

**Power Inductor APSC Series**

**Automotive  
AEC-Q200**

RoHS Compliant  
Halogen Free  
REACH Compliant

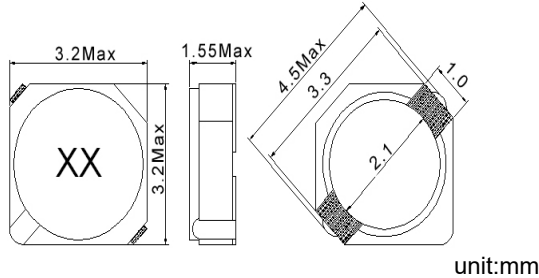


**Part Numbering**

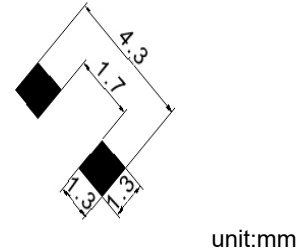
A	PSC	00	131380	100	M	00
Grade	Series Name	Control Code	Dimensions Code (mm)	Inductance (uH)	Tolerance	Internal Code
			030316 3.2x3.2x1.55	R47 0.5	M ±20%	
			040418 4.0x4.0x1.8	2R2 2.2	T ±30%	
			040430 4.0x4.0x3.0	101 100		
			050520 4.7x4.7x2.0			
			050530 4.7x4.7x3.0			
			050540 4.7x4.7x4.0			
			060620 5.7x5.7x2.0			
			060630 5.7x5.7x3.0			
			070730 6.7x6.7x3.0			
			070740 7.0x7.0x4.0			
			101131 10.3x10.5x3.1			
			101140 10.3x10.5x4.0			
			101151 10.3x10.5x5.1			
			080846 7.5x7.5x4.6			
			131345 12.5x12.5x4.5			
			131360 12.5x12.5x6.0			
			131380 12.5x12.5x8.0			

**APSC00030316 Type**

**■ Dimensions**



**■ Recommended Land Pattern**



**■ Electrical Characteristics**

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)Max.	Isat (A) Max(Typ)	Irms (A)Typ.	Tolerance (±%)	Marking
APSC00030316R47□00	0.47	100 kHz, 1 V	0.04	2(2.8)		30	AO
APSC000303161R5□00	1.5	100 kHz, 1 V	0.063	1.4(1.8)	2	30	BF
APSC000303161R8□00	1.8	100 kHz, 1 V	0.075	1.3(1.7)	1.8	30	BI
APSC000303162R2□00	2.2	100 kHz, 1 V	0.094	1.2(1.6)	1.6	30	CC
APSC000303162R7□00	2.7	100 kHz, 1 V	0.106	1.1(1.4)	1.4	30	CH
APSC000303163R3□00	3.3	100 kHz, 1 V	0.125	0.95(1.2)	1.24	30	DD
APSC000303163R9□00	3.9	100 kHz, 1 V	0.138	0.92(1.1)	1.12	30	DJ
APSC000303164R1□00	4.1	100 kHz, 1 V	0.169	0.8(1)	1	30	EA
APSC000303164R7□00	4.7	100 kHz, 1 V	0.169	0.8(1)	1	30	EH
APSC000303165R6□00	5.6	100 kHz, 1 V	0.188	0.76(0.95)	0.98	30	FG
APSC000303166R8□00	6.8	100 kHz, 1 V	0.213	0.71(0.88)	0.92	30	GI
APSC000303168R2□00	8.2	100 kHz, 1 V	0.281	0.64(0.8)	0.8	30	IC
APSC00030316100□00	10	100 kHz, 1 V	0.294	0.57(0.72)	0.76	20,30	KA
APSC00030316120□00	12	100 kHz, 1 V	0.394	0.52(0.65)	0.64	20,30	QA

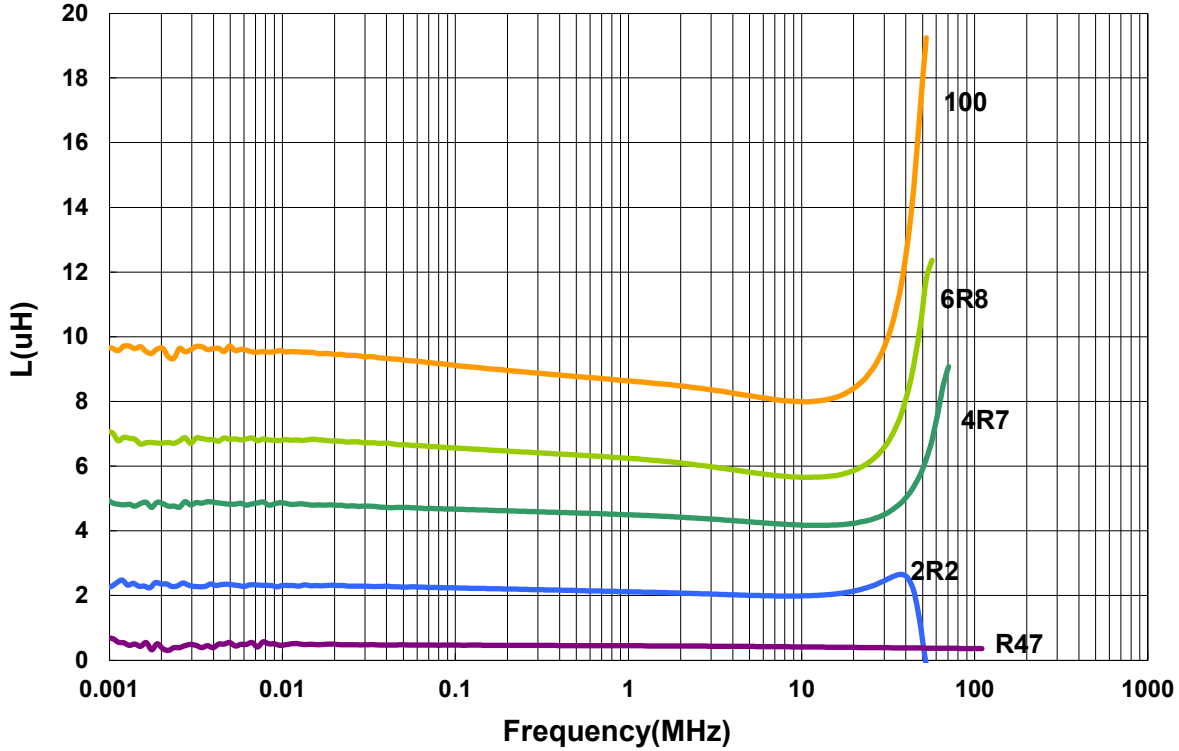
**Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%**

1. Operating temperature range -40°C ~ 125°C (Including self - temperature rise)
2. Rated Current: Inductance drop = 35% typ.
3. I<sub>rms</sub> for a 40°C temperature rise from 25°C ambient with current
4. Measure Equipment:  
L: Agilent E4980 or HP4284A  
RDC: CH502BC  
Rate Current: HP4284+42841A or WK3260B+WK3265B

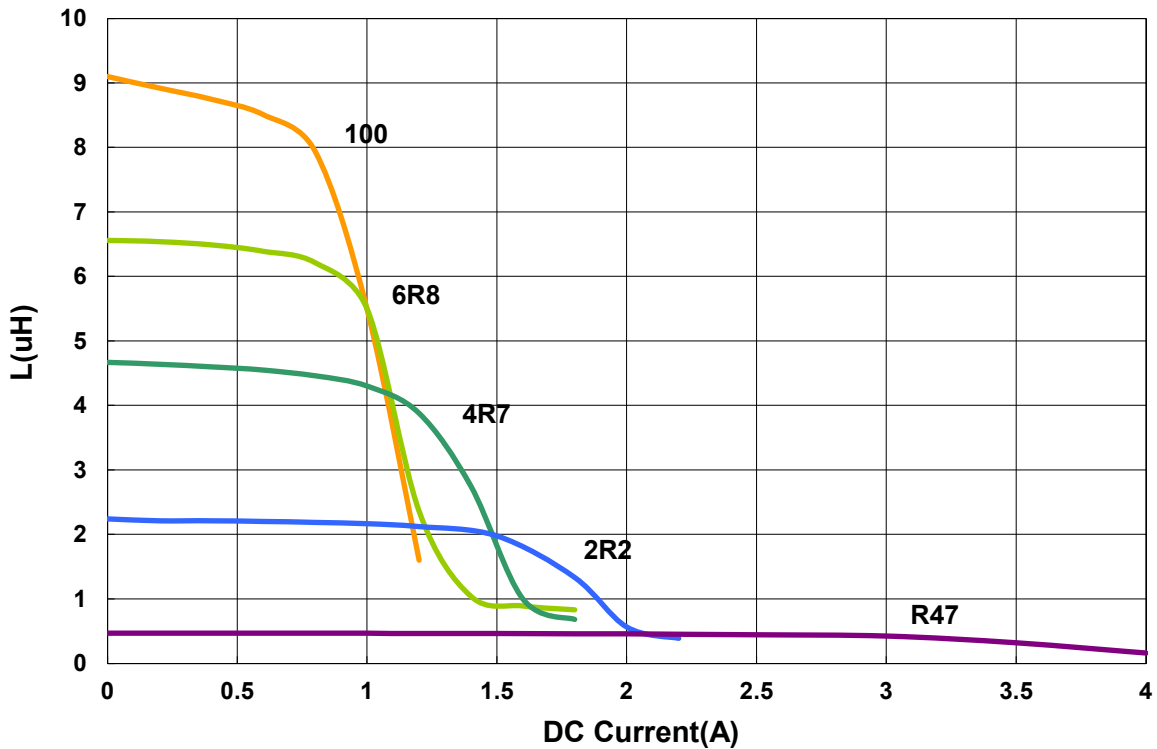
APSC00030316 Type

**Characteristics Graph**

**Inductance vs. Frequency Characteristics**



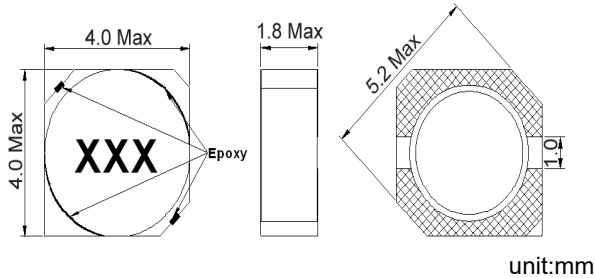
**Inductance vs. DC Current**



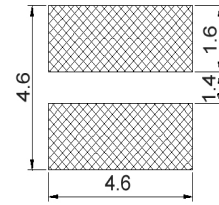
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**APSC00040418 Type**

**Dimensions**



**Recommended Land Pattern**



**Electrical Characteristics**

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)Max.	Isat(A) Max(Typ)	Tolerance (±%)	Marking
APSC0000404181R0□S0	1	100 kHz,0.1 V	0.04	1.35(1.7)	30	1R0
APSC0000404181R5□S0	1.5	100 kHz,0.1 V	0.052	1.25(1.6)	30	1R5
APSC0000404182R2□S0	2.2	100 kHz,0.1 V	0.072	1.0(1.3)	30	2R2
APSC0000404183R3□S0	3.3	100 kHz,0.1 V	0.085	0.88(1.1)	30	3R3
APSC0000404183R6□S0	3.6	100 kHz,0.1 V	0.09	0.74(0.93)	30	3R6
APSC0000404184R7□S0	4.7	100 kHz,0.1 V	0.105	0.72(0.9)	30	4R7
APSC0000404186R8□S0	6.8	100 kHz,0.1 V	0.17	0.61(0.74)	30	6R8
APSC000040418100□S0	10	100 kHz,0.1 V	0.21	0.55(0.6)	20,30	100
APSC000040418150□S0	15	100 kHz,0.1 V	0.295	0.45(0.52)	20,30	150
APSC000040418220□S0	22	100 kHz,0.1 V	0.43	0.32(0.4)	20,30	220
APSC000040418270□S0	27	100 kHz,0.1 V	0.62	0.3(0.37)	30	270
APSC000040418330□S0	33	100 kHz,0.1 V	0.675	0.26(0.32)	30	330
APSC000040418680□S0	68	100 kHz,0.1 V	1.7	0.16(0.21)	30	680

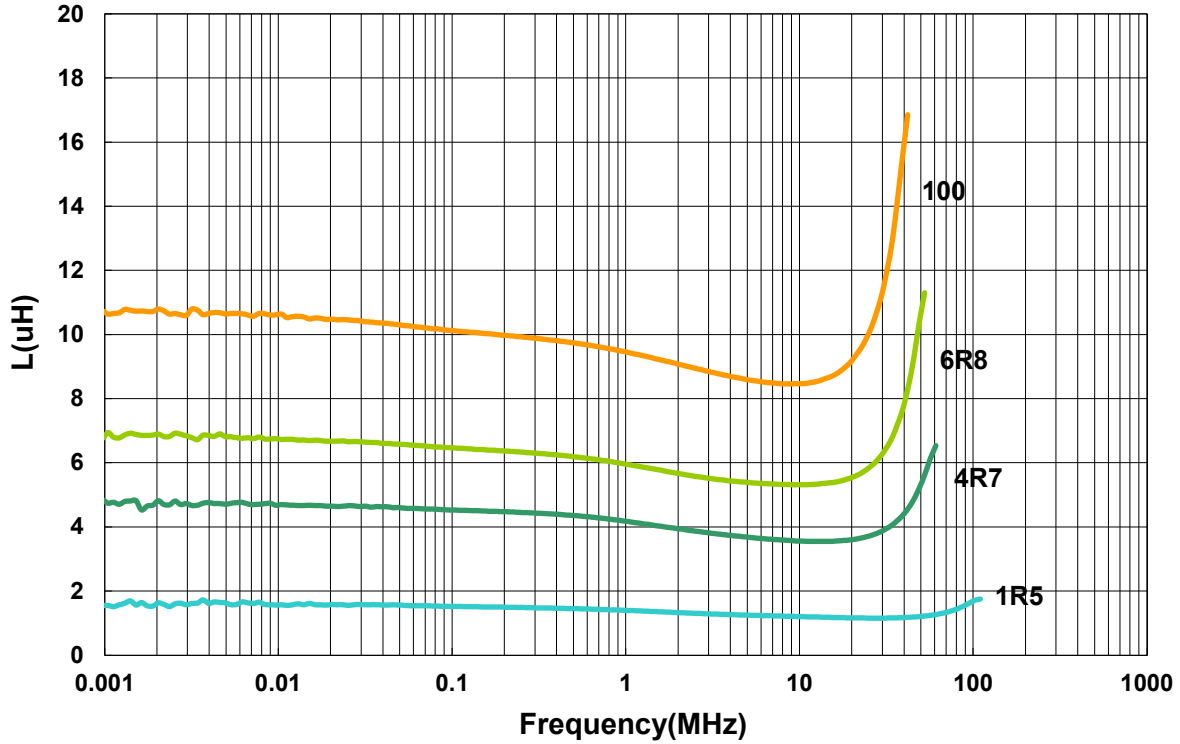
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- Operating temperature range -40°C ~ 125°C (Including self - temperature rise)
- Isat for Inductance drop 35% from its value without current
- Measure Equipment:  
L: Agilent E4980 or HP4284A  
RDC: CH502BC  
Rate current: HP4284+42841A or WK3260B+WK3265B

