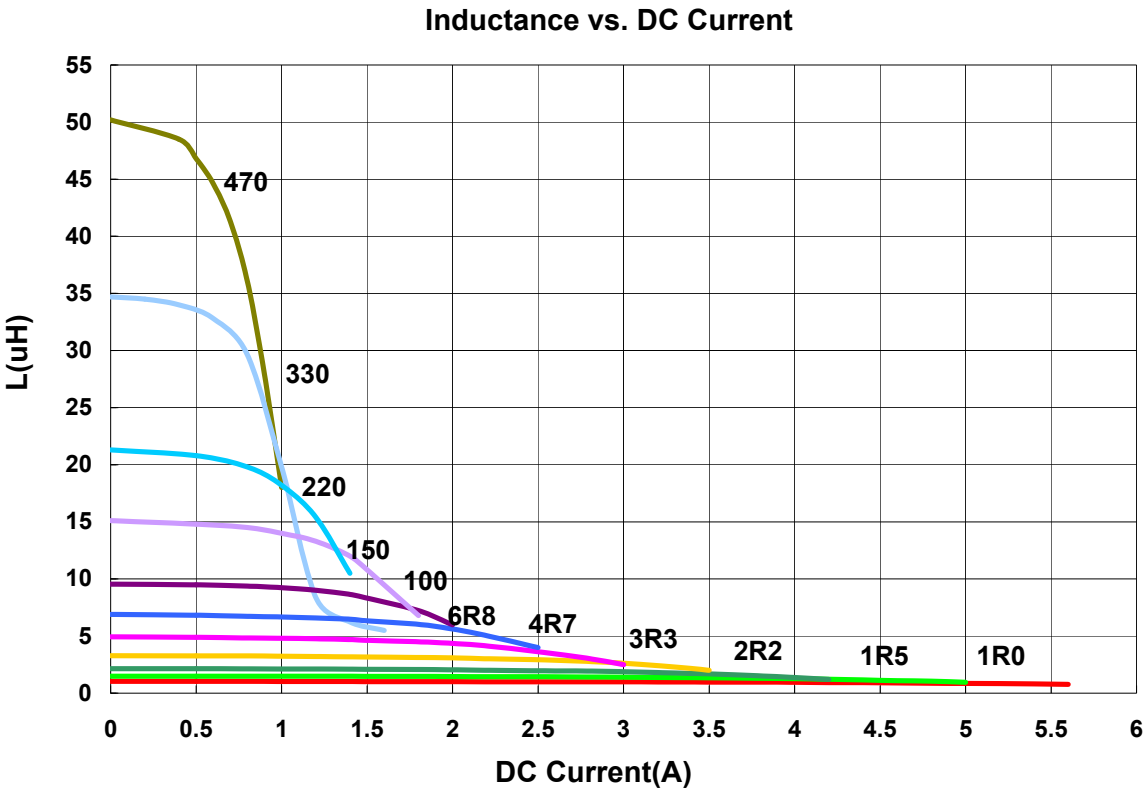
1. Operating temperature range - 40℃ ~ 125℃(Including self - temperature rise)
2. Isat for Inductance drop 30% from its value with current
3. Irms for a 40℃ temperature rise from 25℃ ambient with current
4. Measure Equipment:
   L: Agilent HP4284A+Agilent HP42841A
   RDC: DIGITAL MILLINHM METER CHROMA 16502, or equivalent
   Isat: Agilent HP4284A
   Irms: Agilent HP4284A

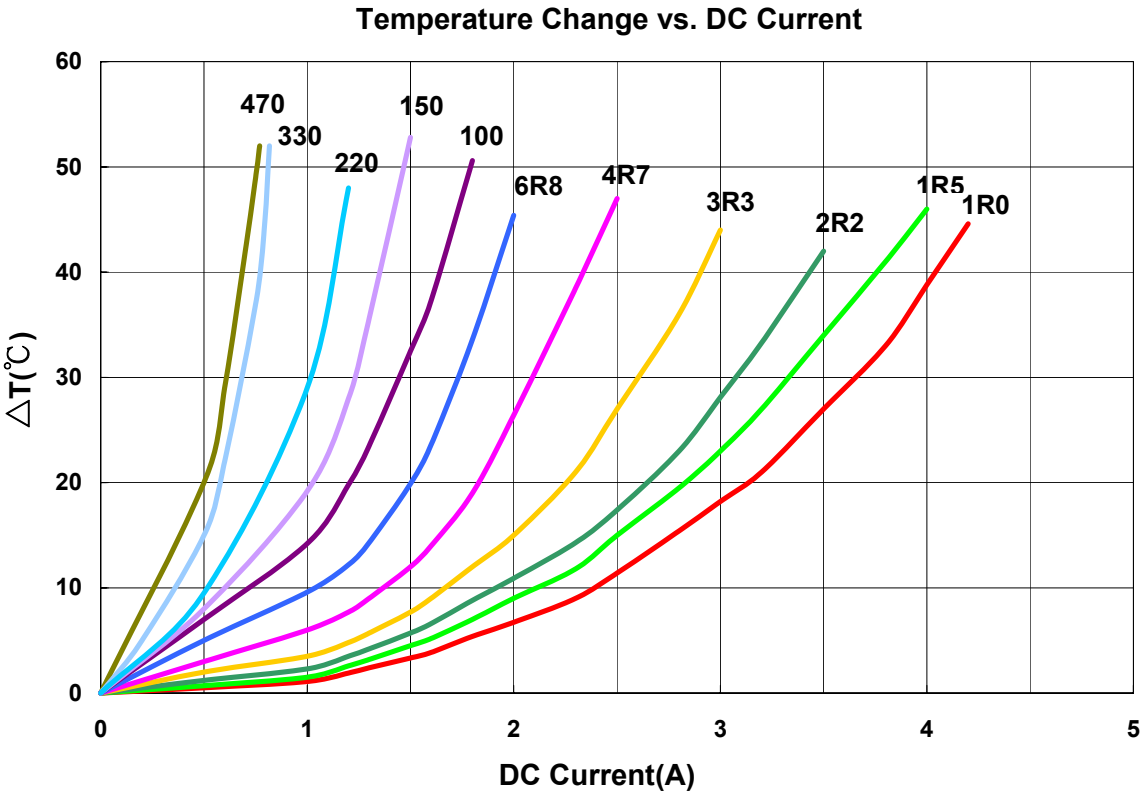
Power Inductor LVS Series

Automotive
AEC-Q200

LVS505020 - AU Type

■ Characteristics Graph



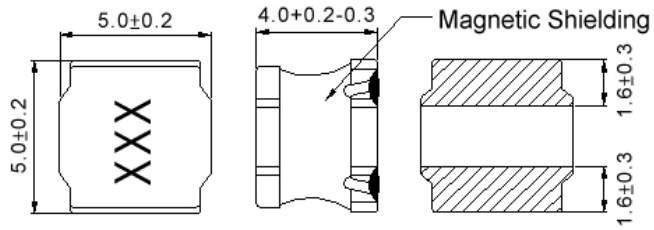


Power Inductor LVS Series

Automotive
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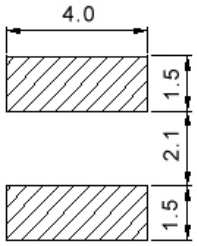
LVS505040 - AU Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (mΩ)±30%	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance (±%)	Marking
LVS505040-1R0□-AU	1.0	100kHz,1V	14	7.5(6.70)	4.6(4.10)	30	1R0
LVS505040-1R2□-AU	1.2	100kHz,1V	15	7.4(6.60)	4.5(4.00)	30	1R2
LVS505040-1R5□-AU	1.5	100kHz,1V	16	7.1(6.30)	4.4(3.90)	20,30	1R5
LVS505040-2R2□-AU	2.2	100kHz,1V	21	5.7(5.10)	3.7(3.30)	20,30	2R2
LVS505040-3R0□-AU	3	100kHz,1V	21	4.8(4.30)	3.5(3.10)	20,30	3R0
LVS505040-3R3□-AU	3.3	100kHz,1V	26	4.8(4.30)	3.5(3.10)	20,30	3R3
LVS505040-3R6□-AU	3.6	100kHz,1V	31	4.2(3.70)	3.3(2.90)	20,30	3R6
LVS505040-4R7□-AU	4.7	100kHz,1V	32	4.2(3.70)	3.2(2.80)	20,30	4R7
LVS505040-6R8□-AU	6.8	100kHz,1V	50	3.3(2.90)	2.4(2.10)	20,30	6R8
LVS505040-100□-AU	10	100kHz,1V	60	2.8(2.50)	2.2(1.90)	20,30	100
LVS505040-150□-AU	15	100kHz,1V	90	2.3(2.00)	1.8(1.60)	20,30	150
LVS505040-220□-AU	22	100kHz,1V	135	1.8(1.60)	1.4(1.20)	20,30	220
LVS505040-270□-AU	27	100kHz,1V	180	1.6(1.40)	1.2(1.00)	20,30	270
LVS505040-330□-AU	33	100kHz,1V	190	1.5(1.30)	1.1(0.99)	20,30	330
LVS505040-470□-AU	47	100kHz,1V	310	1.2(1.00)	0.9(0.81)	20,30	470
LVS505040-680□-AU	68	100kHz,1V	540	1.0(0.90)	0.78(0.7)	20,30	680
LVS505040-101□-AU	100	100kHz,1V	800	0.7(0.60)	0.6(0.50)	20,30	101