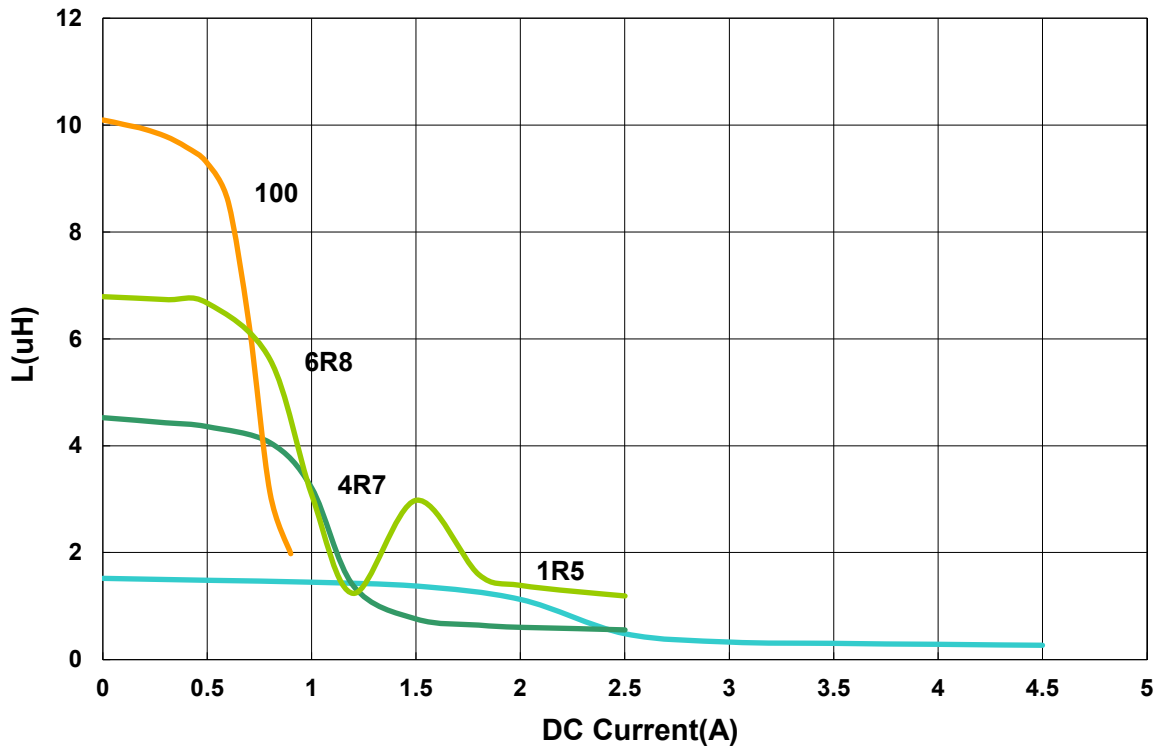
APSC00040418 Type

**Characteristics Graph**

**Inductance vs. Frequency Characteristics**



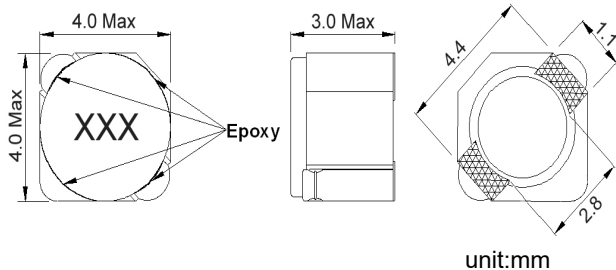
**Inductance vs. DC Current**



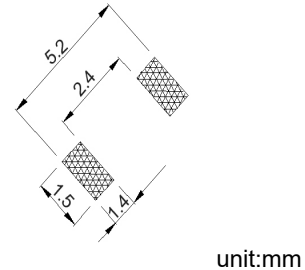
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**APSC00040430 Type**

**■ Dimensions**



**■ Recommended Land Pattern**



**■ Electrical Characteristics**

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)Max.	Isat (A) Max(Typ)	Irms (A)Typ.	Tolerance (±%)	Marking
APSC000404301R0□00	1.0	100 kHz, 1 V	0.045	2.8(4.1)	2.50	30	1R0
APSC000404303R3□00	3.3	100 kHz, 1 V	0.0721	2(2.5)	1.85	30	3R3
APSC000404304R7□00	4.7	100 kHz, 1 V	0.0883	1.65(1.9)	1.62	30	4R7
APSC000404306R8□00	6.8	100 kHz, 1 V	0.119	1.24(1.6)	1.32	30	6R8
APSC00040430100□00	10	100 kHz, 1 V	0.145	1.05(1.4)	1.18	30	100
APSC00040430150□00	15	100 kHz, 1 V	0.213	0.9(1.1)	1.02	30	150
APSC00040430220□00	22	100 kHz, 1 V	0.335	0.76(0.95)	0.74	30	220
APSC00040430330□00	33	100 kHz, 1 V	0.481	0.58(0.74)	0.63	30	330
APSC00040430470□00	47	100 kHz, 1 V	0.599	0.48(0.6)	0.56	20,30	470

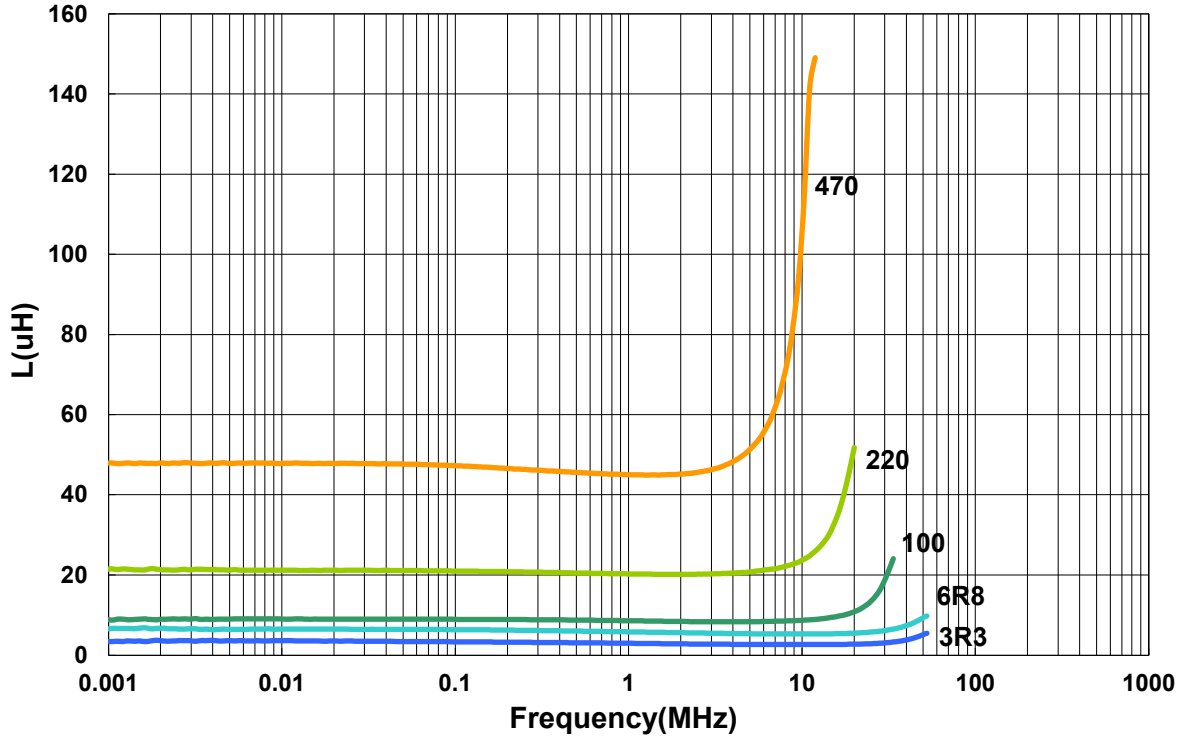
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1. Operating temperature range -40°C ~ 125°C (Including self - temperature rise)
2. Rate current: Inductance drop = 35% typ.
3. I<sub>rms</sub> for a 40°C temperature rise from 25°C ambient.
4. Measure Equipment:  
L: Agilent E4980 or HP4284A  
RDC: CH502BC  
Rate current: HP4284+42841A or WK3260B+WK3265B  
I<sub>rms</sub>:HP4284A+HP42841A or WK3260B+WK3265B

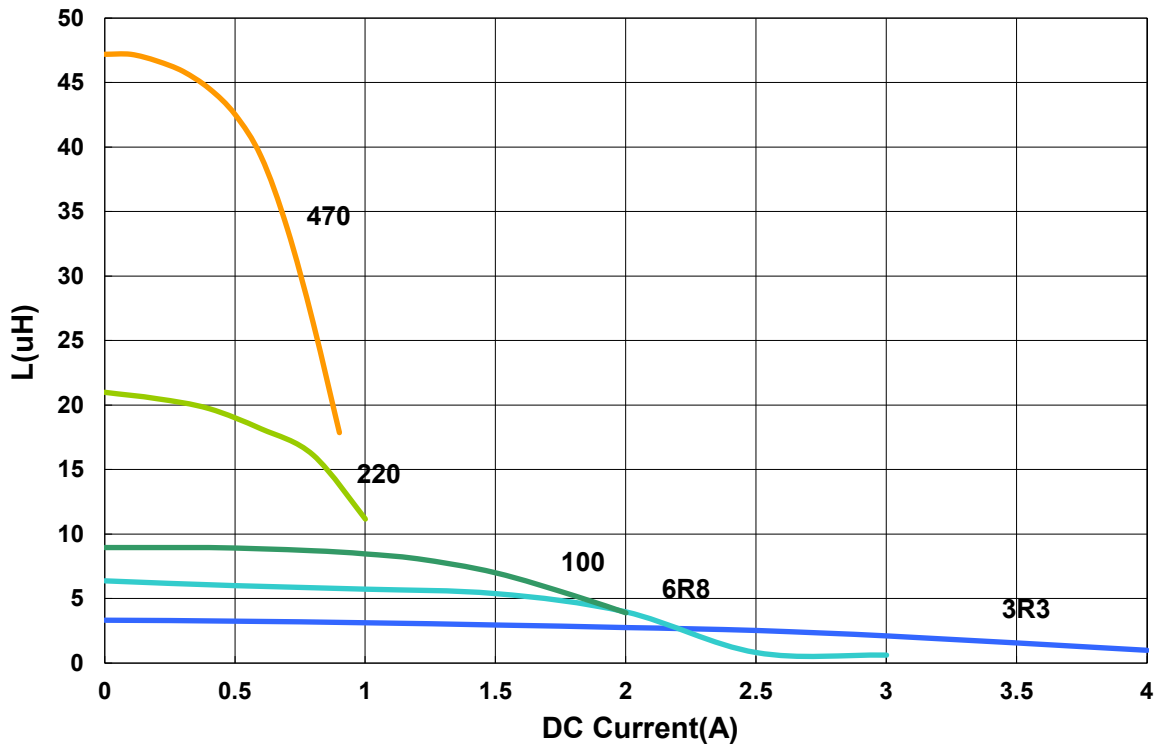
APSC00040430 Type

**Characteristics Graph**

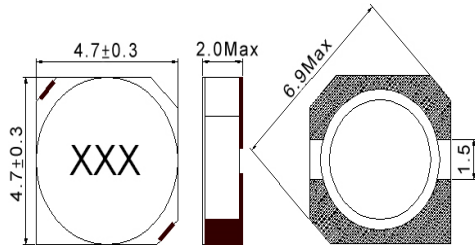
**Inductance vs. Frequency Characteristics**



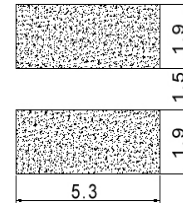
**Inductance vs. DC Current**



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**APSC00050520 Type**
**■ Dimensions**


unit:mm

**■ Recommended Land Pattern**


unit:mm

**■ Electrical Characteristics**

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)Max.	Isat(A) Max(Typ)	Tolerance (±%)	Marking
APSC000505201R0□S0	1	7.96 MHz,1 V	0.045	1.72(2.5)	30	1R0
APSC000505201R5□S0	1.5	7.96 MHz,1 V	0.060	1.5(1.8)	30	1R5
APSC000505201R8□S0	1.8	7.96 MHz,1 V	0.070	1.35(1.7)	30	1R8
APSC000505202R2□S0	2.2	7.96 MHz,1 V	0.075	1.3(1.6)	30	2R2
APSC000505202R7□S0	2.7	7.96 MHz,1 V	0.105	1.2(1.5)	30	2R7
APSC000505203R3□S0	3.3	7.96 MHz,1 V	0.110	1.04(1.3)	30	3R3
APSC000505203R9□S0	3.9	7.96 MHz,1 V	0.155	0.88(1.2)	30	3R9
APSC000505204R7□S0	4.7	7.96 MHz,1 V	0.162	0.84(1.1)	30	4R7
APSC000505205R6□S0	5.6	7.96 MHz,1 V	0.170	0.8(1.0)	30	5R6
APSC000505206R3□S0	6.3	7.96 MHz,1 V	0.180	0.78(0.95)	30	6R3
APSC000505206R8□S0	6.8	7.96 MHz,1 V	0.200	0.76(0.85)	30	6R8
APSC000505208R2□S0	8.2	7.96 MHz,1 V	0.245	0.68(0.8)	30	8R2
APSC00050520100□S0	10	100 kHz,1 V	0.280	0.61(0.75)	20,30	100
APSC00050520120□S0	12	100 kHz,1 V	0.320	0.56(0.7)	30	120
APSC00050520150□S0	15	100 kHz,1 V	0.360	0.5(0.65)	30	150
APSC00050520180□S0	18	100 kHz,1 V	0.400	0.48(0.6)	30	180
APSC00050520220□S0	22	100 kHz,1 V	0.480	0.41(0.55)	20,30	220
APSC00050520270□S0	27	100 kHz,1 V	0.570	0.35(0.5)	30	270
APSC00050520330□S0	33	100 kHz,1 V	0.694	0.32(0.45)	30	330
APSC00050520390□S0	39	100 kHz,1 V	0.80	0.3(0.4)	30	390
APSC00050520470□S0	47	100 kHz,1 V	0.95	0.28(0.38)	30	470
APSC00050520560□S0	56	100 kHz,1 V	1.08	0.26(0.35)	30	560
APSC00050520680□S0	68	100 kHz,1 V	1.30	0.24(0.34)	30	680
APSC00050520101□S0	100	100 kHz,1 V	2	0.2(0.3)	20,30	101

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

- Operating temperature range -40°C ~125°C (Including self - temperature rise)
- Isat for Inductance drop 35% from its value without current
- Measure Equipment:

L: Agilent E4980 or HP4284A

RDC: CH502BC

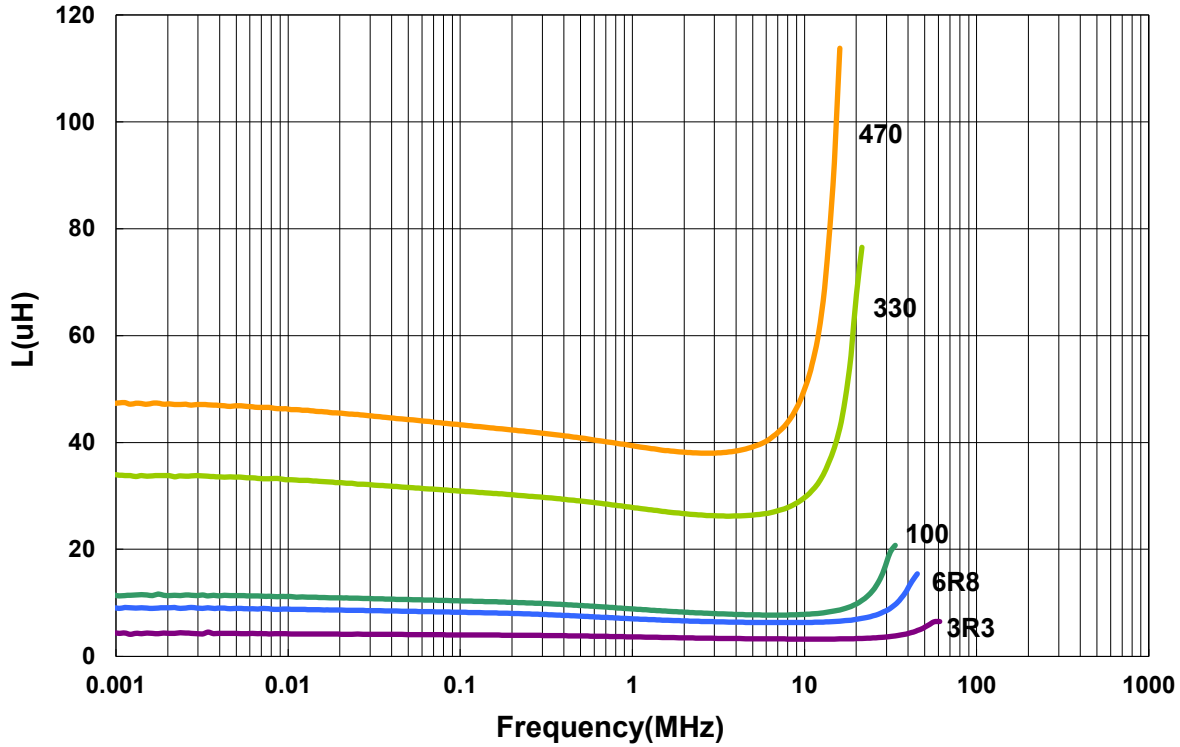
Rate current: HP4284+42841A or WK3260B+WK3265B