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

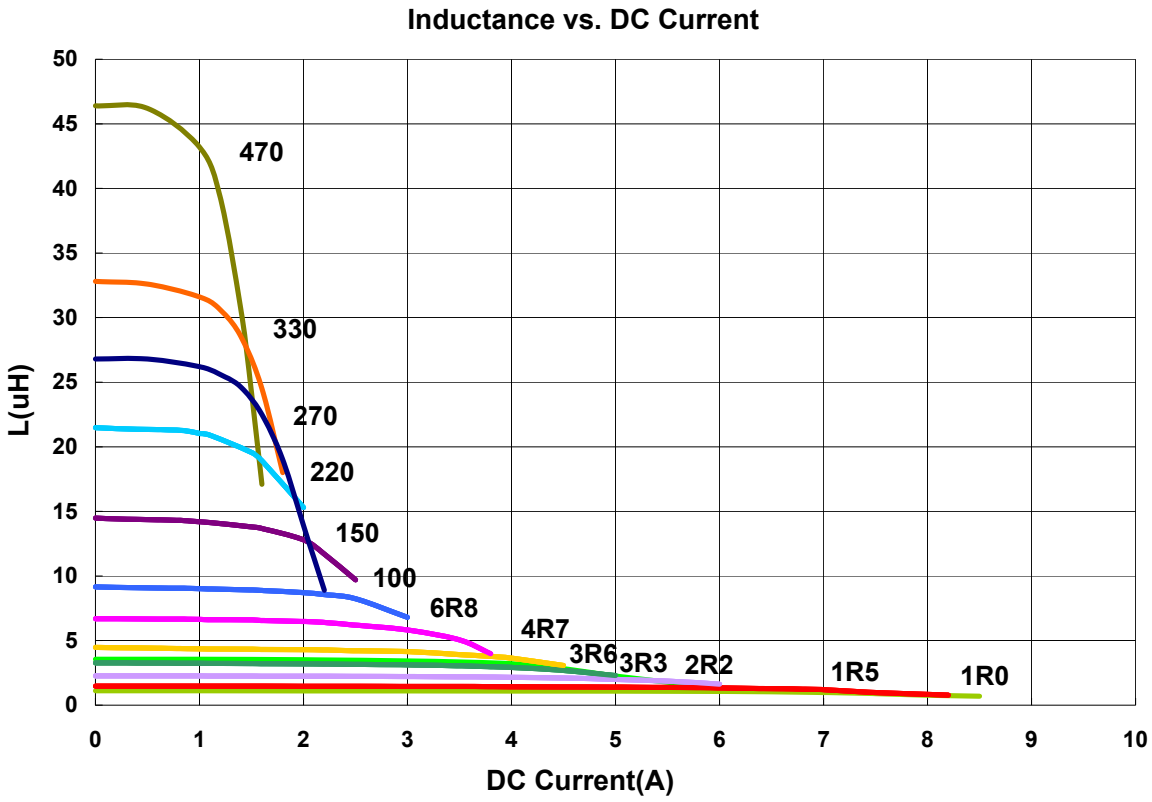
1. Operating temperature range - 40℃ ~ 125℃(Including self - temperature rise)
2. Isat for Inductance drop 30% from its value with current
3. Irms for a 40℃ temperature rise from 25℃ ambient with current
4. Measure Equipment:
   L: Agilent HP4284A+Agilent HP42841A
   RDC: DIGITAL MILLINHM METER CHROMA 16502, or equivalent
   Isat: Agilent HP4284A
   Irms: Agilent HP4284A

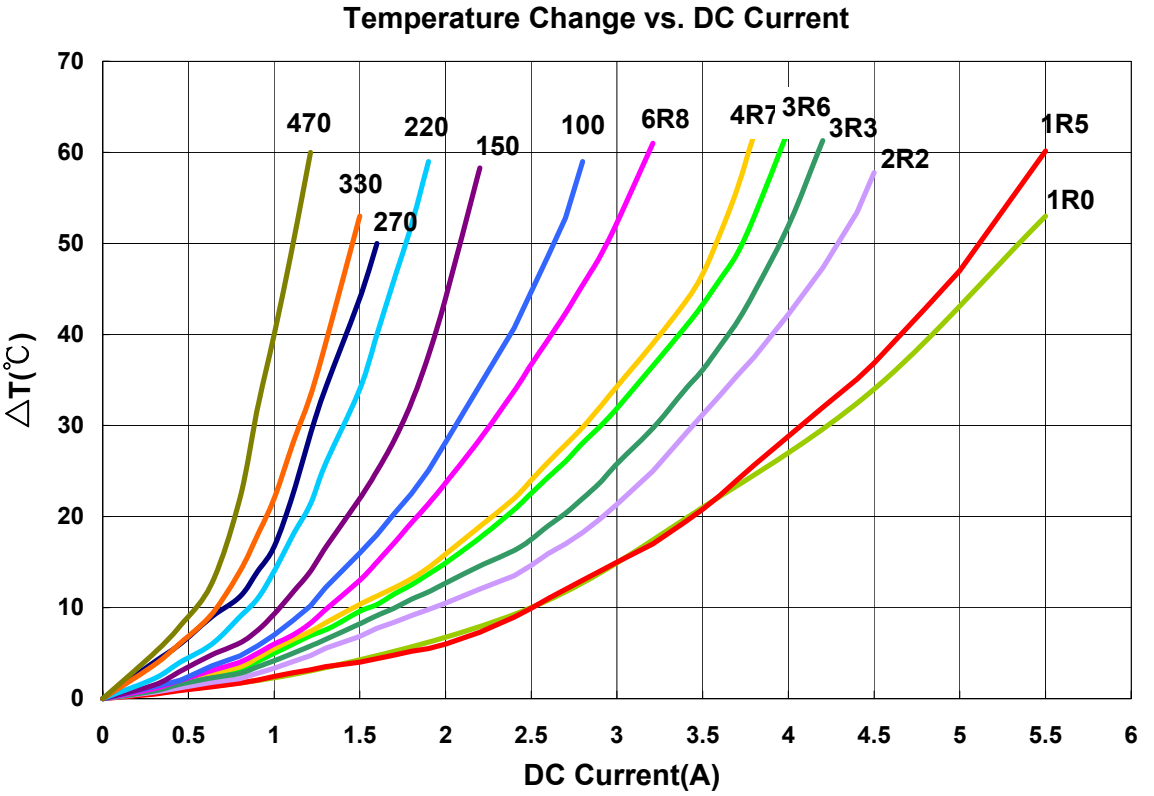
Power Inductor LVS Series

Automotive
AEC-Q200

LVS505040 - AU Type

■ Characteristics Graph



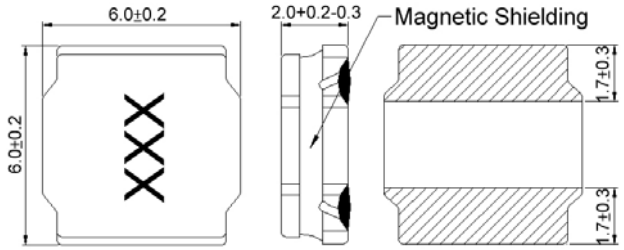


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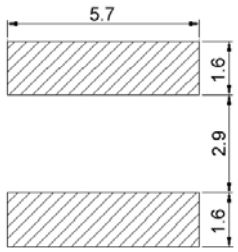
LVS606020 - AU Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (mΩ)±30%	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance (±%)	Marking
LVS606020-R50□-AU	0.5	100kHz,1V	13	8.0(7.20)	5.3(4.7)	30	R50
LVS606020-R90□-AU	0.9	100kHz,1V	18	6.3(5.60)	4.2(3.7)	30	R90
LVS606020-1R0□-AU	1.0	100kHz,1V	19	6.2(5.50)	4.1(3.6)	30	1R0
LVS606020-1R5□-AU	1.5	100kHz,1V	26	5.0(4.50)	3.6(3.2)	20,30	1R5
LVS606020-2R2□-AU	2.2	100kHz,1V	34	4.2(3.70)	3.2(2.8)	20,30	2R2
LVS606020-3R3□-AU	3.3	100kHz,1V	40	3.2(2.80)	2.7(2.4)	20,30	3R3
LVS606020-4R7□-AU	4.7	100kHz,1V	58	2.5(2.20)	2.2(1.9)	20,30	4R7
LVS606020-6R8□-AU	6.8	100kHz,1V	85	2.2(1.90)	1.8(1.6)	20,30	6R8
LVS606020-100□-AU	10	100kHz,1V	125	2.0(1.80)	1.6(1.4)	20,30	100
LVS606020-150□-AU	15	100kHz,1V	190	1.3(1.10)	1.3(1.1)	20,30	150
LVS606020-220□-AU	22	100kHz,1V	260	1.1(0.99)	1.1(0.99)	20,30	220