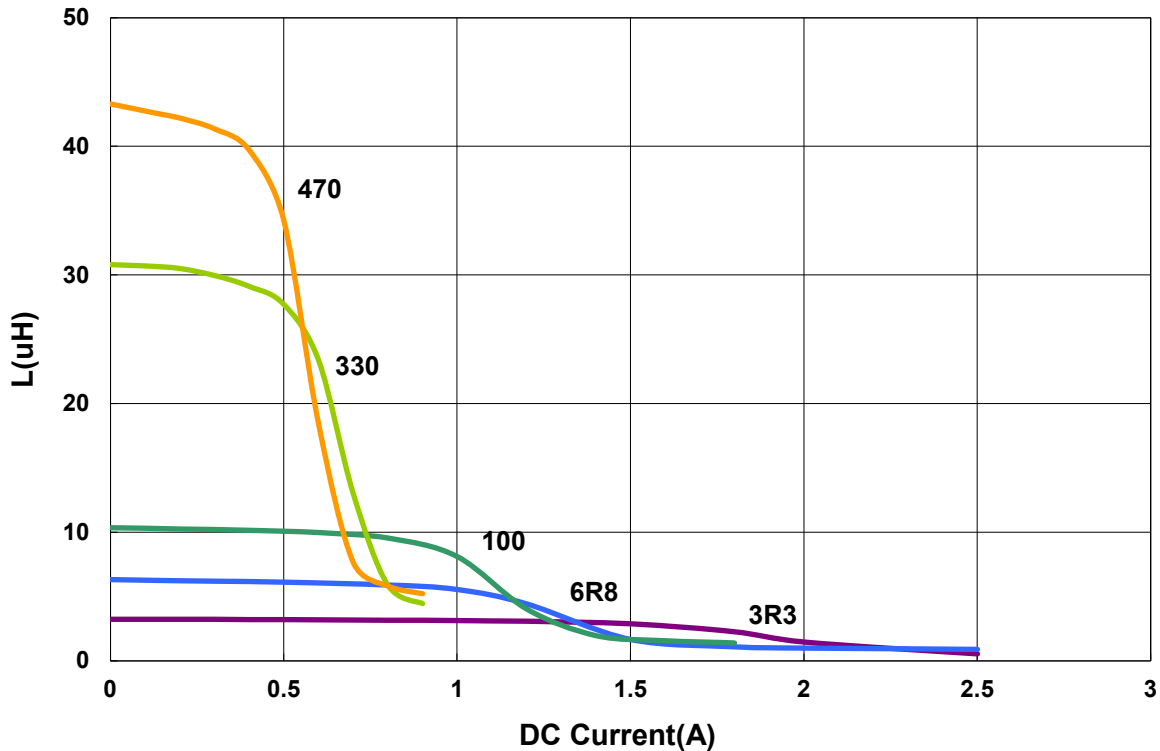
APSC00050520 Type

**Characteristics Graph**

**Inductance vs. Frequency Charateristics**



**Inductance vs. DC Current**



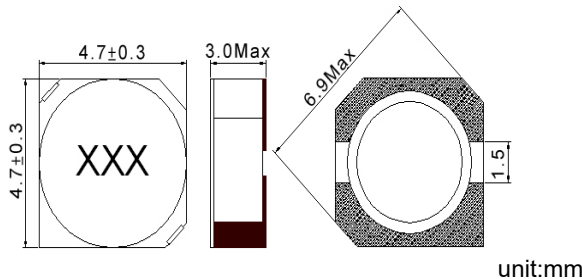
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# Power Inductor APSC Series

**Automotive  
AEC-Q200**

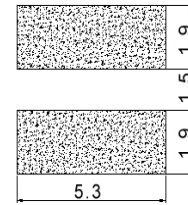
## APSC00050530 Type

### ■ Dimensions



unit:mm

### ■ Recommended Land Pattern



unit:mm

### ■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)Max.	Isat(A) Max(Typ)	Tolerance (±%)	Marking
APSC000505301R2□S0	1.2	100 kHz, 1 V	0.0236	2.56(4.1)	30	1R2
APSC000505301R8□S0	1.8	100 kHz, 1 V	0.035	2.2(3.2)	30	1R8
APSC000505302R0□S0	2	100 kHz, 1 V	0.030	2.1(3.0)	30	2R0
APSC000505302R2□S0	2.2	100 kHz, 1 V	0.0313	2.04(2.9)	30	2R2
APSC000505302R7□S0	2.7	100 kHz, 1 V	0.0433	1.6(2.8)	30	2R7
APSC000505303R3□S0	3.3	100 kHz, 1 V	0.0492	1.57(2.3)	30	3R3
APSC000505303R9□S0	3.9	100 kHz, 1 V	0.0648	1.44(2.1)	30	3R9
APSC000505304R7□S0	4.7	100 kHz, 1 V	0.072	1.32(2.0)	20,30	4R7
APSC000505305R6□S0	5.6	100 kHz, 1 V	0.1009	1.17(1.7)	30	5R6
APSC000505306R8□S0	6.8	100 kHz, 1 V	0.1089	1.12(1.6)	30	6R8
APSC000505308R2□S0	8.2	100 kHz, 1 V	0.1175	1.04(1.5)	30	8R2
APSC00050530100□S0	10	100 kHz, 1 V	0.1283	1.0(1.3)	20,30	100
APSC00050530120□S0	12	100 kHz, 1 V	0.1316	0.84(1.1)	30	120
APSC00050530150□S0	15	100 kHz, 1 V	0.149	0.76(1.0)	30	150
APSC00050530180□S0	18	100 kHz, 1 V	0.166	0.72(0.99)	30	180
APSC00050530220□S0	22	100 kHz, 1 V	0.235	0.7(0.93)	20,30	220
APSC00050530270□S0	27	100 kHz, 1 V	0.261	0.58(0.83)	30	270
APSC00050530330□S0	33	100 kHz, 1 V	0.3313	0.56(0.64)	30	330
APSC00050530390□S0	39	100 kHz, 1 V	0.3837	0.5(0.7)	20,30	390
APSC00050530470□S0	47	100 kHz, 1 V	0.587	0.48(0.61)	20,30	470
APSC00050530560□S0	56	100 kHz, 1 V	0.6245	0.41(0.54)	30	560
APSC00050530680□S0	68	100 kHz, 1 V	0.699	0.35(0.49)	30	680
APSC00050530820□S0	82	100 kHz, 1 V	0.9148	0.32(0.49)	30	820
APSC00050530101□S0	100	100 kHz, 1 V	1.02	0.29(0.45)	20,30	101
APSC00050530121□S0	120	100 kHz, 1 V	1.27	0.27(0.4)	30	121
APSC00050530151□S0	150	100 kHz, 1 V	1.35	0.24(0.34)	30	151
APSC00050530181□S0	180	100 kHz, 1 V	1.54	0.22(0.32)	30	181
APSC00050530221□S0	220	100 kHz, 1 V	2.0	0.2(0.29)	30	221
APSC00050530331□S0	330	100 kHz, 1 V	3.4	0.19(0.24)	20,30	331
APSC00050530391□S0	390	100 kHz, 1 V	3.56	0.18(0.22)	20,30	391
APSC00050530681□S0	680	100 kHz, 1 V	5.2	0.1(0.17)	20,30	681

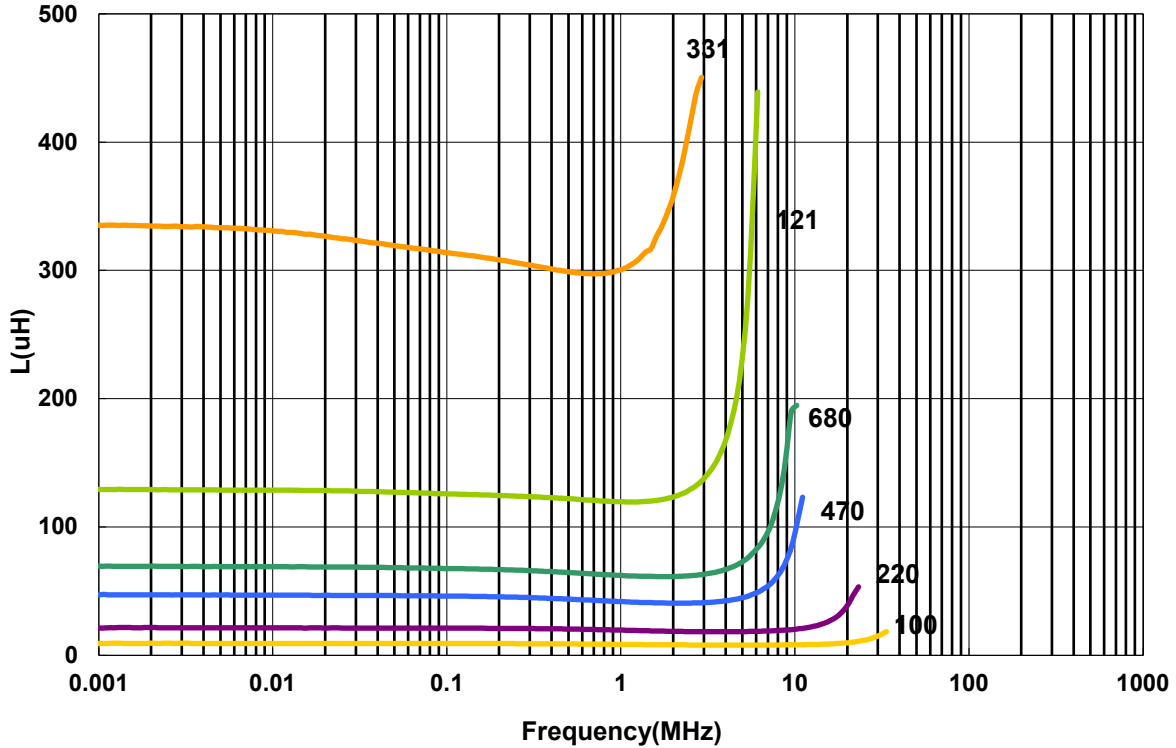
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2. Isat for Inductance drop 35% from its value without current
3. Measure Equipment:  
 L: Agilent E4980 or HP4284A  
 RDC: CH502BC  
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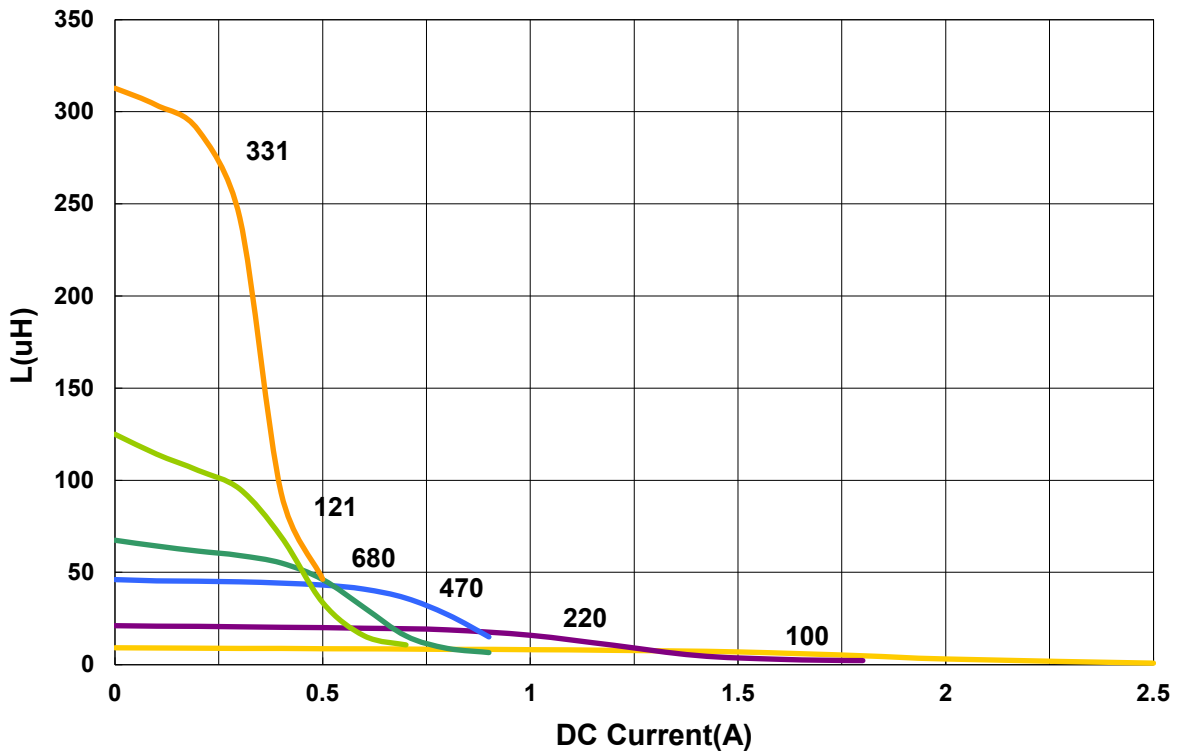
**APSC00050530 Type**

**Characteristics Graph**

**Inductance vs. Frequency Characteristics**



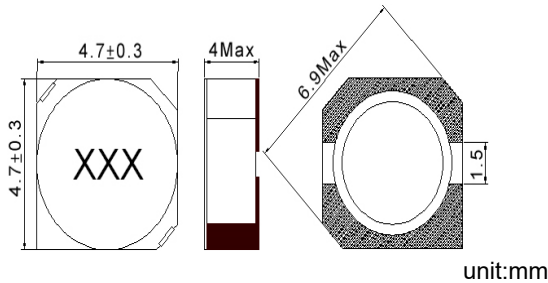
**Inductance vs. DC Current**



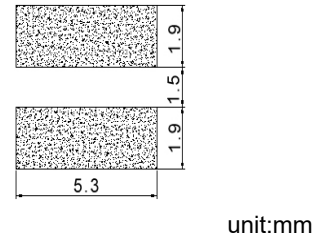
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**APSC00050540 Type**

**■ Dimensions**



**■ Recommended Land Pattern**



**■ Electrical Characteristics**

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)Max.	Isat(A) Max(Typ)	Irms (A)Typ.	Tolerance (±%)	Marking
APSC000505402R2□S0	2.2	100 kHz, 1 V	0.033	3.5(4.6)	4.3	30	2R2
APSC000505403R3□S0	3.3	100 kHz, 1 V	0.039	2.7(3.4)	3.6	30	3R3
APSC000505404R7□S0	4.7	100 kHz, 1 V	0.053	2.4(3.0)	3	30	4R7
APSC000505406R8□S0	6.8	100 kHz, 1 V	0.06	2.0(2.6)	2.8	30	6R8
APSC00050540100□S0	10	100 kHz, 1 V	0.15	1.5(2.0)	1.6	20,30	100
APSC00050540150□S0	15	100 kHz, 1 V	0.21	1.2(1.6)	1.35	20,30	150
APSC00050540220□S0	22	100 kHz, 1 V	0.27	1.0(1.4)	1	20,30	220

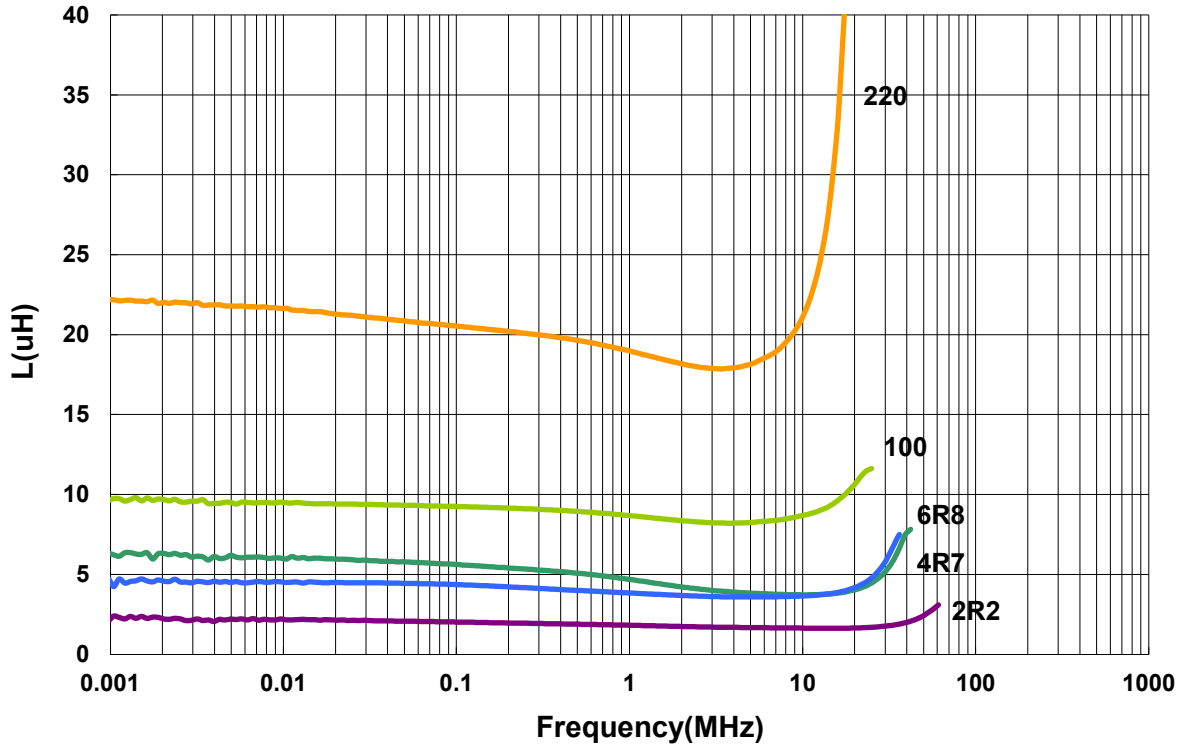
**Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%**