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

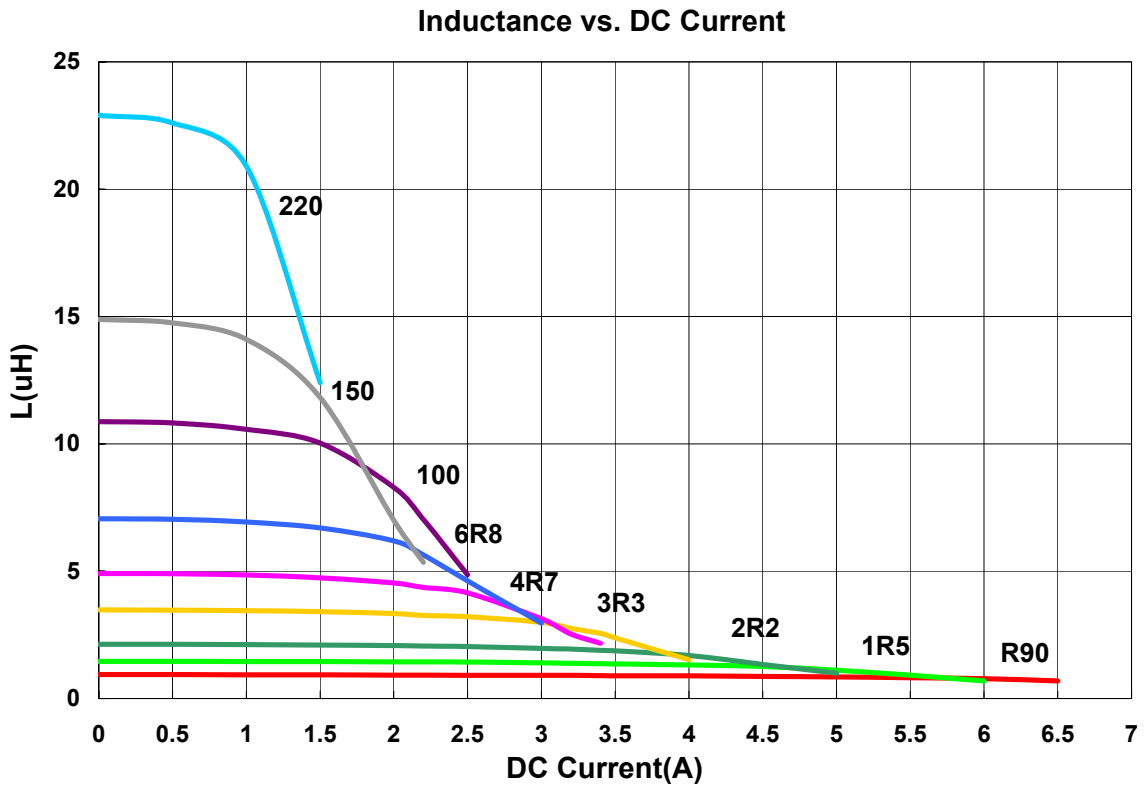
1. Operating temperature range - 40℃ ~ 125℃(Including self - temperature rise)
2. Isat for Inductance drop 30% from its value with current
3. Irms for a 40℃ temperature rise from 25℃ ambient with current
4. Measure Equipment:
   L: Agilent HP4284A+Agilent HP42841A
   RDC: DIGITAL MILLINHM METER CHROMA 16502, or equivalent
   Isat: Agilent HP4284A
   Irms: Agilent HP4284A

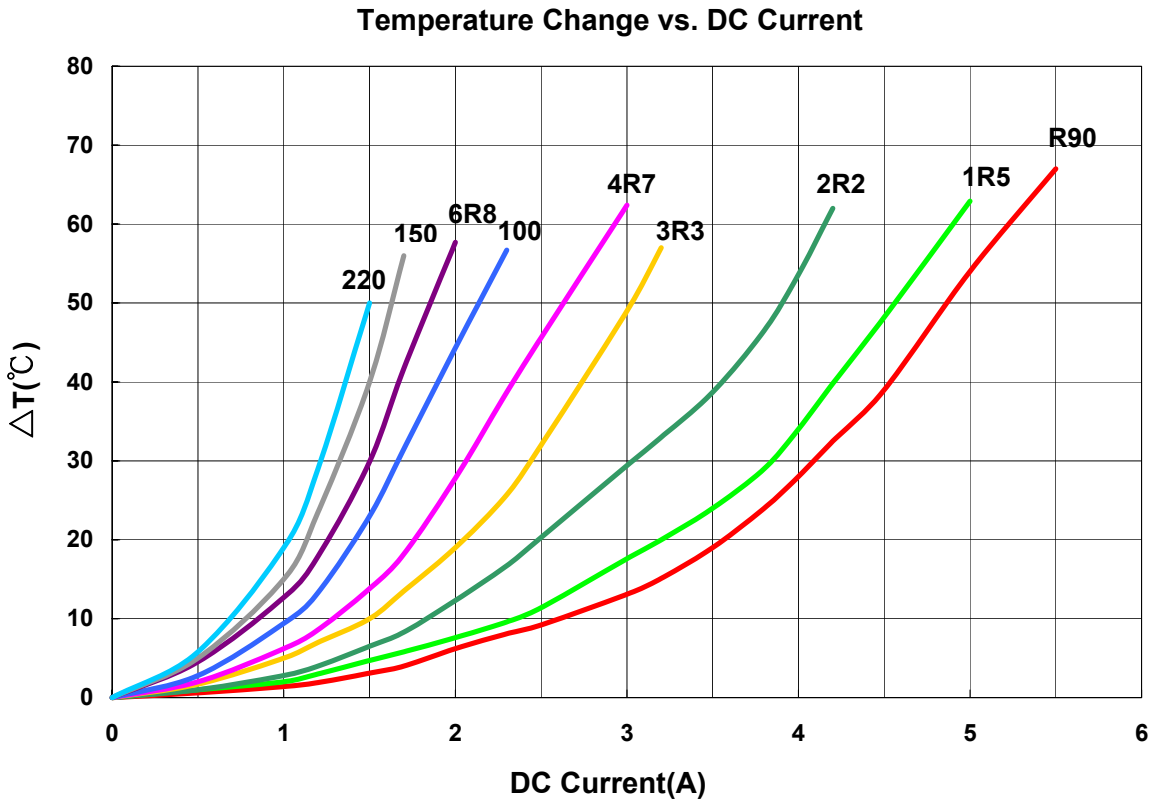
Power Inductor LVS Series

Automotive
AEC-Q200

LVS606020 - AU Type

■ Characteristics Graph



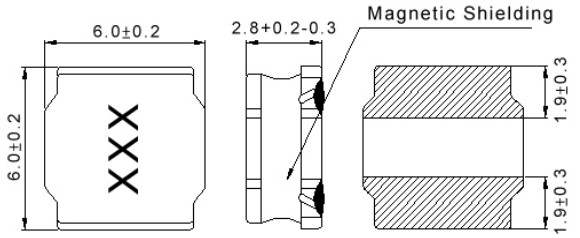


Power Inductor LVS Series

Automotive
AEC-Q200

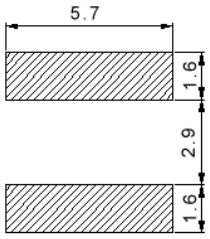
LVS606028 - AU Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (mΩ)±30%	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance (±%)	Marking
LVS606028-1R0□-AU	1	100kHz,1V	13	7.60(6.80)	5.20(4.60)	30	1R0
LVS606028-1R5□-AU	1.5	100kHz,1V	16	6.30(5.60)	4.80(4.30)	30	1R5
LVS606028-2R2□-AU	2.2	100kHz,1V	20	5.40(4.80)	4.00(3.60)	20,30	2R2
LVS606028-2R7□-AU	2.7	100kHz,1V	26	4.90(4.40)	3.70(3.30)	20,30	2R7
LVS606028-3R3□-AU	3.3	100kHz,1V	28	4.30(3.80)	3.50(3.10)	20,30	3R3
LVS606028-4R7□-AU	4.7	100kHz,1V	38	3.70(3.30)	3.20(2.80)	20,30	4R7
LVS606028-6R0□-AU	6	100kHz,1V	45	3.30(2.90)	2.80(2.50)	20,30	6R0
LVS606028-6R8□-AU	6.8	100kHz,1V	50	3.10(2.70)	2.70(2.40)	20,30	6R8
LVS606028-100□-AU	10	100kHz,1V	65	2.50(2.20)	2.30(2.00)	20,30	100
LVS606028-150□-AU	15	100kHz,1V	95	2.00(1.80)	1.80(1.60)	20,30	150
LVS606028-220□-AU	22	100kHz,1V	135	1.60(1.40)	1.50(1.30)	20,30	220
LVS606028-330□-AU	33	100kHz,1V	220	1.30(1.10)	1.40(1.20)	20,30	330
LVS606028-470□-AU	47	100kHz,1V	320	1.10(0.99)	1.00(0.90)	20,30	470
LVS606028-680□-AU	68	100kHz,1V	420	0.98(0.88)	0.90(0.81)	20,30	680
LVS606028-101□-AU	100	100kHz,1V	600	0.82(0.73)	0.8(0.72)	20,30	101