1. Operating temperature range -40°C ~ 125°C (Including self - temperature rise)
2. Isat for Inductance drop 35% from its value without current
3. I<sub>rms</sub> for a 40°C temperature rise from 25°C ambient with current
4. Measure Equipment:  
 L: Agilent E4980 or HP4284A  
 RDC: CH502BC  
 Rate current: HP4284+42841A or WK3260B+WK3265B

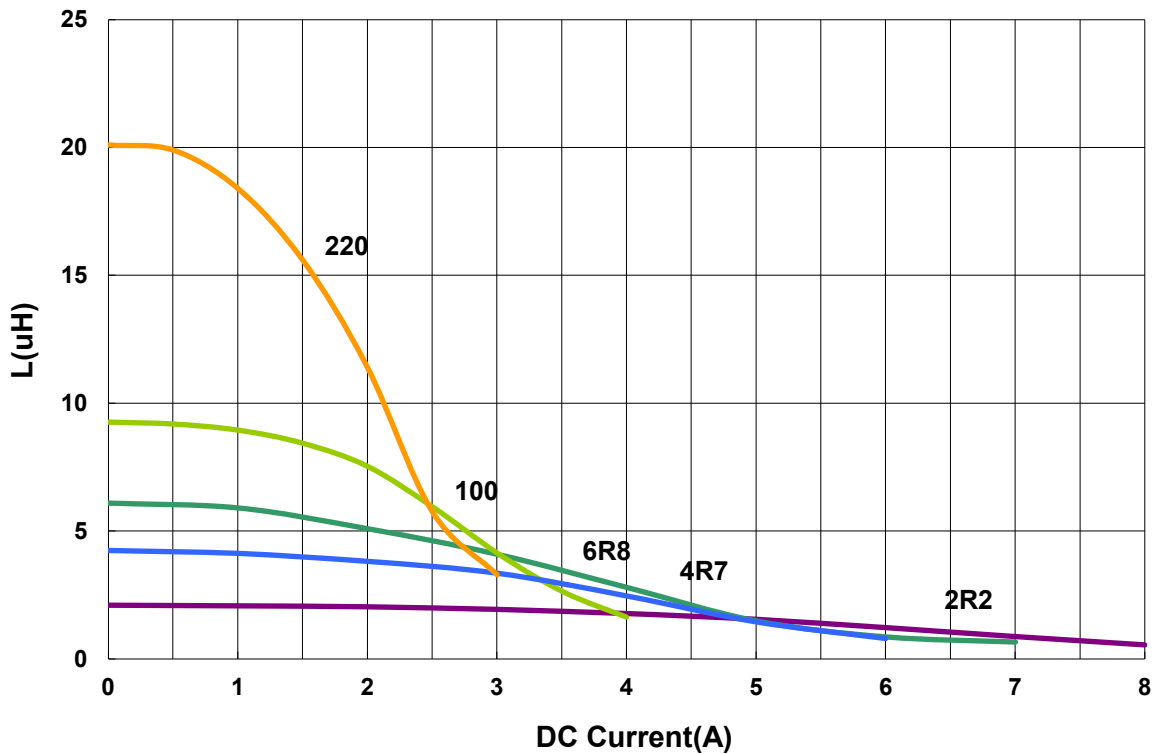
APSC00050540 Type

■ **Characteristics Graph**

**Inductance vs. Frequency Characteristics**



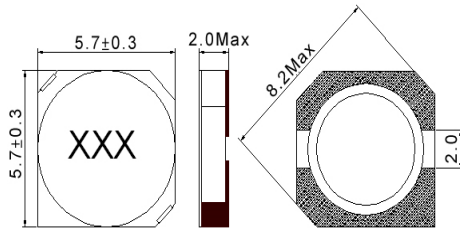
**Inductance vs. DC Current**



Please be sure to request approval specifications that provide further details of the products. Kindly note that the content of these specifications are subject to change or may be discontinued without prior notice. This product may not be designed/used in medical or high risk applications without Chilisin approval. Please contact our sales department before ordering.

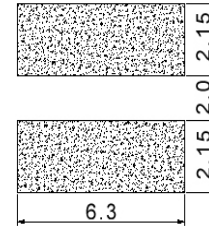
**APSC00060620 Type**

**■ Dimensions**



unit:mm

**■ Recommended Land Pattern**



unit:mm

**■ Electrical Characteristics**

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)Max.	Isat(A) Max(Typ)	Tolerance (±%)	Marking
APSC000606201R0□S0	1	10 kHz, 1 V	0.038	2.8(3.5)	30	1R0
APSC000606201R5□S0	1.5	10 kHz, 1 V	0.038	2.5(3.0)	30	1R5
APSC000606202R0□S0	2	10 kHz, 1 V	0.045	2.1(2.6)	30	2R0
APSC000606202R2□S0	2.2	10 kHz, 1 V	0.048	2.0(2.5)	30	2R2
APSC000606203R3□S0	3.3	10 kHz, 1 V	0.056	1.7(2.0)	30	3R3
APSC000606204R1□S0	4.1	10 kHz, 1 V	0.057	1.55(1.9)	30	4R1
APSC000606204R7□S0	4.7	10 kHz, 1 V	0.076	1.35(1.7)	30	4R7
APSC000606205R4□S0	5.4	10 kHz, 1 V	0.076	1.2(1.5)	30	5R4
APSC000606206R2□S0	6.2	10 kHz, 1 V	0.096	1.1(1.4)	30	6R2
APSC000606206R8□S0	6.8	10 kHz, 1 V	0.100	1.0(1.3)	30	6R8
APSC000606208R9□S0	8.9	10 kHz, 1 V	0.116	0.95(1.25)	30	8R9
APSC00060620100□S0	10	10 kHz, 1 V	0.124	0.9(1.2)	20,30	100
APSC00060620120□S0	12	10 kHz, 1 V	0.153	0.9(1.0)	30	120
APSC00060620150□S0	15	10 kHz, 1 V	0.196	0.8(0.91)	20,30	150
APSC00060620180□S0	18	10 kHz, 1 V	0.210	0.75(0.9)	30	180
APSC00060620220□S0	22	10 kHz, 1 V	0.290	0.65(0.8)	20,30	220
APSC00060620270□S0	27	10 kHz, 1 V	0.330	0.6(0.7)	30	270
APSC00060620330□S0	33	10 kHz, 1 V	0.386	0.55(0.65)	20,30	330
APSC00060620390□S0	39	10 KHz, 1 V	0.520	0.48(0.6)	30	390
APSC00060620470□S0	47	10 kHz, 1 V	0.595	0.44(0.51)	20,30	470
APSC00060620560□S0	56	10 kHz, 1 V	0.665	0.4(0.5)	30	560
APSC00060620680□S0	68	10 kHz, 1 V	0.840	0.33(0.43)	30	680
APSC00060620820□S0	82	10 kHz, 1 V	0.978	0.3(0.41)	30	820
APSC00060620101□S0	100	10 kHz, 1 V	1.2	0.25(0.36)	20,30	101

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

1. Operating temperature range -40°C ~ 125°C (Including self - temperature rise)
2. Isat for Inductance drop 35% from its value without current
3. Measure Equipment:

L: Agilent E4980 or HP4284A

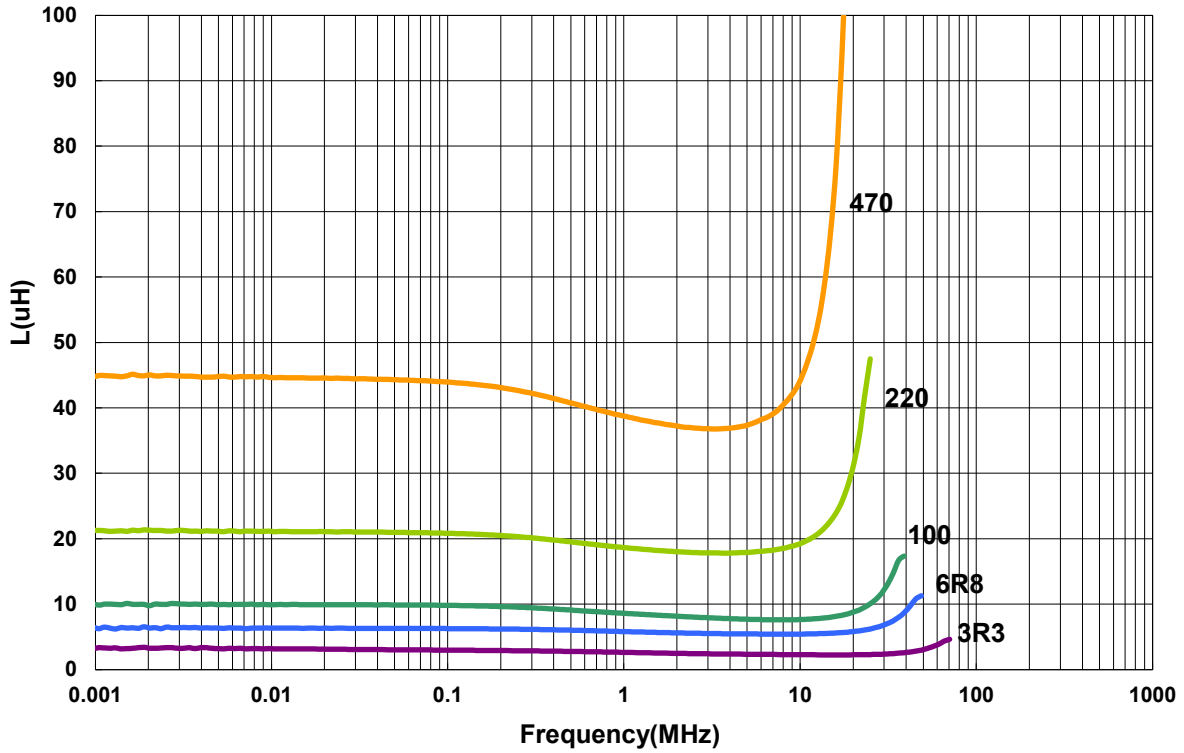
RDC: CH502BC

Rate current: HP4284+42841A or WK3260B+WK3265B

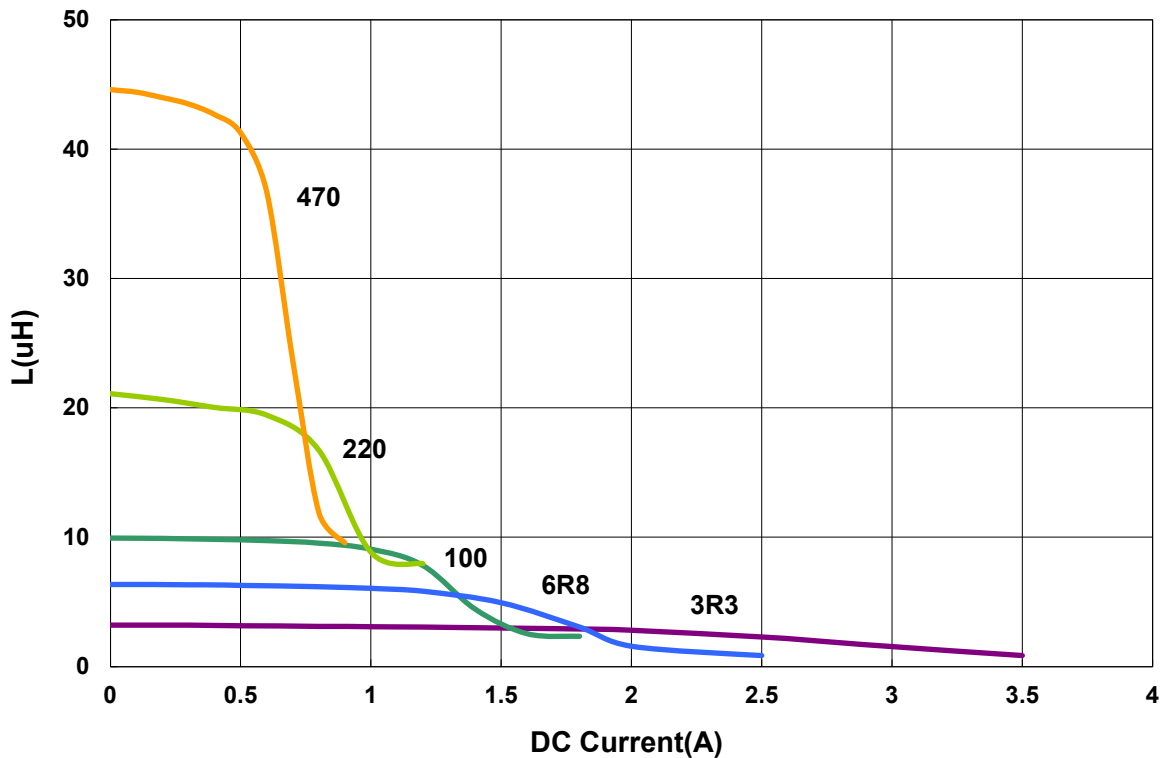
**APSC00060620 Type**

**Characteristics Graph**

**Inductance vs. Frequency Characteristics**



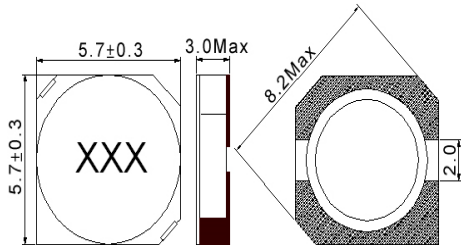
**Inductance vs. DC Current**



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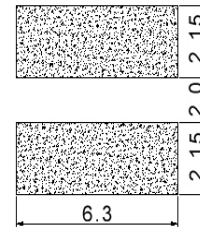
**APSC00060630 Type**

**■ Dimensions**



unit:mm

**■ Recommended Land Pattern**



unit:mm

**■ Electrical Characteristics**

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)Max.	Isat(A) Max(Typ)	Tolerance (±%)	Marking
APSC000606301R0□S0	1	10 kHz, 1 V	0.015	3.5(4.2)	30	1R0
APSC000606301R5□S0	1.5	10 kHz, 1 V	0.015	2.8(3.7)	30	1R5
APSC000606302R2□S0	2.2	10 kHz, 1 V	0.018	2.4(3.1)	30	2R2
APSC000606302R5□S0	2.5	10 kHz, 1 V	0.022	2.3(2.7)	30	2R5
APSC000606302R6□S0	2.6	10 kHz, 1 V	0.022	2.2(2.6)	30	2R6
APSC000606302R7□S0	2.7	10 kHz, 1 V	0.024	2.2(2.6)	30	2R7
APSC000606303R0□S0	3	10 kHz, 1 V	0.024	2.2(2.5)	30	3R0
APSC000606303R3□S0	3.3	10 kHz, 1 V	0.027	2.1(2.5)	30	3R3
APSC000606304R2□S0	4.2	10 kHz, 1 V	0.031	2.0(2.2)	30	4R2
APSC000606304R3□S0	4.3	10 kHz, 1 V	0.041	1.8(2.1)	30	4R3
APSC000606304R7□S0	4.7	10 kHz, 1 V	0.038	1.6(2.0)	30	4R7
APSC000606305R0□S0	5	10 kHz, 1 V	0.038	1.5(1.9)	30	5R0
APSC000606305R3□S0	5.3	10 kHz, 1 V	0.038	1.5(1.9)	30	5R3
APSC000606306R2□S0	6.2	10 kHz, 1 V	0.045	1.2(1.8)	30	6R2
APSC000606306R8□S0	6.8	10 kHz, 1 V	0.050	1.2(1.6)	30	6R8
APSC000606308R2□S0	8.2	10 kHz, 1 V	0.053	1.0(1.5)	30	8R2
APSC00060630100□S0	10	10 kHz, 1 V	0.065	0.95(1.4)	20,30	100
APSC00060630120□S0	12	10 kHz, 1 V	0.076	0.9(1.3)	20,30	120
APSC00060630150□S0	15	10 kHz, 1 V	0.103	0.85(1.1)	20,30	150
APSC00060630180□S0	18	10 kHz, 1 V	0.110	0.8(1.0)	30	180
APSC00060630220□S0	22	10 kHz, 1 V	0.122	0.75(0.92)	20,30	220
APSC00060630270□S0	27	10 kHz, 1 V	0.175	0.65(0.82)	30	270
APSC00060630330□S0	33	10 kHz, 1 V	0.189	0.6(0.75)	30	330
APSC00060630390□S0	39	10 kHz, 1 V	0.212	0.55(0.7)	30	390
APSC00060630470□S0	47	10 kHz, 1 V	0.250	0.5(0.62)	20,30	470
APSC00060630560□S0	56	10 kHz, 1 V	0.305	0.48(0.59)	30	560
APSC00060630680□S0	68	10 kHz, 1 V	0.355	0.42(0.52)	30	680
APSC00060630820□S0	82	10 kHz, 1 V	0.463	0.39(0.46)	30	820

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

1. Operating temperature range -40°C ~ 125°C (Including self - temperature rise)
2. Rate current: The rate current indicates the current when the inductance decreases to 65% over of its nominal value or D.C.current when the temperature rising  $\Delta T=40^\circ\text{C}$  lower, whichever is lower
3. Measure Equipment:  
L: Agilent E4980 or HP4284A  
RDC: CH502BC  
Rate current: HP4284+42841A or WK3260B+WK3265B