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

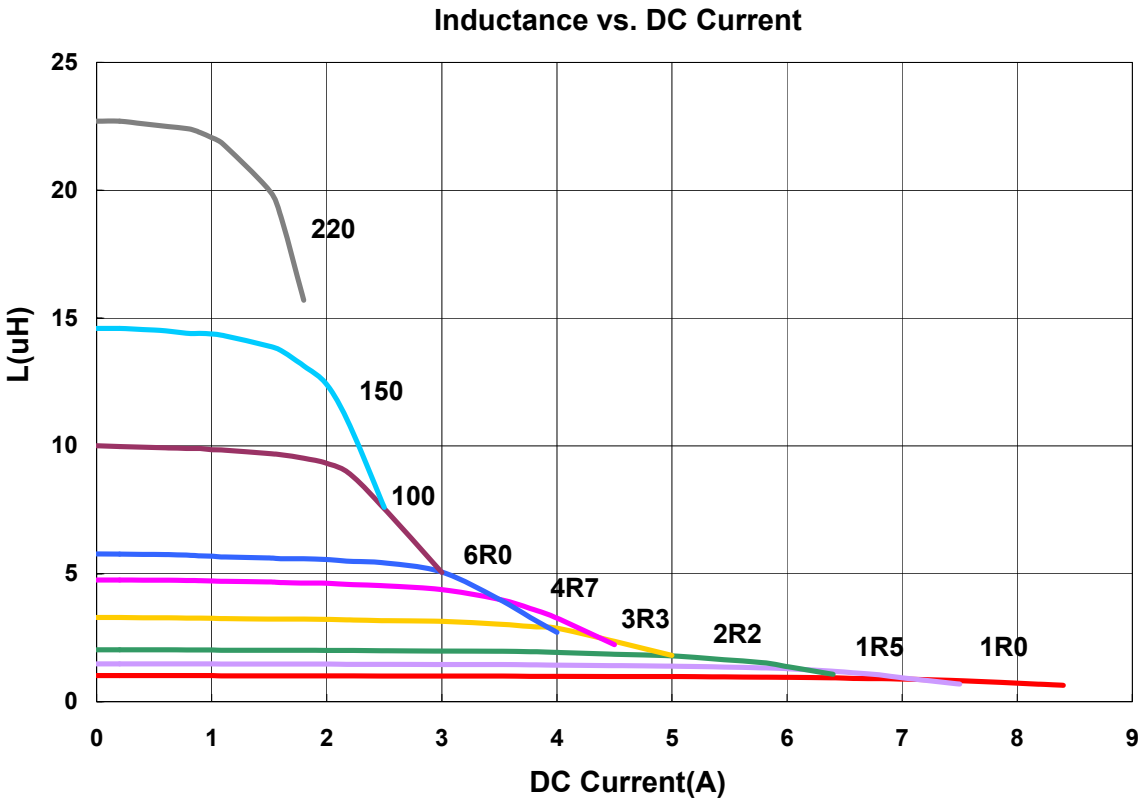
1. Operating temperature range - 40℃ ~ 125℃(Including self - temperature rise)
2. Isat for Inductance drop 30% from its value with current
3. Irms for a 40℃ temperature rise from 25℃ ambient with current
4. Measure Equipment:
   L: Agilent HP4284A+Agilent HP42841A
   RDC: DIGITAL MILLINHM METER CHROMA 16502, or equivalent
   Isat: Agilent HP4284A
   Irms: Agilent HP4284A

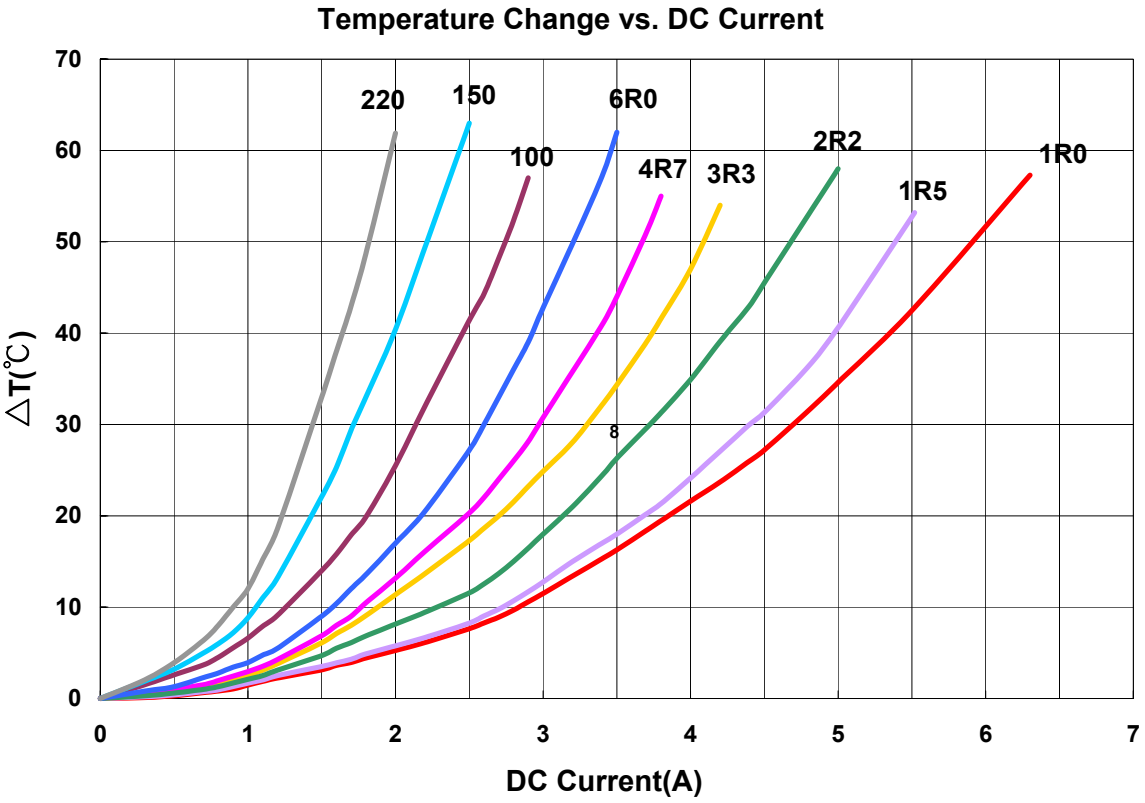
Power Inductor LVS Series

Automotive
AEC-Q200

LVS606028 - AU Type

■ Characteristics Graph



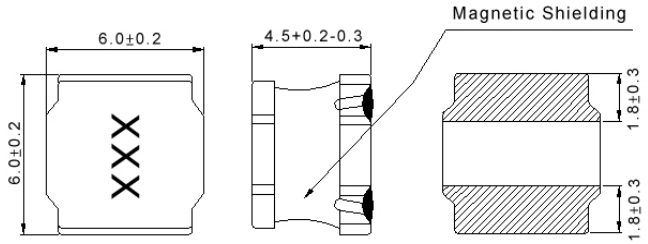


Power Inductor LVS Series

Automotive
AEC-Q200

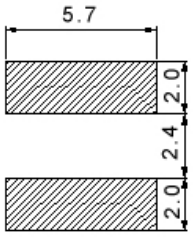
LVS606045 - AU Type

Dimensions



unit:mm

Recommended Land Pattern



unit:mm

Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (mΩ)±30%	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance (±%)	Marking
LVS606045-1R0□-AU	1.0	100kHz,1V	12	12.2(10.50)	6.5(5.80)	20,30	1R0
LVS606045-1R5□-AU	1.5	100kHz,1V	15	10.4(9.30)	5.9(5.30)	20,30	1R5
LVS606045-1R8□-AU	1.8	100kHz,1V	17	9.6(8.60)	5.6(5.00)	20,30	1R8
LVS606045-2R2□-AU	2.2	100kHz,1V	18	8.8(7.90)	5.1(4.50)	20,30	2R2
LVS606045-2R3□-AU	2.3	100kHz,1V	19	8.8(7.90)	5.0(4.50)	20,30	2R3
LVS606045-3R0□-AU	3	100kHz,1V	22	7.8(7.00)	4.4(3.90)	20,30	3R0
LVS606045-3R3□-AU	3.3	100kHz,1V	24	7.5(6.70)	4.3(3.80)	20,30	3R3
LVS606045-3R6□-AU	3.6	100kHz,1V	24	7.5(6.70)	4.3(3.80)	20,30	3R6
LVS606045-3R9□-AU	3.9	100kHz,1V	26	7.0(6.30)	4.0(3.60)	20,30	3R9
LVS606045-4R5□-AU	4.5	100kHz,1V	31	6.7(6.00)	3.9(3.50)	20,30	4R5
LVS606045-4R7□-AU	4.7	100kHz,1V	31	6.7(6.00)	3.9(3.50)	20,30	4R7
LVS606045-5R1□-AU	5.1	100kHz,1V	33	6.0(5.40)	3.5(3.10)	20,30	5R1
LVS606045-5R6□-AU	5.6	100kHz,1V	40	5.5(4.90)	3.3(2.90)	20,30	5R6
LVS606045-6R3□-AU	6.3	100kHz,1V	40	5.5(4.90)	3.3(2.90)	20,30	6R3
LVS606045-6R8□-AU	6.8	100kHz,1V	43	5.3(4.70)	3.2(2.80)	20,30	6R8
LVS606045-8R2□-AU	8.2	100kHz,1V	53	4.6(4.10)	2.9(2.60)	20,30	6R8
LVS606045-100□-AU	10	100kHz,1V	57	4.5(4.00)	2.7(2.40)	20,30	100
LVS606045-150□-AU	15	100kHz,1V	80	3.4(3.00)	2.2(1.90)	20,30	150
LVS606045-180□-AU	18	100kHz,1V	100	3.1(2.70)	1.8(1.60)	20,30	180
LVS606045-220□-AU	22	100kHz,1V	125	3.0(2.70)	1.9(1.70)	20,30	220
LVS606045-270□-AU	27	100kHz,1V	160	2.5(2.20)	1.3(1.10)	20,30	270
LVS606045-330□-AU	33	100kHz,1V	165	2.3(2.00)	1.4(1.20)	20,30	330
LVS606045-470□-AU	47	100kHz,1V	245	1.9(1.70)	1.2(1.00)	20,30	470
LVS606045-560□-AU	56	100kHz,1V	310	1.7(1.50)	1.1(0.99)	20,30	560
LVS606045-680□-AU	68	100kHz,1V	330	1.6(1.40)	1.0(0.90)	20,30	680
LVS606045-101□-AU	100	100kHz,1V	500	1.3(1.10)	0.8(0.72)	20,30	101
LVS606045-221□-AU	220	100kHz,1V	1300	0.82(0.73)	0.38(0.34)	20,30	221
LVS606045-331□-AU	330	100kHz,1V	1800	0.7(0.63)	0.35(0.31)	20,30	331
LVS606045-102□-AU	1000	100kHz,1V	6000	0.4(0.36)	0.22(0.19)	20,30	102

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

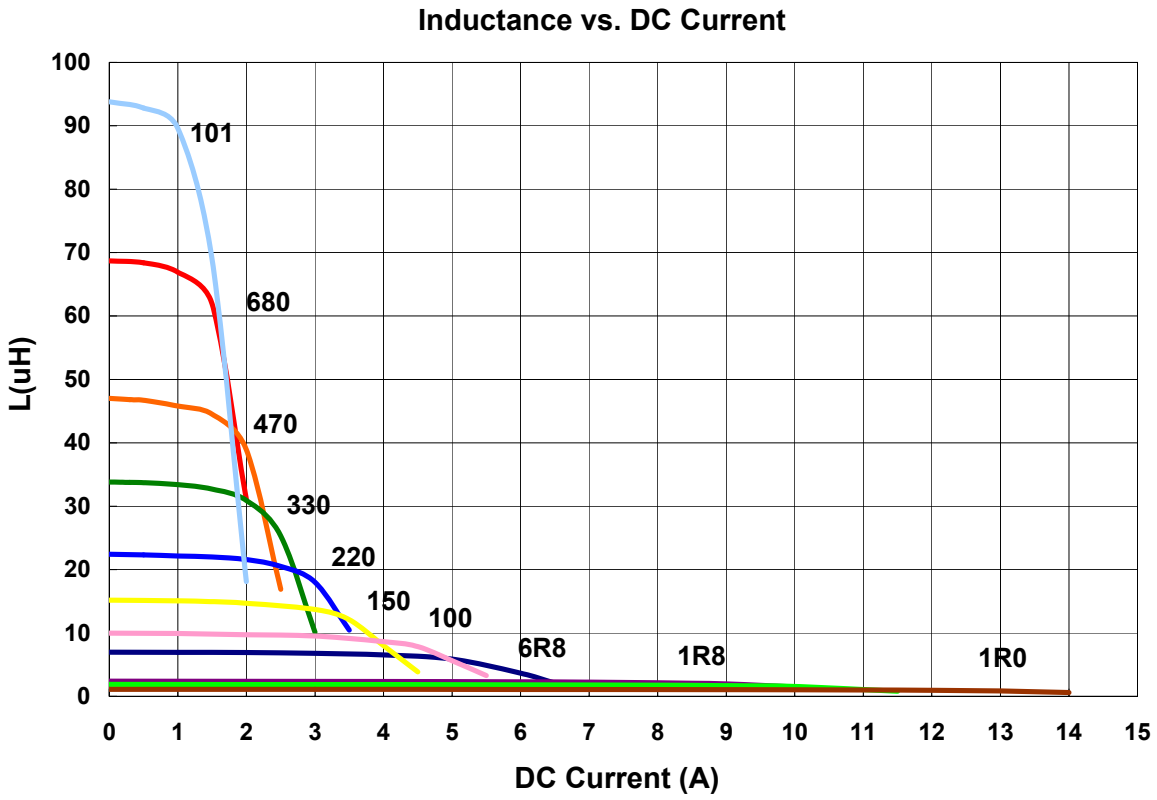
1. Operating temperature range - 40℃ ~ 125℃(Including self - temperature rise)
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4. Measure Equipment:
   L: Agilent HP4284A+Agilent HP42841A
   RDC: DIGITAL MILLINHM METER CHROMA 16502, or equivalent
   Isat: Agilent HP4284A
   Irms: Agilent HP4284A

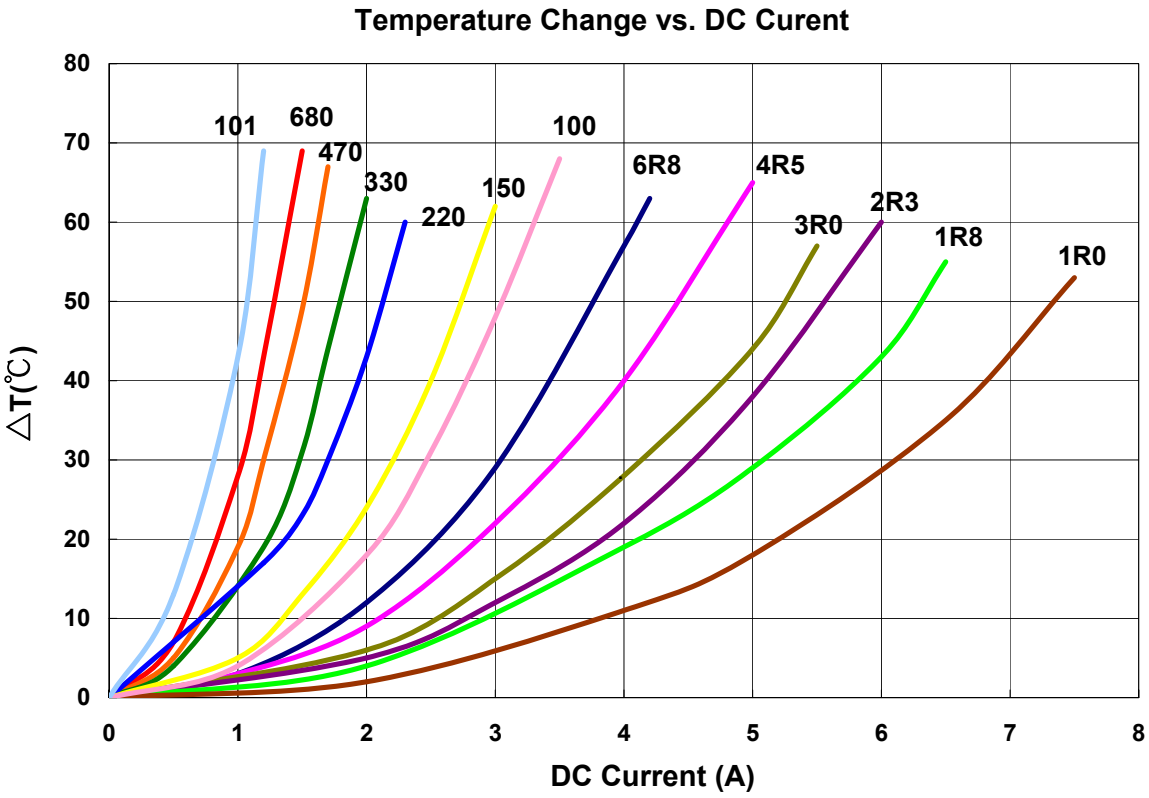
Power Inductor LVS Series

Automotive
AEC-Q200

LVS606045 - AU Type

■ Characteristics Graph



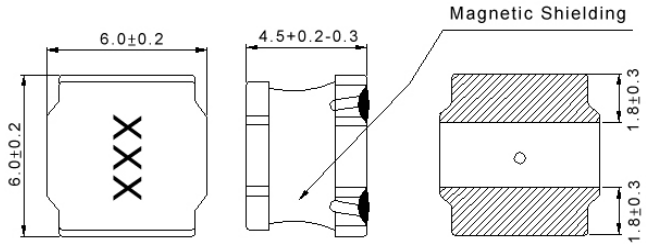


Power Inductor LVS Series

Automotive
AEC-Q200

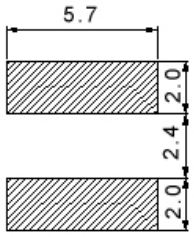
LVS606045L - AU Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (mΩ)Max.	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance (±%)	Marking
LVS606045L-R50□-AU	0.5	100kHz,1V	9	11(9.90)	8.0(7.20)	30	R50
LVS606045L-2R2□-AU	2.2	100kHz,1V	17	6.8(6.10)	5.5(4.90)	20,30	2R2
LVS606045L-3R3□-AU	3.3	100kHz,1V	24	5.5(4.90)	4.7(4.20)	20,30	3R3
LVS606045L-4R7□-AU	4.7	100kHz,1V	30	4.6(4.10)	4.0(3.60)	20,30	4R7
LVS606045L-6R8□-AU	6.8	100kHz,1V	40	4.0(3.60)	3.5(3.10)	20,30	6R8
LVS606045L-100□-AU	10	100kHz,1V	50	3.2(2.80)	3.2(2.80)	20,30	100
LVS606045L-150□-AU	15	100kHz,1V	80	2.6(2.30)	2.5(2.20)	20,30	150
LVS606045L-220□-AU	22	100kHz,1V	120	2.1(1.80)	2.0(1.80)	20,30	220
LVS606045L-330□-AU	33	100kHz,1V	170	1.7(1.50)	1.6(1.40)	20,30	330
LVS606045L-101□-AU	100	100kHz,1V	595	0.95(0.85)	0.92(0.82)	20,30	101