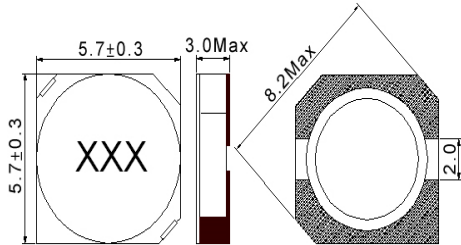


## Power Inductor APSC Series

Automotive  
AEC-Q200

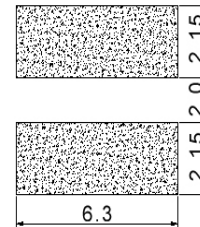
### APSC00060630 Type

#### ■ Dimensions



unit:mm

#### ■ Recommended Land Pattern



unit:mm

#### ■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)Max.	Isat(A) Max(Typ)	Tolerance (±%)	Marking
APSC00060630101□S0	100	10 kHz, 1 V	0.52	0.35(0.42)	20,30	101
APSC00060630181□S0	180	10 kHz, 1 V	1.05	0.21(0.31)	30	181
APSC00060630221□S0	220	10 kHz, 1 V	1.2	0.20(0.30)	30	221
APSC00060630331□S0	330	10 kHz, 1 V	1.7	0.15(0.24)	20,30	331
APSC00060630391□S0	390	10 kHz, 1 V	1.8	0.13(0.22)	30	391
APSC00060630471□S0	470	10 kHz, 1 V	2.5	0.11(0.21)	20,30	471
APSC00060630561□S0	560	10 kHz, 1 V	3.2	0.10(0.17)	20,30	561

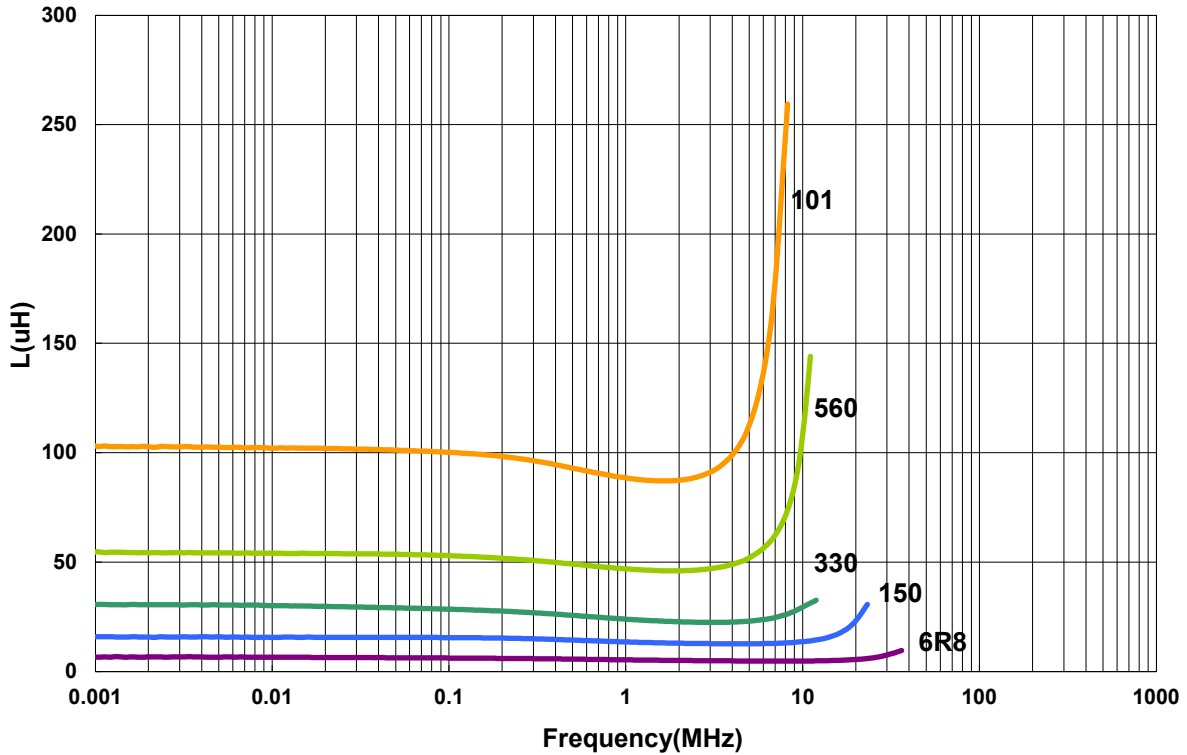
**Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%**

- Operating temperature range - 40 °C ~ 125 °C (Including self - temperature rise)
- Isat for Inductance drop 35% from its value without current
- Measure Equipment:  
 L: Agilent E4980 or HP4284A  
 RDC: CH502BC  
 Rate current: HP4284+42841A or WK3260B+WK3265B

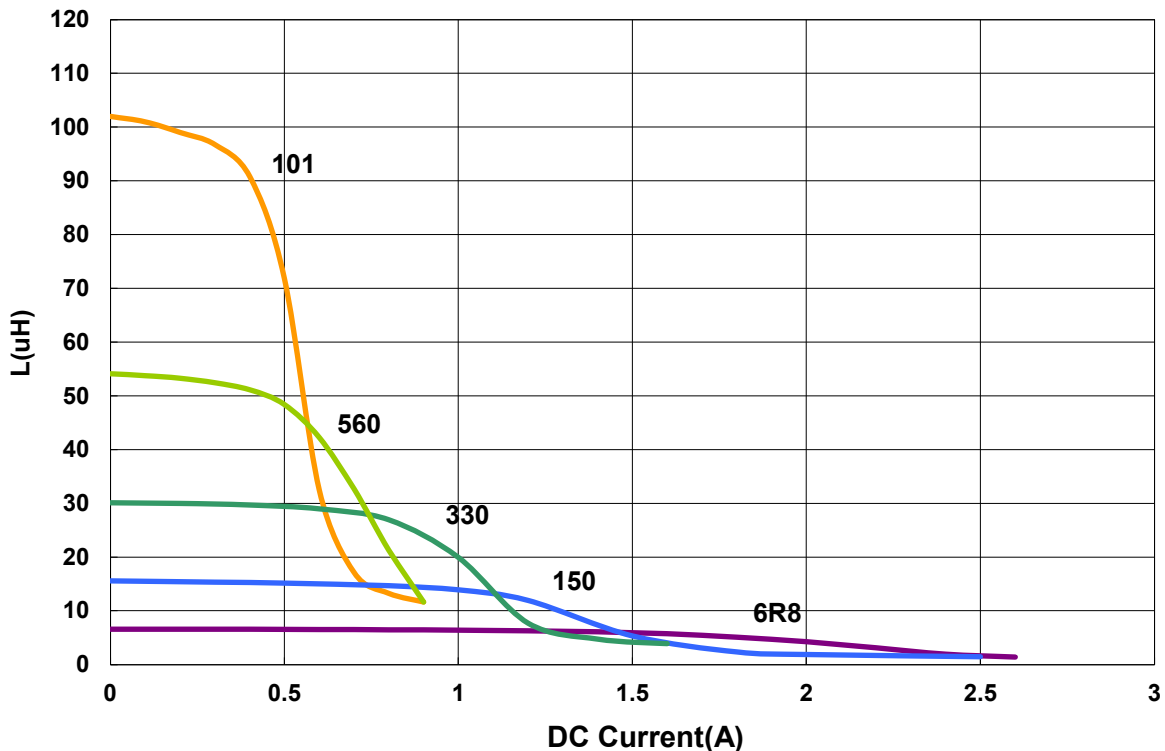
**APSC00060630 Type**

**Characteristics Graph**

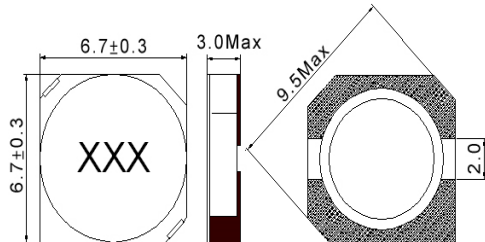
**Inductance vs. Frequency Characteristics**



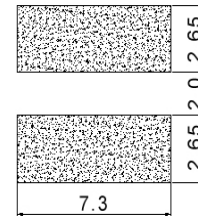
**Inductance vs. DC Current**



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**APSC00070730 Type**
**■ Dimensions**


unit:mm

**■ Recommended Land Pattern**


unit:mm

**■ Electrical Characteristics**

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)Max.	Isat(A) Max(Typ)	Tolerance (±%)	Marking
APSC000707301R0□S0	1	10 kHz, 1 V	0.024	3.5(5.3)	30	1R0
APSC000707301R5□S0	1.5	10 kHz, 1 V	0.0195	3.4(4.5)	30	1R5
APSC000707302R2□S0	2.2	10 kHz, 1 V	0.035	3.0(3.4)	30	2R2
APSC000707303R0□S0	3	10 kHz, 1 V	0.024	2.6(3.2)	30	3R0
APSC000707303R3□S0	3.3	10 kHz, 1 V	0.025	2.5(3.1)	30	3R3
APSC000707303R9□S0	3.9	10 kHz, 1 V	0.027	2.3(2.9)	30	3R9
APSC000707304R7□S0	4.7	10 kHz, 1 V	0.031	1.92(2.4)	30	4R7
APSC000707305R0□S0	5	10 kHz, 1 V	0.031	1.74(2.4)	30	5R0
APSC000707306R0□S0	6	10 kHz, 1 V	0.035	1.7(2.25)	30	6R0
APSC000707306R2□S0	6.2	10 kHz, 1 V	0.051	1.4(2.2)	30	6R2
APSC000707306R8□S0	6.8	10 kHz, 1 V	0.050	1.3(2.15)	30	6R8
APSC000707307R3□S0	7.3	10 kHz, 1 V	0.054	1.25(2.1)	30	7R3
APSC000707308R6□S0	8.6	10 kHz, 1 V	0.058	1.2(1.85)	30	8R6
APSC00070730100□S0	10	10 kHz, 1 V	0.065	1.15(1.7)	20,30	100
APSC00070730120□S0	12	10 kHz, 1 V	0.070	1.14(1.5)	20,30	120
APSC00070730150□S0	15	10 kHz, 1 V	0.084	1.12(1.4)	20,30	150
APSC00070730180□S0	18	10 kHz, 1 V	0.095	1.02(1.32)	30	180
APSC00070730220□S0	22	10 kHz, 1 V	0.128	0.87(1.2)	30	220
APSC00070730270□S0	27	10 kHz, 1 V	0.142	0.82(1.05)	30	270
APSC00070730330□S0	33	10 kHz, 1 V	0.165	0.8(0.97)	30	330
APSC00070730390□S0	39	10 kHz, 1 V	0.210	0.79(0.9)	30	390
APSC00070730470□S0	47	10 kHz, 1 V	0.238	0.7(0.8)	20,30	470
APSC00070730560□S0	56	10 kHz, 1 V	0.277	0.6(0.73)	30	560
APSC00070730680□S0	68	10 kHz, 1 V	0.304	0.55(0.65)	30	680
APSC00070730820□S0	82	10 kHz, 1 V	0.390	0.48(0.6)	30	820
APSC00070730101□S0	100	10 kHz, 1 V	0.535	0.43(0.54)	30	101
APSC00070730121□S0	120	10 kHz, 1 V	0.60	0.36(0.45)	20,30	121
APSC00070730221□S0	220	10 kHz, 1 V	1.3	0.27(0.34)	20,30	221

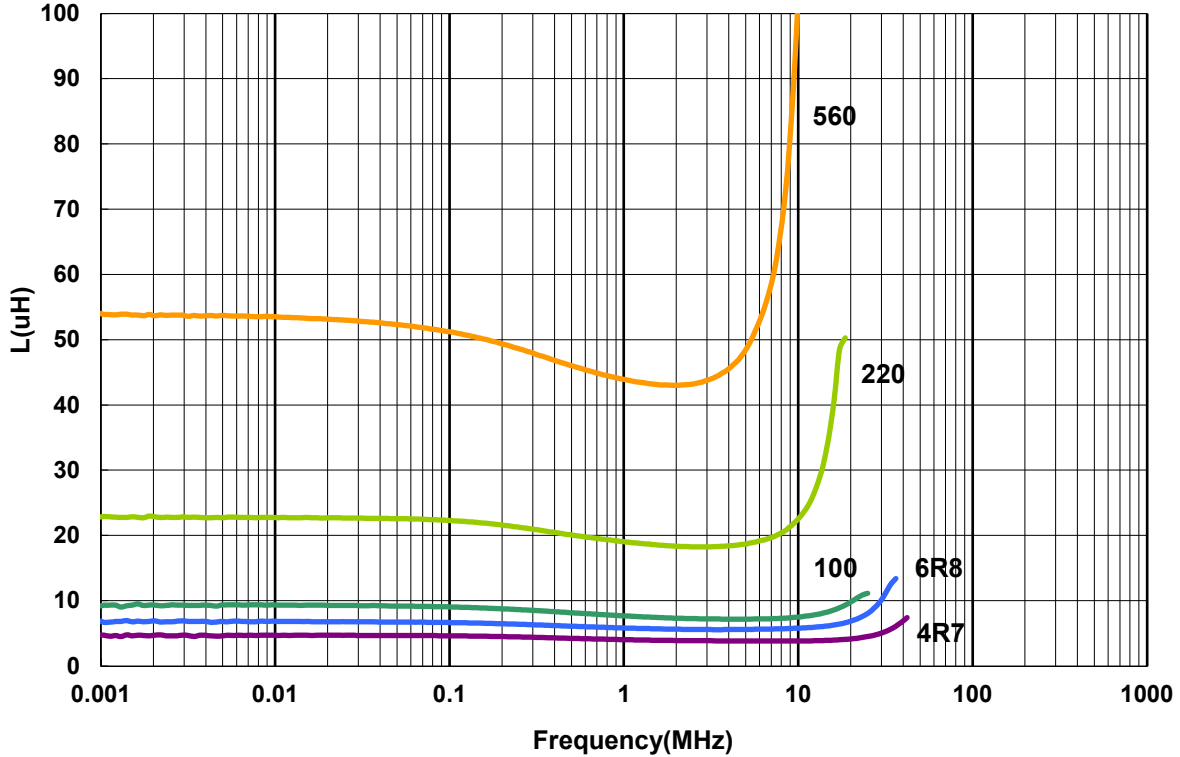
**Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%**

- Operating temperature range -40°C ~ 125°C (Including self - temperature rise)
- Isat for Inductance drop 35% from its value without current
- Measure Equipment:
  - L: Agilent E4980 or HP4284A
  - RDC: CH502BC
  - Rate current: HP4284+42841A or WK3260B+WK3265B

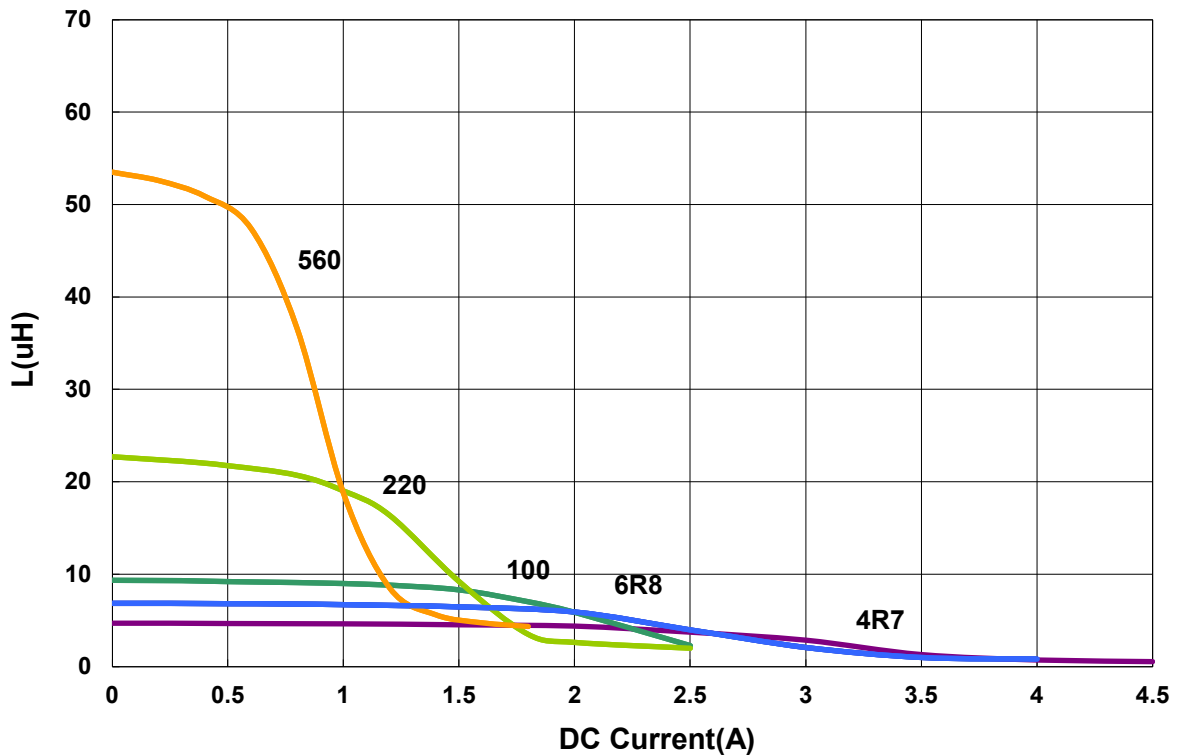
**APSC00070730 Type**

**Characteristics Graph**

**Inductance vs. Frequency Characteristics**



**Inductance vs. DC Current**



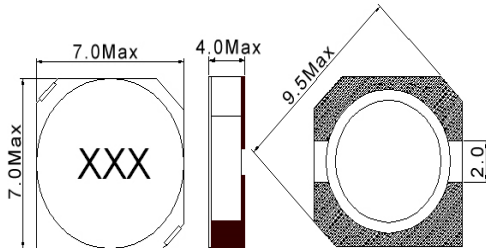
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# Power Inductor APSC Series

**Automotive  
AEC-Q200**

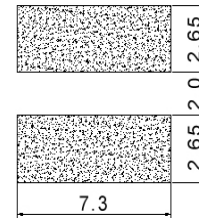
## APSC00070740 Type

### ■ Dimensions



unit:mm

### ■ Recommended Land Pattern



unit:mm

### ■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)Max.	Isat(A) Max(Typ)	Tolerance (±%)	Marking
APSC000707402R2□S0	2.2	10 kHz,0.1 V	0.018	3.8(4.7)	30	2R2
APSC000707402R7□S0	2.7	10 kHz,0.1 V	0.002	3.2(4.0)	30	2R7
APSC000707403R3□S0	3.3	10 kHz,0.1 V	0.023	3.0(3.8)	30	3R3
APSC000707404R7□S0	4.7	10 kHz,0.1 V	0.025	2.7(3.4)	30	4R7
APSC000707405R0□S0	5	10 kHz,0.1 V	0.026	2.5(3.1)	30	5R0
APSC000707405R6□S0	5.6	10 kHz,0.1 V	0.027	2.3(3.0)	30	5R6
APSC000707406R2□S0	6.2	10 kHz,0.1 V	0.027	1.8(2.8)	30	6R2
APSC000707406R8□S0	6.8	10 kHz,0.1 V	0.032	1.7(2.7)	30	6R8
APSC000707407R4□S0	7.4	10 kHz,0.1 V	0.032	1.7(2.5)	30	7R4
APSC000707408R7□S0	8.7	10 kHz,0.1 V	0.034	1.7(2.4)	30	8R7
APSC00070740100□S0	10	10 kHz,0.1 V	0.041	1.6(2.2)	20,30	100
APSC00070740120□S0	12	10 kHz,0.1 V	0.053	1.5(1.9)	30	120
APSC00070740150□S0	15	10 kHz,0.1 V	0.057	1.4(1.8)	20,30	150
APSC00070740180□S0	18	10 kHz,0.1 V	0.092	1.25(1.6)	30	180
APSC00070740220□S0	22	10 kHz,0.1 V	0.096	1.1(1.5)	20,30	220
APSC00070740270□S0	27	10 kHz,0.1 V	0.109	0.9(1.2)	30	270
APSC00070740330□S0	33	10 kHz,0.1 V	0.124	0.85(1.1)	20,30	330
APSC00070740390□S0	39	10 kHz,0.1 V	0.138	0.8(1.1)	20,30	390
APSC00070740470□S0	47	10 kHz,0.1 V	0.150	0.7(1.0)	20,30	470
APSC00070740560□S0	56	10 kHz,0.1 V	0.202	0.65(0.9)	30	560
APSC00070740680□S0	68	10 kHz,0.1 V	0.234	0.6(0.8)	20,30	680
APSC00070740820□S0	82	10 kHz,0.1 V	0.324	0.55(0.7)	30	820
APSC00070740101□S0	100	10 kHz,0.1 V	0.358	0.5(0.65)	20,30	101
APSC00070740561□S0	560	10 kHz,0.1 V	1.8	0.2(0.25)	30	561

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

1. Operating temperature range -40°C ~ 125°C (Including self - temperature rise)
2. Isat for Inductance drop 35% from its value without current
3. Measure Equipment:

L: Agilent E4980 or HP4284A

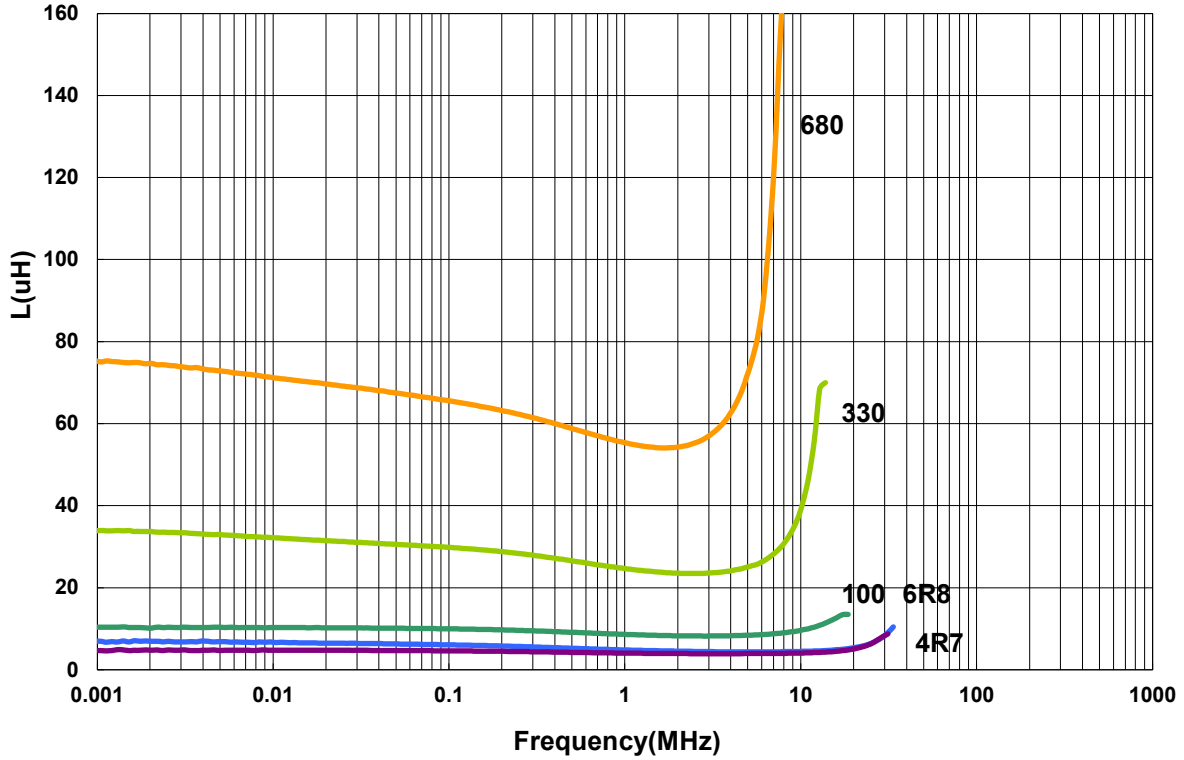
RDC: CH502BC

Rate Current: HP4284+42841A or WK3260B+WK3265B

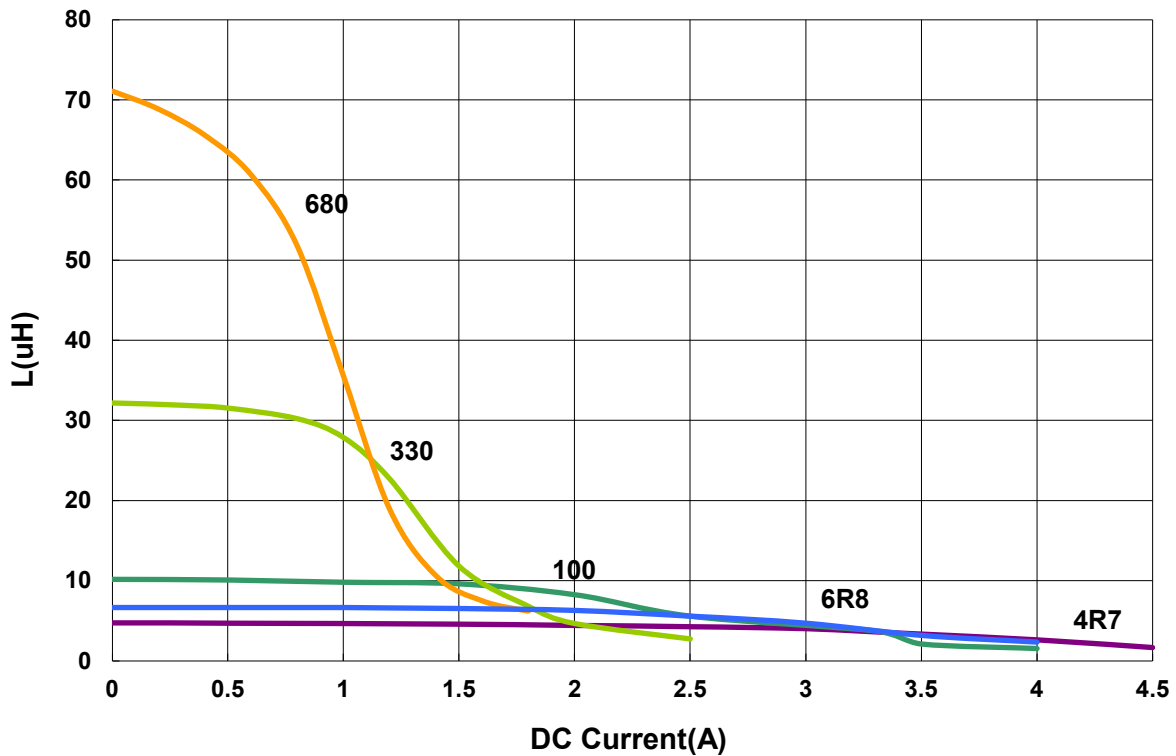
**APSC00070740 Type**

**Characteristics Graph**

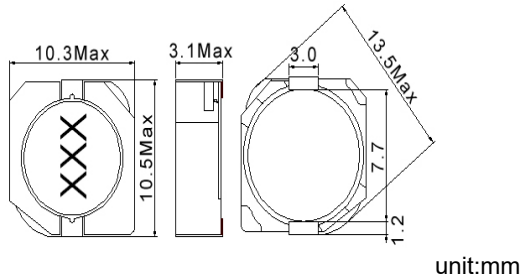
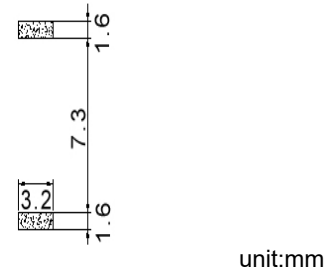
**Inductance vs. Frequency Characteristics**



**Inductance vs. DC Current**



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**APSC00101131 Type**
**■ Dimensions**

**■ Recommended Land Pattern**

**■ Electrical Characteristics**

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)Max.	Isat (A)Max.	Irms (A)Typ.	Tolerance (±%)	Marking
APSC001011314R7□00	4.7	100 kHz, 1 V	0.03	4.65	4.00	30	4R7
APSC001011316R8□00	6.8	100 kHz, 1 V	0.035	3.84	3.60	30	6R8
APSC00101131100□00	10	100 kHz, 1 V	0.059	3.18	2.80	20,30	100
APSC00101131150□00	15	100 kHz, 1 V	0.091	2.6	2.05	20,30	150
APSC00101131330□00	33	100 kHz, 1 V	0.202	1.74	1.35	20,30	330
APSC00101131470□00	47	100 kHz, 1 V	0.299	1.43	1.20	20,30	470
APSC00101131560□00	56	100 kHz, 1 V	0.325	0.9	1.15	20,30	560

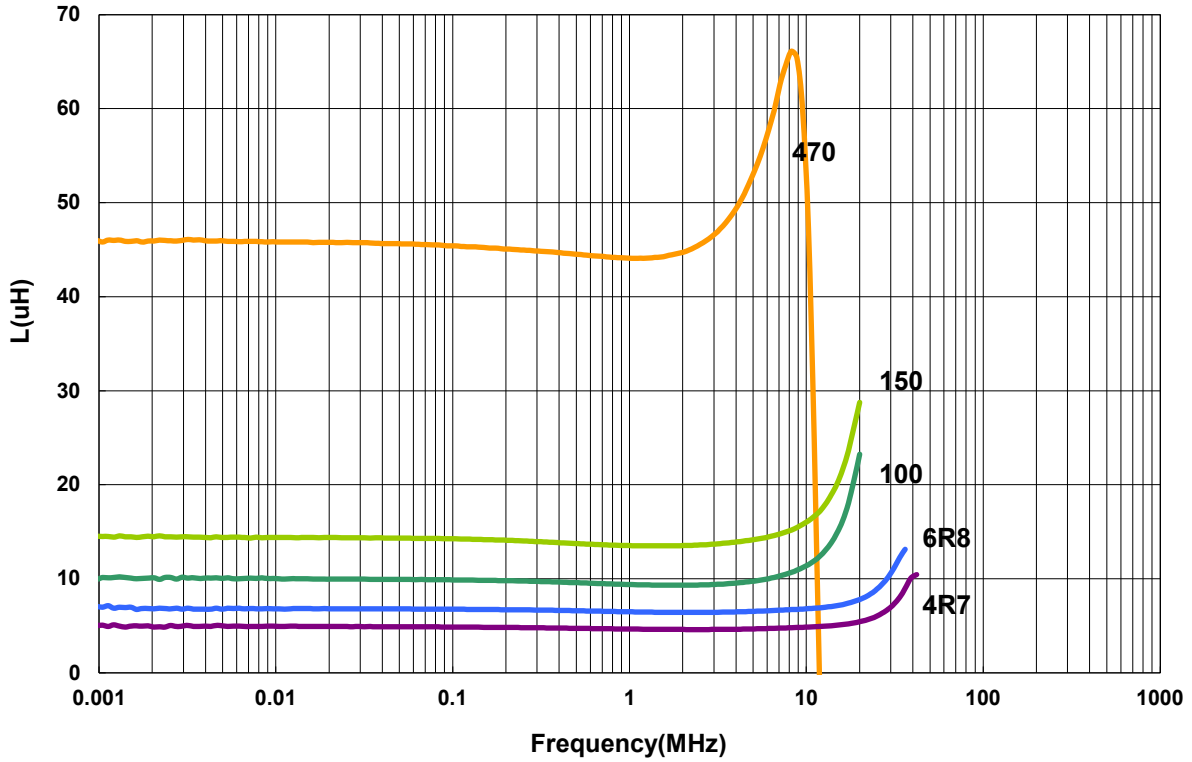
**Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%**

1. Operating temperature range -40°C ~ 125°C (Including self - temperature rise)
2. Isat for Inductance drop 35% from its value without current
3. I rms for a 40°C temperature rise from 25°C ambient.
4. Measure Equipment:
  - L: Agilent E4980 or HP4284A
  - RDC: CH502BC
  - Isat: HP4284+42841A or WK3260B+WK3265B
  - I rms: WK3255BQ+ WK3265B

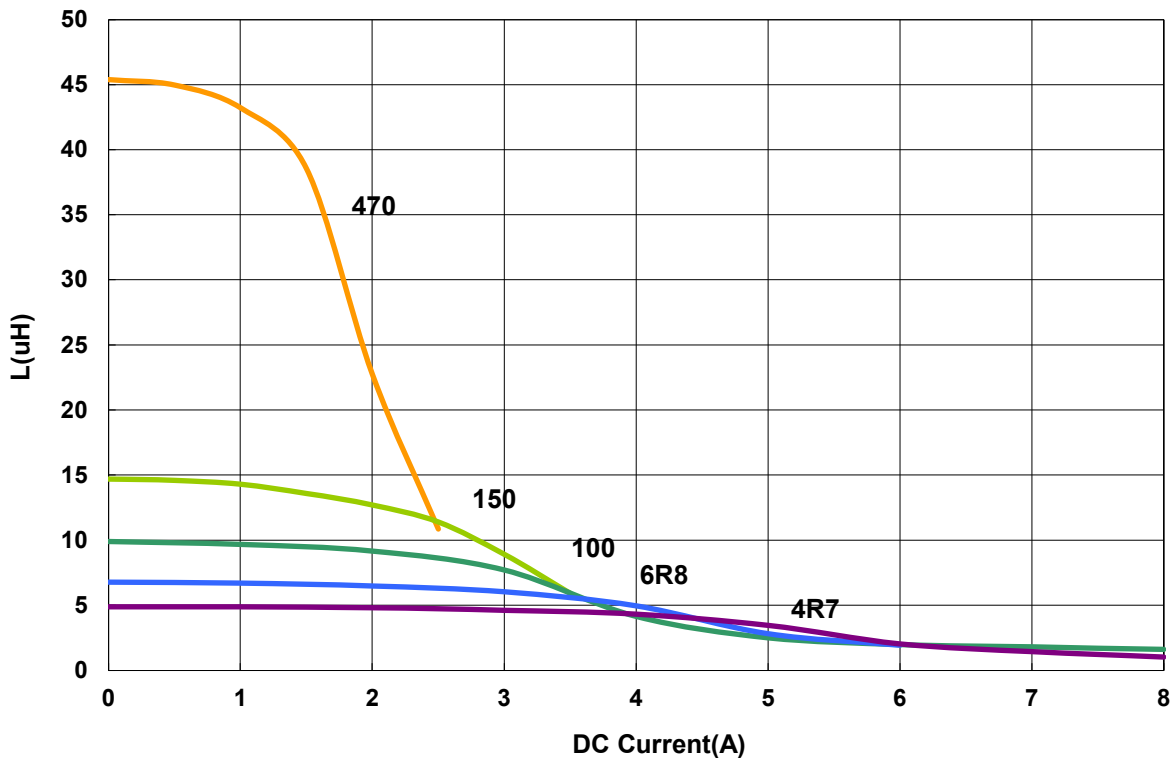
APSC00101131 Type

**Characteristics Graph**

**Inductance vs. Frequency Characteristics**



**Inductance vs. DC Current**



Please be sure to request approval specifications that provide further details of the products. Kindly note that the content of these specifications are subject to change or may be discontinued without prior notice. This product may not be designed/used in medical or high risk applications without Chilisin approval. Please contact our sales department before ordering.