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

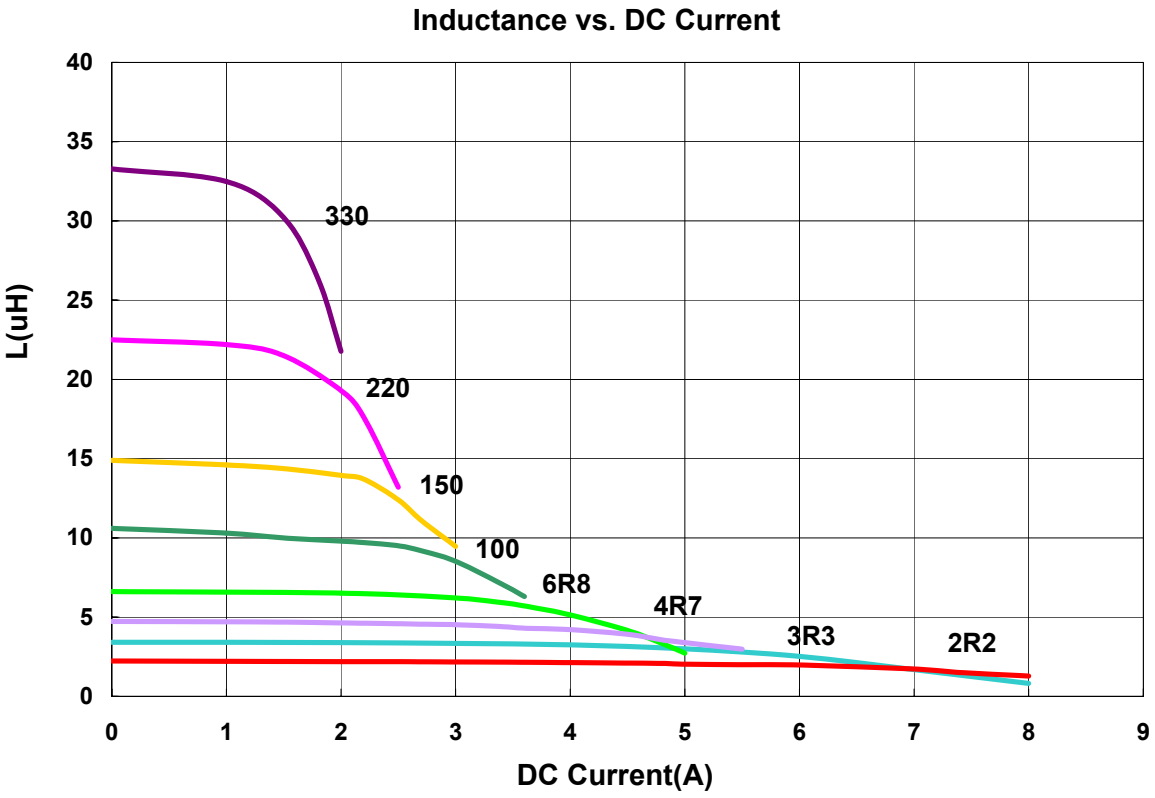
1. Operating temperature range - 40℃ ~ 125℃(Including self - temperature rise)
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4. Measure Equipment:
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   RDC: DIGITAL MILLINHM METER CHROMA 16502, or equivalent
   Isat: Agilent HP4284A
   Irms: Agilent HP4284A

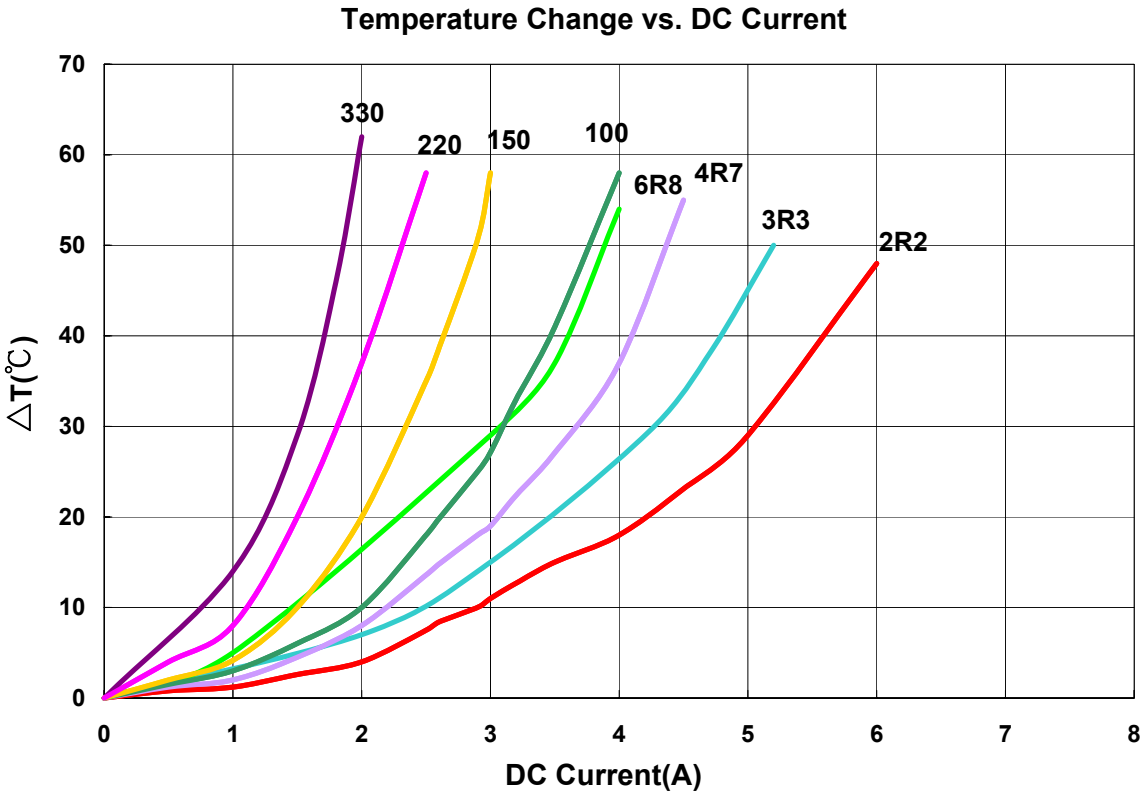
Power Inductor LVS Series

Automotive
AEC-Q200

LVS606045L - AU Type

■ Characteristics Graph



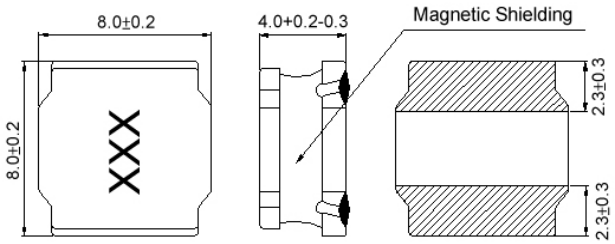


Power Inductor LVS Series

Automotive
AEC-Q200

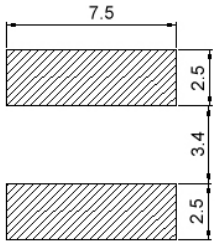
LVS808040 - AU Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (mΩ)±30%	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance (±%)	Marking
LVS808040-R90□-AU	0.9	100kHz,1V	7	13.8(12.00)	8.05(7.10)	30	R90
LVS808040-1R0□-AU	1.0	100kHz,1V	8	13.0(11.50)	7.95(7.00)	30	1R0
LVS808040-1R4□-AU	1.4	100kHz,1V	9	10.8(9.50)	7.80(6.90)	30	1R4
LVS808040-1R5□-AU	1.5	100kHz,1V	10	10.0(9.00)	7.70(6.80)	30	1R5
LVS808040-2R0□-AU	2	100kHz,1V	11	9.60(8.50)	7.40(6.50)	20,30	2R0
LVS808040-2R2□-AU	2.2	100kHz,1V	12	9.20(8.10)	7.20(6.30)	20,30	2R2
LVS808040-2R5□-AU	2.5	100kHz,1V	13	8.20(7.20)	6.30(5.50)	20,30	2R5
LVS808040-3R3□-AU	3.3	100kHz,1V	15	7.50(6.60)	6.00(5.30)	20,30	3R3
LVS808040-4R7□-AU	4.7	100kHz,1V	18	6.00(5.30)	5.50(4.80)	20,30	4R7
LVS808040-5R6□-AU	5.6	100kHz,1V	23	5.70(5.00)	5.20(4.50)	20,30	5R6
LVS808040-6R8□-AU	6.8	100kHz,1V	25	5.40(4.70)	5.10(4.40)	20,30	6R8
LVS808040-100□-AU	10	100kHz,1V	38	4.30(3.70)	3.80(3.30)	20,30	100
LVS808040-120□-AU	12	100kHz,1V	45	3.80(3.30)	3.50(3.00)	20,30	120
LVS808040-150□-AU	15	100kHz,1V	50	3.60(3.10)	3.20(2.70)	20,30	150
LVS808040-180□-AU	18	100kHz,1V	68	3.10(2.60)	2.70(2.30)	20,30	180
LVS808040-220□-AU	22	100kHz,1V	80	2.80(2.40)	2.60(2.20)	20,30	220
LVS808040-330□-AU	33	100kHz,1V	110	2.30(2.00)	2.00(1.70)	20,30	330
LVS808040-470□-AU	47	100kHz,1V	160	1.90(1.60)	1.75(1.40)	20,30	470
LVS808040-680□-AU	68	100kHz,1V	240	1.70(1.40)	1.45(1.20)	20,30	680
LVS808040-101□-AU	100	100kHz,1V	340	1.40(1.10)	1.10(0.95)	20,30	101
LVS808040-121□-AU	120	100kHz,1V	425	1.10(0.95)	1.00(0.80)	20,30	121
LVS808040-151□-AU	150	100kHz,1V	480	1.00(0.88)	0.90(0.75)	20,30	151
LVS808040-221□-AU	220	100kHz,1V	670	0.94(0.80)	0.60(0.50)	20,30	221
LVS808040-271□-AU	270	100kHz,1V	900	0.83(0.73)	0.55(0.45)	20,30	271
LVS808040-821□-AU	820	100kHz,1V	2800	0.40(0.35)	0.38(0.30)	20,30	821