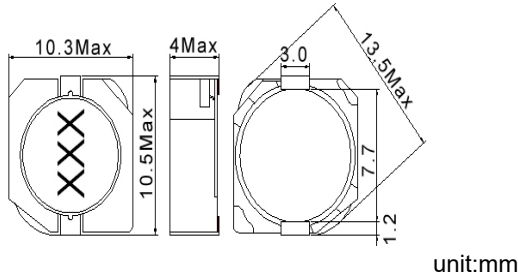


## Power Inductor APSC Series

**Automotive  
AEC-Q200**

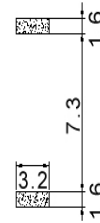
### APSC00101140 Type

#### ■ Dimensions



unit:mm

#### ■ Recommended Land Pattern



unit:mm

#### ■ Electrical Characteristics

Part No.	Inductance ( $\mu\text{H}$ )	Test Freq.	RDC ( $\Omega$ )Max.	Isat(A) Max(Typ)	Irms (A)Typ.	Tolerance ( $\pm\%$ )	Marking
APSC001011403R8□00	3.8	100 kHz, 1 V	0.015	6.8(8.5)	5.50	30	3R8
APSC001011404R7□00	4.7	100 kHz, 1 V	0.02	5.8(7.3)	5.40	30	4R7
APSC001011405R2□00	5.2	100 kHz, 1 V	0.024	5.8(7.3)	5.20	30	5R2
APSC001011405R6□00	5.6	100 kHz, 1 V	0.027	5.0(6.5)	4.50	30	5R6
APSC001011406R8□00	6.8	100 kHz, 1 V	0.031	5.0(6.5)	4.40	30	6R8
APSC001011407R0□00	7	100 kHz, 1 V	0.031	4.8(5.9)	4.40	30	7R0
APSC001011408R2□00	8.2	100 kHz, 1 V	0.036	4.5(5.8)	3.80	30	8R2
APSC00101140100□00	10	100 kHz, 1 V	0.04	4.0(5.0)	3.60	20,30	100
APSC00101140120□00	12	100 kHz, 1 V	0.046	3.7(4.6)	3.40	20,30	120
APSC00101140150□00	15	100 kHz, 1 V	0.055	3.4(4.3)	2.80	20,30	150
APSC00101140180□00	18	100 kHz, 1 V	0.075	2.9(3.6)	2.50	20,30	180
APSC00101140220□00	22	100 kHz, 1 V	0.08	2.6(3.3)	2.40	20,30	220
APSC00101140270□00	27	100 kHz, 1 V	0.096	2.4(3.0)	2.20	20,30	270
APSC00101140330□00	33	100 kHz, 1 V	0.098	2.3(2.9)	2.10	20,30	330
APSC00101140390□00	39	100 kHz, 1 V	0.12	2.1(2.7)	2.00	20,30	390
APSC00101140470□00	47	100 kHz, 1 V	0.144	1.8(2.5)	1.80	20,30	470
APSC00101140560□00	56	100 kHz, 1 V	0.175	1.6(2.1)	1.60	20,30	560
APSC00101140680□00	68	100 kHz, 1 V	0.204	1.4(1.9)	1.45	20,30	680
APSC00101140820□00	82	100 kHz, 1 V	0.25	1.3(1.7)	1.40	20,30	820
APSC00101140101□00	100	100 kHz, 1 V	0.304	1.0(1.6)	1.25	20,30	101
APSC00101140151□00	150	100 kHz, 1 V	0.506	0.96(1.3)	0.85	20,30	151
APSC00101140221□00	220	100 kHz, 1 V	0.69	0.8(1.0)	0.73	20,30	221
APSC00101140331□00	330	100 kHz, 1 V	1	0.68(0.86)	0.52	20,30	331
APSC00101140471□00	470	100 kHz, 1 V	1.6	6.0(0.75)	0.46	20,30	471
APSC00101140561□00	560	100 kHz, 1 V	1.68	0.5(0.68)	0.45	20,30	561

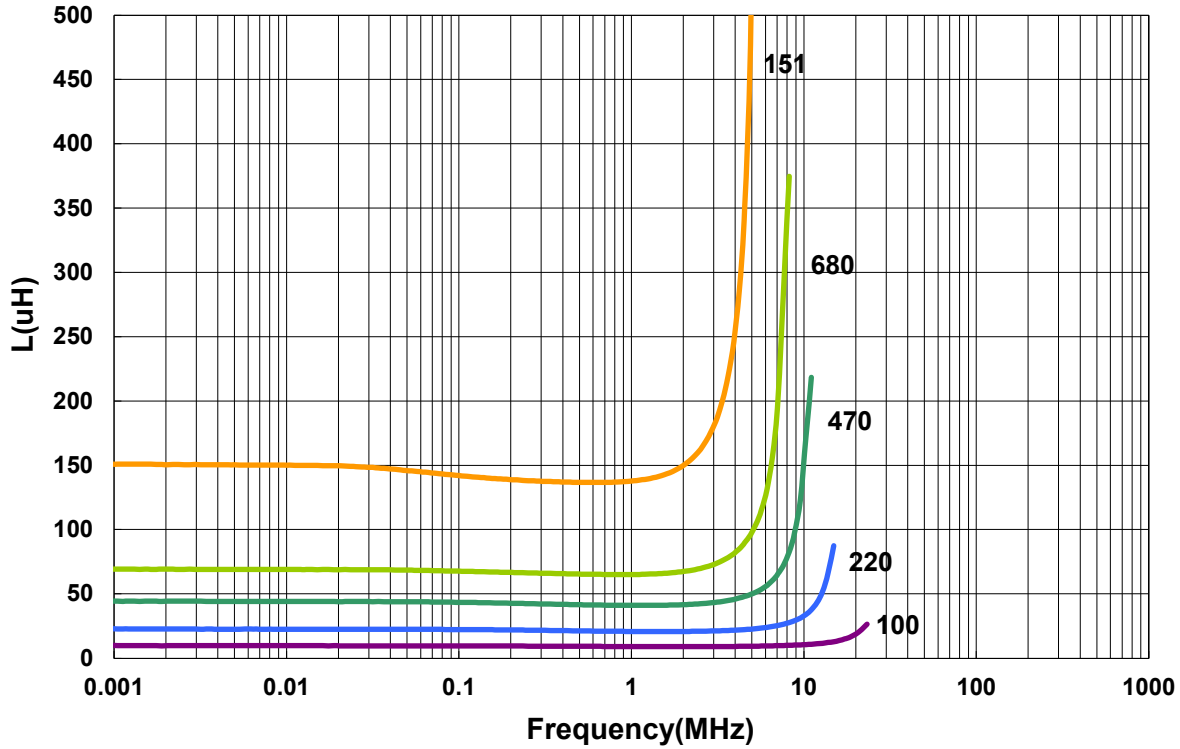
**Note:** When ordering, please specify tolerance code. Tolerance: M= $\pm 20\%$  / T= $\pm 30\%$

- Operating temperature range  $-40^{\circ}\text{C} \sim 125^{\circ}\text{C}$  (Including self - temperature rise)
- Isat for Inductance drop 35% from its value without current
- Irms for a  $40^{\circ}\text{C}$  temperature rise from  $25^{\circ}\text{C}$  ambient.
- Measure Equipment:  
 L: Agilent E4980 or HP4284A  
 RDC: CH502BC  
 Isat: HP4284+42841A or WK3260B+WK3265B  
 Iirms: WK3255BQ+ WK3265B

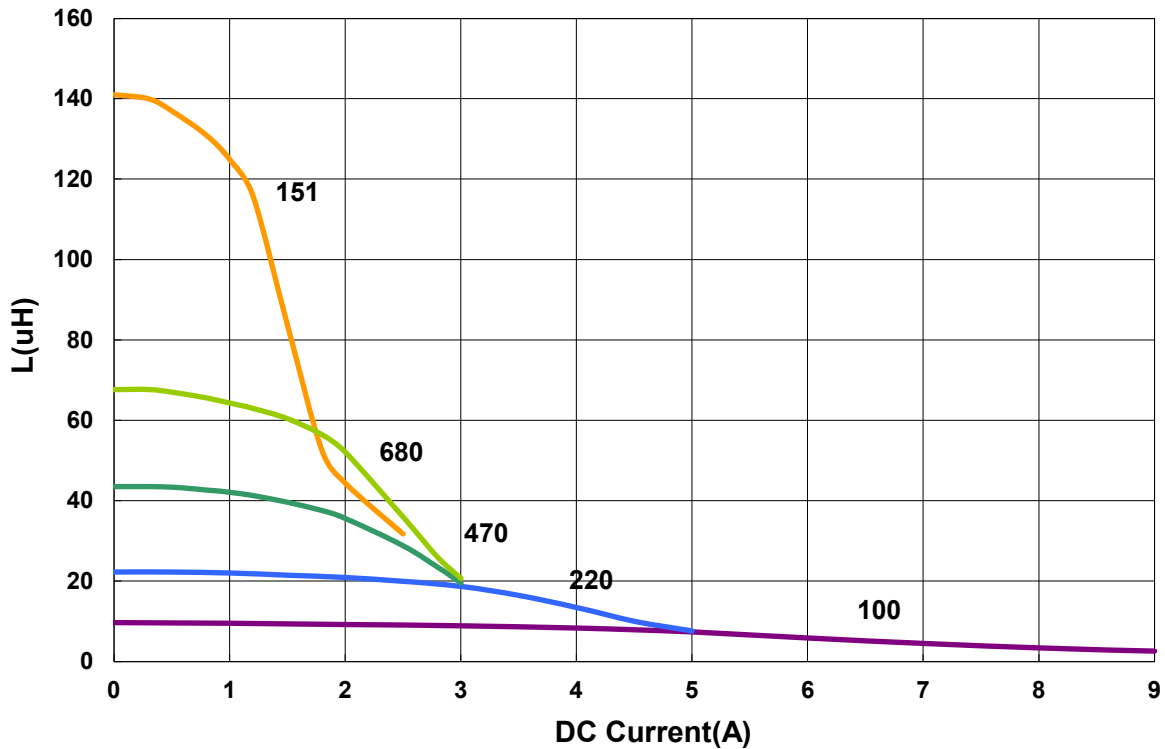
APSC00101140 Type

**Characteristics Graph**

**Inductance vs. Frequency Charateristics**



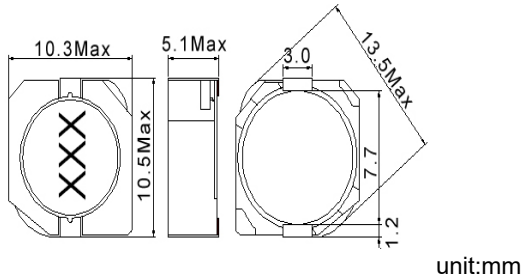
**Inductance vs. DC Current**



Please be sure to request approval specifications that provide further details of the products. Kindly note that the content of these specifications are subject to change or may be discontinued without prior notice. This product may not be designed/used in medical or high risk applications without Chilisin approval. Please contact our sales department before ordering.

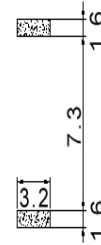
**APSC00101151 Type**

**■ Dimensions**



unit:mm

**■ Recommended Land Pattern**



unit:mm

**■ Electrical Characteristics**

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)Max.	Isat(A) Max(Typ)	Irms (A)Typ	Tolerance (±%)	Marking
APSC001011514R7□00	4.7	100 kHz,1 V	0.014	5.6(7.6)	5.00	30	4R7
APSC001011516R8□00	6.8	100 kHz,1 V	0.024	5.1(6.4)	4.70	30	6R8
APSC001011518R2□00	8.2	100 kHz,1 V	0.027	4.7(5.9)	4.40	30	8R2
APSC00101151100□00	10	100 kHz,1 V	0.028	4.4(5.6)	4.20	20,30	100
APSC00101151120□00	12	100 kHz,1 V	0.036	3.4(5.8)	3.60	20,30	120
APSC00101151150□00	15	100 kHz,1 V	0.041	3.2(4.5)	3.40	20,30	150
APSC00101151180□00	18	100 kHz,1 V	0.046	3.0(3.8)	3.10	20,30	180
APSC00101151220□00	22	100 kHz,1 V	0.061	2.8(3.6)	2.90	20,30	220
APSC00101151270□00	27	100 kHz,1 V	0.069	2.1(3.2)	2.60	20,30	270
APSC00101151330□00	33	100 kHz,1 V	0.084	2.0(2.9)	2.50	20,30	330
APSC00101151390□00	39	100 kHz,1 V	0.106	1.9(2.6)	2.25	20,30	390
APSC00101151470□00	47	100 kHz,1 V	0.13	1.7(2.3)	2.00	20,30	470
APSC00101151560□00	56	100 kHz,1 V	0.149	1.6(2.2)	1.90	20,30	560
APSC00101151680□00	68	100 kHz,1 V	0.201	1.5(2.0)	1.60	20,30	680
APSC00101151820□00	82	100 kHz,1 V	0.227	1.3(1.8)	1.45	20,30	820
APSC00101151101□00	100	100 kHz,1 V	0.253	1.2(1.7)	1.35	20,30	101
APSC00101151121□00	120	100 kHz,1 V	0.303	1.1(1.5)	1.18	20,30	121
APSC00101151151□00	150	100 kHz,1 V	0.42	1.0(1.3)	1.00	20,30	151
APSC00101151181□00	180	100 kHz,1 V	0.45	0.9(1.2)	0.90	20,30	181
APSC00101151221□00	220	100 kHz,1 V	0.54	0.8(1.1)	0.85	20,30	221
APSC00101151271□00	270	100 kHz,1 V	0.672	0.75(0.99)	0.80	20,30	271
APSC00101151331□00	330	100 kHz,1 V	0.812	0.74(0.92)	0.73	20,30	331
APSC00101151391□00	390	100 kHz,1 V	0.953	0.82(0.83)	0.70	20,30	391
APSC00101151471□00	470	100 kHz,1 V	1.29	0.6(0.77)	0.54	20,30	471
APSC00101151561□00	560	100 kHz,1 V	1.43	0.47(0.71)	0.52	20,30	561
APSC00101151681□00	680	100 kHz,1 V	1.6	0.46(0.65)	0.51	20,30	681
APSC00101151821□00	820	100 kHz,1 V	1.77	0.42(0.57)	0.48	20,30	821
APSC00101151102□00	1000	100 kHz,1 V	2.2	0.4(0.54)	0.40	20,30	102