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

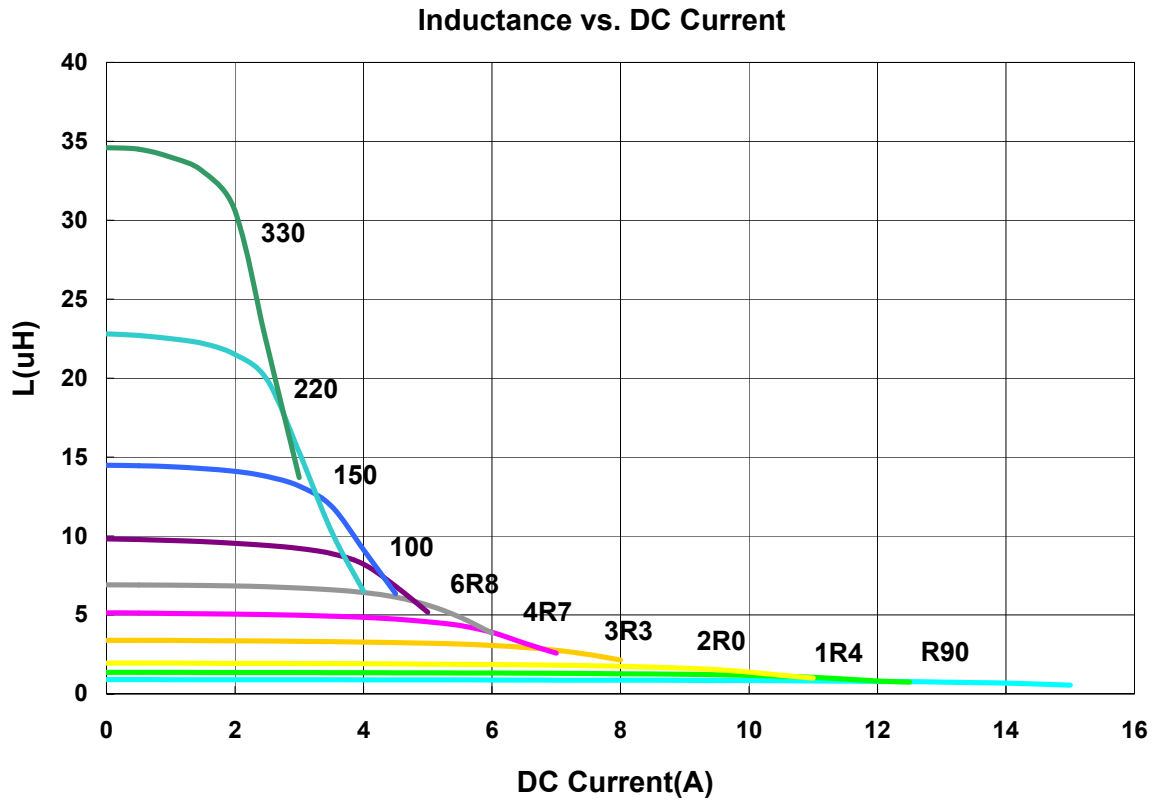
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   Irms: Agilent HP4284A

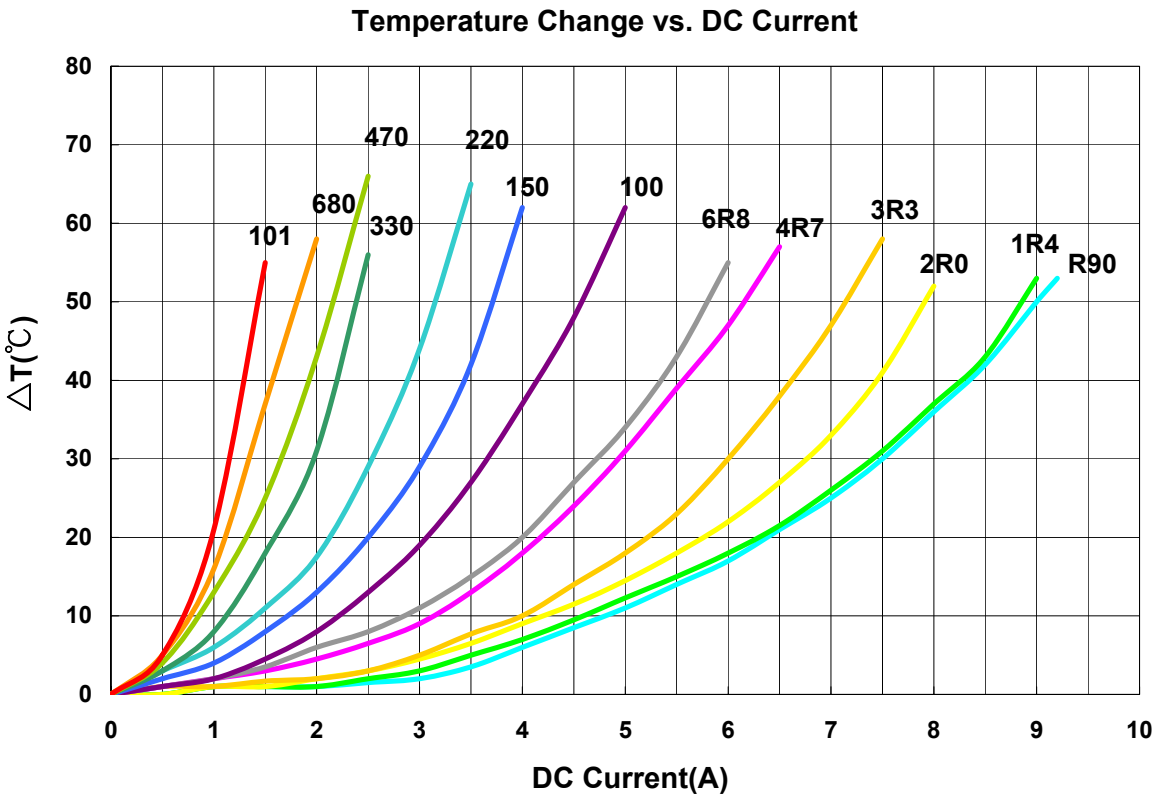
Power Inductor LVS Series

Automotive
AEC-Q200

LVS808040 - AU Type

■ Characteristics Graph



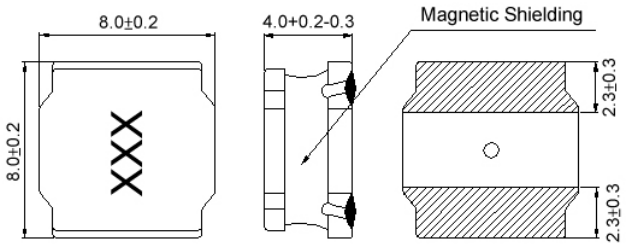


Power Inductor LVS Series

Automotive AEC-Q200

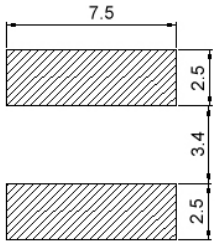
LVS808040L - AU Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (mΩ)Max.	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance (±%)	Marking
LVS808040L-1R0□-AU	1.0	100kHz,1V	10	9.5(8.40)	8.5(7.50)	30	1R0
LVS808040L-2R2□-AU	2.2	100kHz,1V	12	7.2(6.30)	7.3(6.40)	20,30	2R2
LVS808040L-3R3□-AU	3.3	100kHz,1V	19	5.6(4.99)	6.0(5.30)	20,30	3R3
LVS808040L-4R7□-AU	4.7	100kHz,1V	22	4.4(3.80)	5.0(4.40)	20,30	4R7
LVS808040L-8R2□-AU	8.2	100kHz,1V	37	3.6(3.10)	3.8(3.30)	20,30	8R2
LVS808040L-100□-AU	10	100kHz,1V	42	3.1(2.60)	3.5(3.00)	20,30	100
LVS808040L-150□-AU	15	100kHz,1V	58	2.5(2.10)	3.0(2.60)	20,30	150
LVS808040L-220□-AU	22	100kHz,1V	85	2.0(1.70)	2.5(2.10)	20,30	220

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

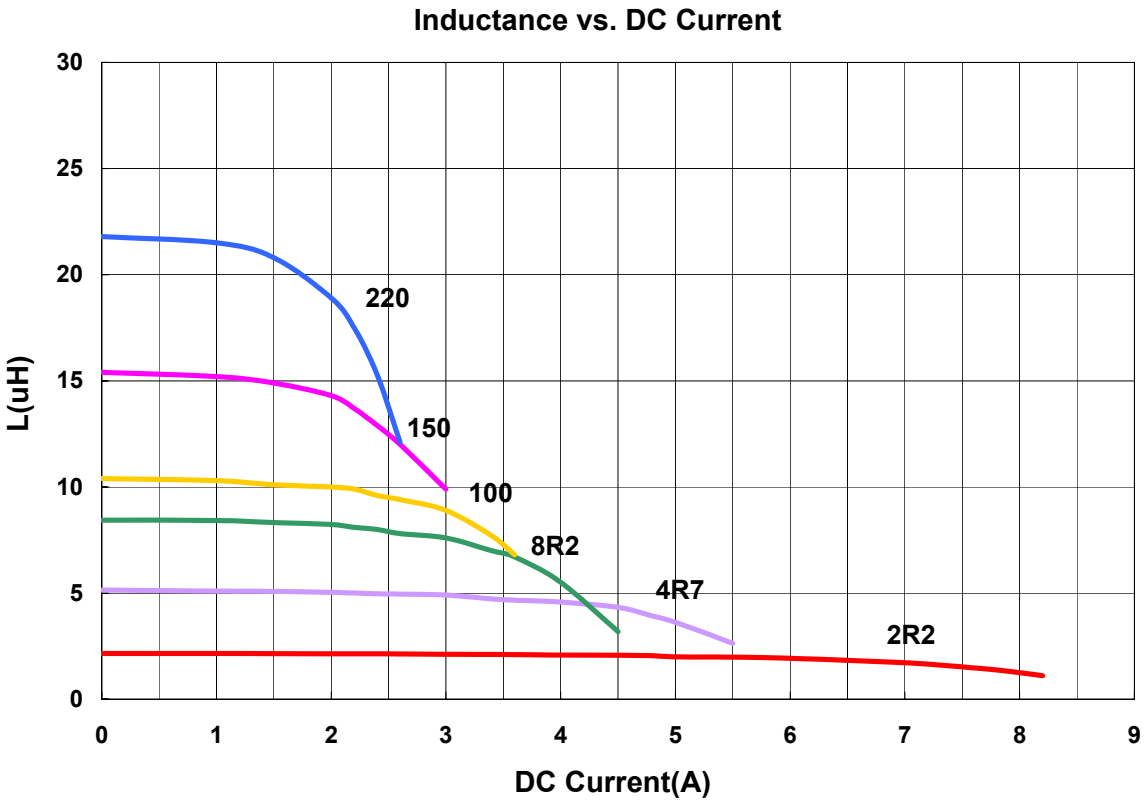
1. Operating temperature range - 40℃ ~ 125℃(Including self - temperature rise)
2. Isat for Inductance drop 30% from its value with current
3. Irms for a 40℃ temperature rise from 25℃ ambient with current
4. Measure Equipment:
   L: Agilent HP4284A+Agilent HP42841A
   RDC: DIGITAL MILLINHM METER CHROMA 16502, or equivalent
   Isat: Agilent HP4284A
   Irms: Agilent HP4284A

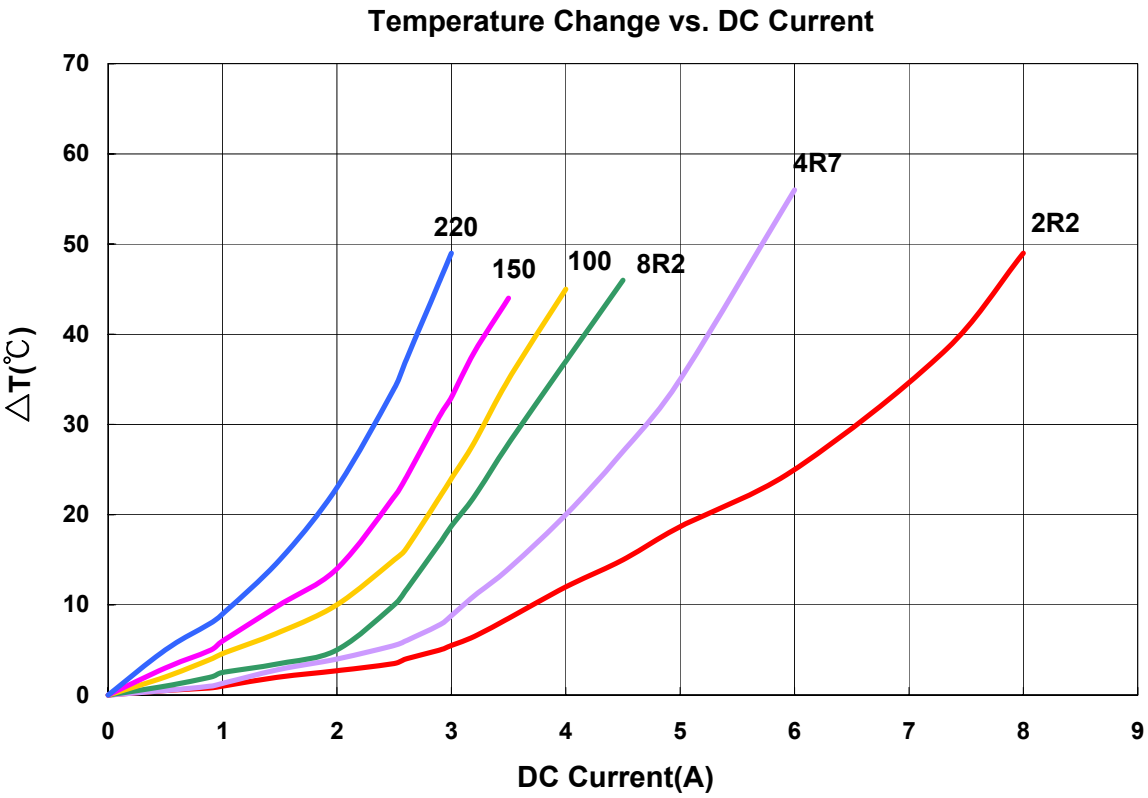
Power Inductor LVS Series

Automotive
AEC-Q200

LVS808040L - AU Type

■ Characteristics Graph



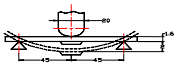


Power Inductor LVS Series

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Reliability

1-1.Mechanical Performance

	Item	Specification	Test Method
1-1-1	Board Flex	The forces applied on the right conditions must not damage the terminal electrode and the ferrite.	Test device shall be soldered on the substrate Substrate Dimension: 100x40x1.6mm Deflection: 2.0mm Keeping Time: 60 sec 
1-1-2	Terminal Strength	The chip must not damage the terminal electrode and the ferrite.	Appendix 1 Note(AEC-Q200-005):Force of 1.8 kg for 60 seconds.
1-1-3	Solderability	The electrodes shall be at least 95% covered with new solder coating.	Pre-heating: 150℃, 1min Solder Composition: Sn/3.0Ag/0.5Cu Solder Temperature: 245±5℃ Immersion Time: 4±1sec
1-1-4	Resistance to Soldering Heat	Appearance:No damage Inductance change shall be within ±10%.	Pre-heating: 150℃, 1min Solder Composition: Sn/Ag3.0/Cu0.5 Solder Temperature: 260±5℃ Immersion Time: 10±1sec
1-1-5	Resistance to Solvents	There must be no change in appearance or obliteration of marking.	Inductors must withstand 6 minutes of alcohol or water.
1-1-6	Mechanical Shock	The forces applied on the right conditions must not damage the terminal electrode and the ferrite.	Pulse shape：Half-sine waveform Impact acceleration：100 g Pulse duration：6 ms Number of shocks：18 shocks (3 shocks for each face) Orientation：Bottom, top, left, right, front and rear faces
1-1-7	Vibration	Appearance:No damage Inductance change shall be within ±10%.	Vibration waveform: Sine waveform Vibration frequency: 10Hz~2000Hz Vibration acceleration: 5g Sweep rate: 0.764386otcave/minute Duration of test: 12 cycles each of 3 orientations 20 minutes for each cycle Vibration axes: X, Y & Z

1-2.Environmental Performance

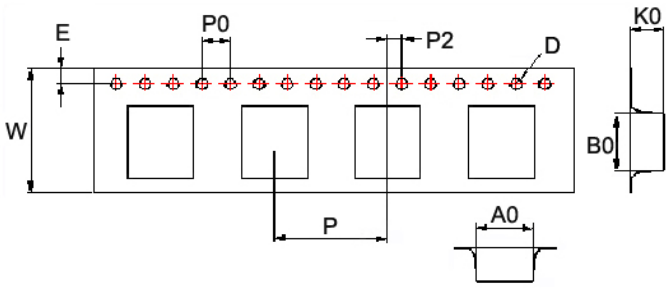
No	Item	Specification	Test Method
1-2-1	High Temperature Exposure (Storage)	Appearance:No damage (for microscope of CASTOR MZ-45 20X)Inductance change shall be within ±10%.	Temperature: 125±3℃ Time: 1000hrs Measured after exposure in the room condition for 24hrs
1-2-2	Operational Life		Temperature: 85±2℃ Appliend Current : Rated Current Time: 1000± 24 hrs Measured after exposure in the room condition for 24hrs
1-2-3	Biased Humidity		Temperature: 85±2℃ Relative Humidity: 85% Time: 1000hrs Measured after exposure in the room condition for 24hrs
1-2-4	Temperature Cycling		Total cycles: 1000 cycles Temperature Cycling Test Conditions : -40 to +125 ℃ Soak Mode Condition： 30 minutes Measured after exposure in the room condition for 24hrs
1-2-5	ESD		Test mode：Contact Discharge Discharge level：±6KV, Discharge interval：1 second Polarity of the output voltage：Positive and negative Number of discharge：Discharge +/- for 1 time for the 2 test points.
			Test Mode：Air Discharge Discharge level：±12KV, ±16KV, ±25KV Discharge interval：＜5 seconds Polarity of the output voltage：Positive and negative Number of discharge：Discharge +/- for 1 time for the 1~2 test points.

Power Inductor LVS Series

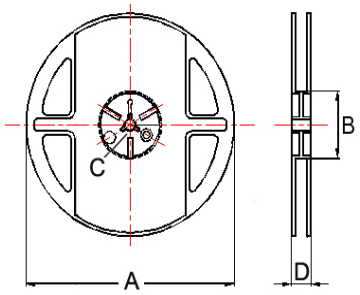
Automotive
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Packaging

Tape Dimensions



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions										Reel Dimensions				Quantity
	A0	B0	K0	D	E	F	W	P	P0	P2	A	B	C	D	PCS / Reel
LVS404012	4.25	4.25	1.3	1.55	1.75	5.5	12	8.1	4	2	180	60	13	13.2	1000
LVS404018	4.25	4.25	2.10	1.55	1.75	5.5	12	8.1	4	2	178	60	13	13.2	800
LVS505020	5.25	5.25	2.2	1.55	1.75	5.5	12	8.1	4	2	330	100	13	13.4	2000
LVS505040	5.2	5.2	4.2	1.55	1.75	5.5	12	8.1	4	2	330	100	13	13.4	1500
LVS606020	6.25	6.25	2.2	1.55	1.75	7.5	16	12	4	2	330	100	13	16.0	2000
LVS606028	6.25	6.25	3.00	1.55	1.75	7.5	16	12	4	2	330	100	13	16.0	1500
LVS606045	6.25	6.25	4.65	1.55	1.75	7.5	16	12	4	2	330	100	13	16.0	1000
LVS808040	8.25	8.25	4.15	1.55	1.75	7.5	16	12	4	2	330	100	13	16.0	1000