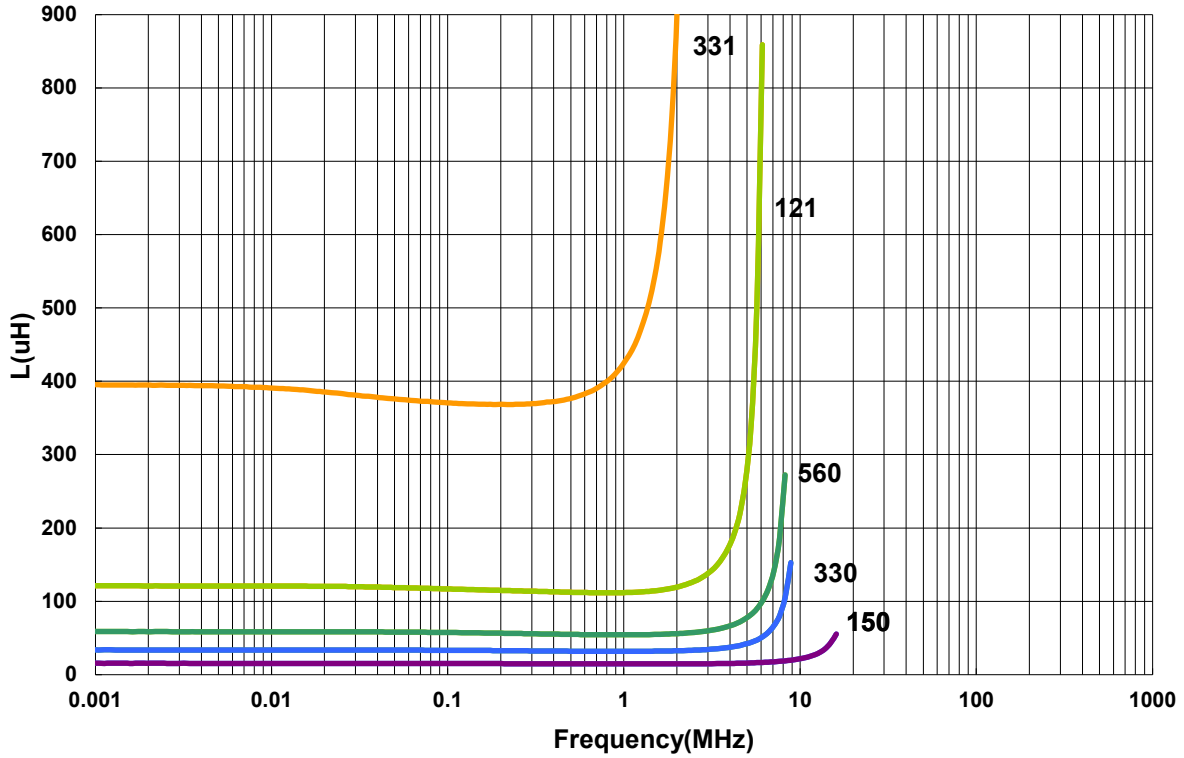
**Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%**

- Operating temperature range -40°C ~ 125°C (Including self - temperature rise)
- Isat for Inductance drop 35% from its value without current
- Irms for a 40°C temperature rise from 25°C ambient.
- Measure Equipment:  
L: Agilent E4980 or HP4284A  
RDC: CH502BC  
Isat: HP4284+42841A or WK3260B+WK3265B  
Irms: WK3255BQ+ WK3265B

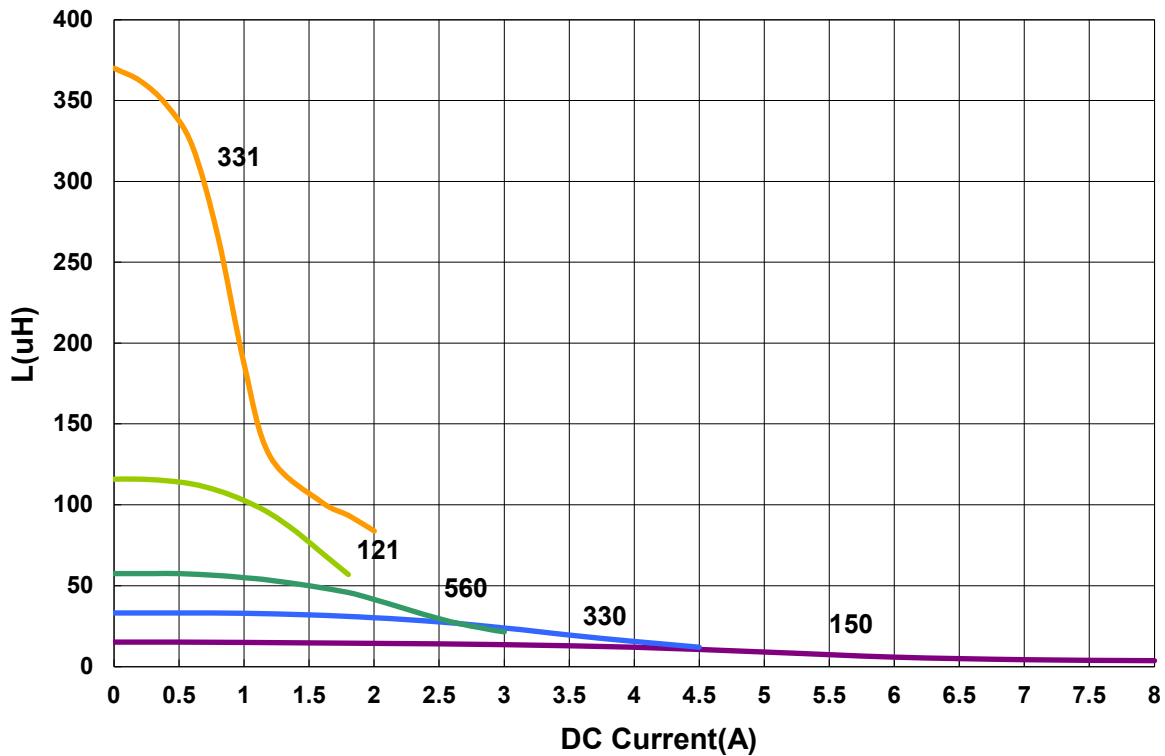
**APSC00101151 Type**

**Characteristics Graph**

**Inductance vs. Frequency Charateristics**



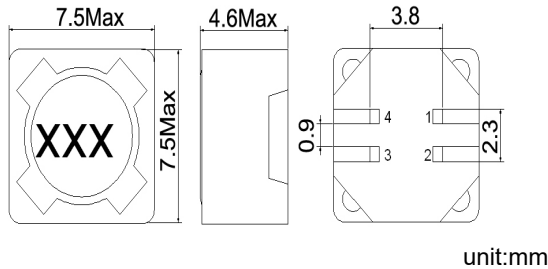
**Inductance vs. DC Current**



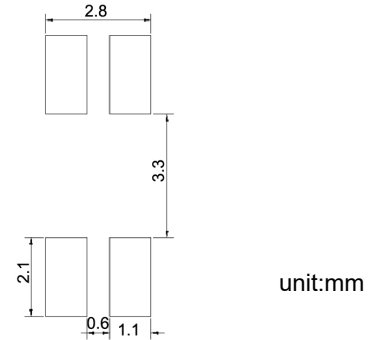
Please be sure to request approval specifications that provide further details of the products. Kindly note that the content of these specifications are subject to change or may be discontinued without prior notice. This product may not be designed/used in medical or high risk applications without Chilisin approval. Please contact our sales department before ordering.

**APSC00080846 Type**

**■ Dimensions**



**■ Recommended Land Pattern**



**■ Electrical Characteristics**

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)±20%	Isat(A) Max(Typ)	Irms (A)Max	Tolerance (±%)	Marking
APSC000808462R5□P0	2.5	100 kHz,0.1 V	0.033	5.0(6.3)	2.17	20	2R5
APSC000808464R7□P0	4.7	100 kHz,0.1 V	0.047	3.5(4.6)	1.74	20	4R7
APSC00080846100□P0	10	100 kHz,0.1 V	0.089	2.0(3.0)	1.24	20	100
APSC00080846221□P0	220	100 kHz,0.1 V	1.65	0.5(0.66)	0.30	20	221
APSC00080846821□P0	820	100 kHz,0.1 V	6	0.25(0.35)	0.15	20	821

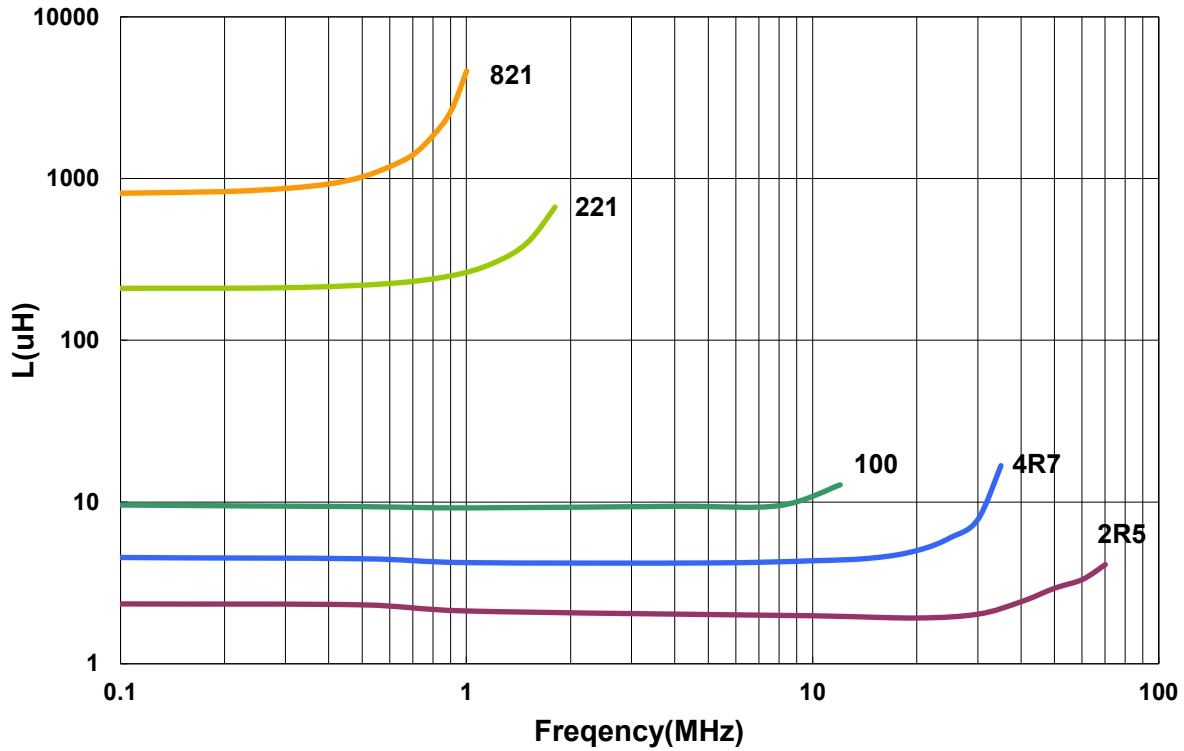
**Note: When ordering, please specify tolerance code. Tolerance: M=±20%**

1. Operating temperature range -40°C ~ 125°C (Including self - temperature rise)
2. Isat for Inductance drop 30% from its value without current
3. The actual use current is suggested not to be out of Isat\*80%
4. I rms for a 40°C temprature rise from 25°C ambient.
5. L,RDC,Isat,I rms: L1 or L2
6. Measure Equipment:  
L: Agilent E4980 or HP4284A  
RDC: CH502BC  
Isat: HP4284+42841A or WK3260B+WK3265B

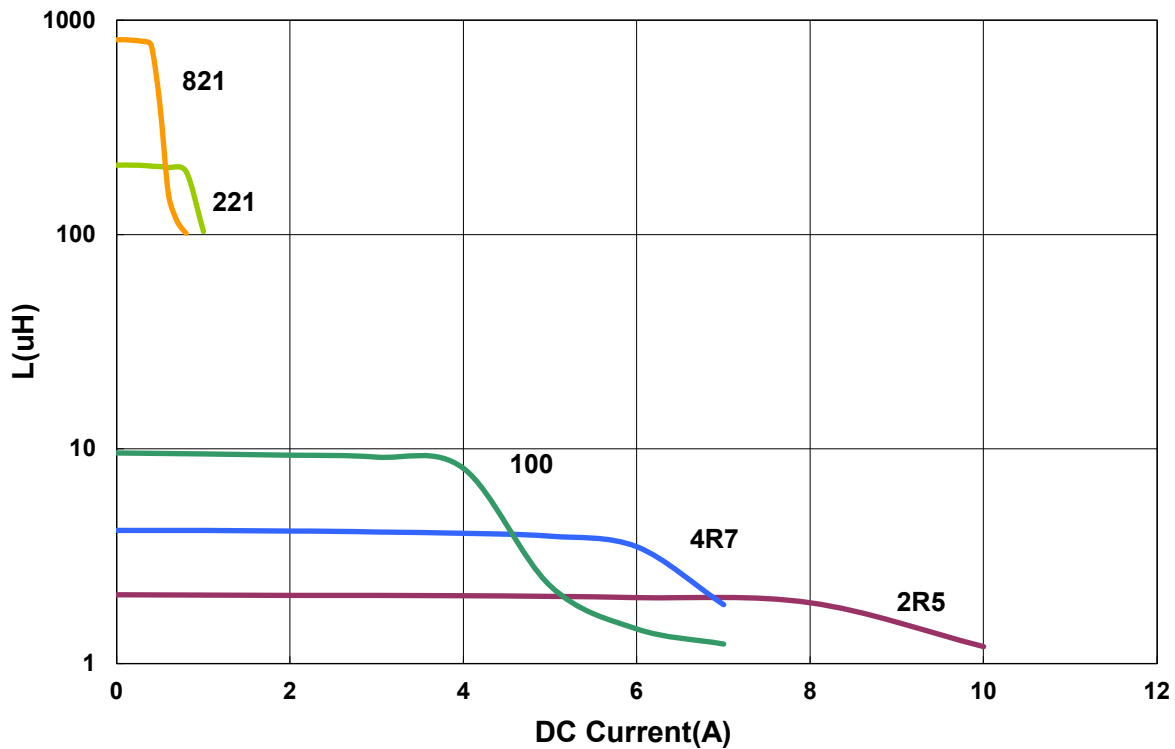
APSC00080846 Type

**Characteristics Graph**

**Inductance vs. Frequency Characteristics**



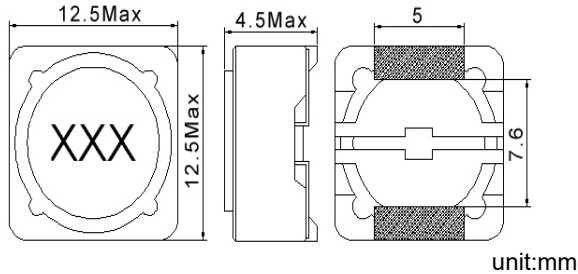
**Inductance vs. DC Current**



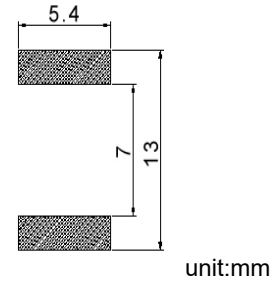
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**APSC00131345 Type**

**■ Dimensions**



**■ Recommended Land Pattern**



**■ Electrical Characteristics**

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)Max.	Isat(A) Max(Typ)	Tolerance (±%)	Marking
APSC001313453R9□00	3.9	100 kHz, 1 V	0.016	8.0(10.1)	30	3R9
APSC001313454R7□00	4.7	100 kHz, 1 V	0.018	7.9(9.9)	30	4R7
APSC001313456R8□00	6.8	100 kHz, 1 V	0.023	6.5(8.3)	30	6R8
APSC00131345100□00	10	100 kHz, 1 V	0.035	5.2(6.6)	20,30	100
APSC00131345120□00	12	100 kHz, 1 V	0.038	4.8(6.2)	20,30	120
APSC00131345150□00	15	100 kHz, 1 V	0.05	4.1(5.4)	20,30	150
APSC00131345180□00	18	100 kHz, 1 V	0.057	4.0(5.1)	20,30	180
APSC00131345220□00	22	100 kHz, 1 V	0.066	3.5(4.4)	20,30	220
APSC00131345270□00	27	100 kHz, 1 V	0.08	3.1(3.9)	20,30	270
APSC00131345330□00	33	100 kHz, 1 V	0.097	2.7(3.5)	20,30	330
APSC00131345390□00	39	100 kHz, 1 V	0.132	2.1(3.2)	20,30	390
APSC00131345470□00	47	100 kHz, 1 V	0.15	1.9(2.9)	20,30	470
APSC00131345560□00	56	100 kHz, 1 V	0.19	1.8(2.6)	20,30	560
APSC00131345680□00	68	100 kHz, 1 V	0.22	1.5(2.5)	20,30	680
APSC00131345820□00	82	100 kHz, 1 V	0.26	1.3(2.3)	20,30	820
APSC00131345101□00	100	100 kHz, 1 V	0.308	1.2(2.0)	20,30	101
APSC00131345121□00	120	100 kHz, 1 V	0.38	1.1(1.8)	20,30	121
APSC00131345151□00	150	100 kHz, 1 V	0.53	0.95(1.6)	20,30	151
APSC00131345181□00	180	100 kHz, 1 V	0.62	0.85(1.4)	20,30	181
APSC00131345221□00	220	100 kHz, 1 V	0.7	0.8(1.3)	20,30	221
APSC00131345271□00	270	100 kHz, 1 V	0.876	0.6(1.1)	20,30	271
APSC00131345331□00	330	100 kHz, 1 V	0.99	0.5(1.0)	20,30	331

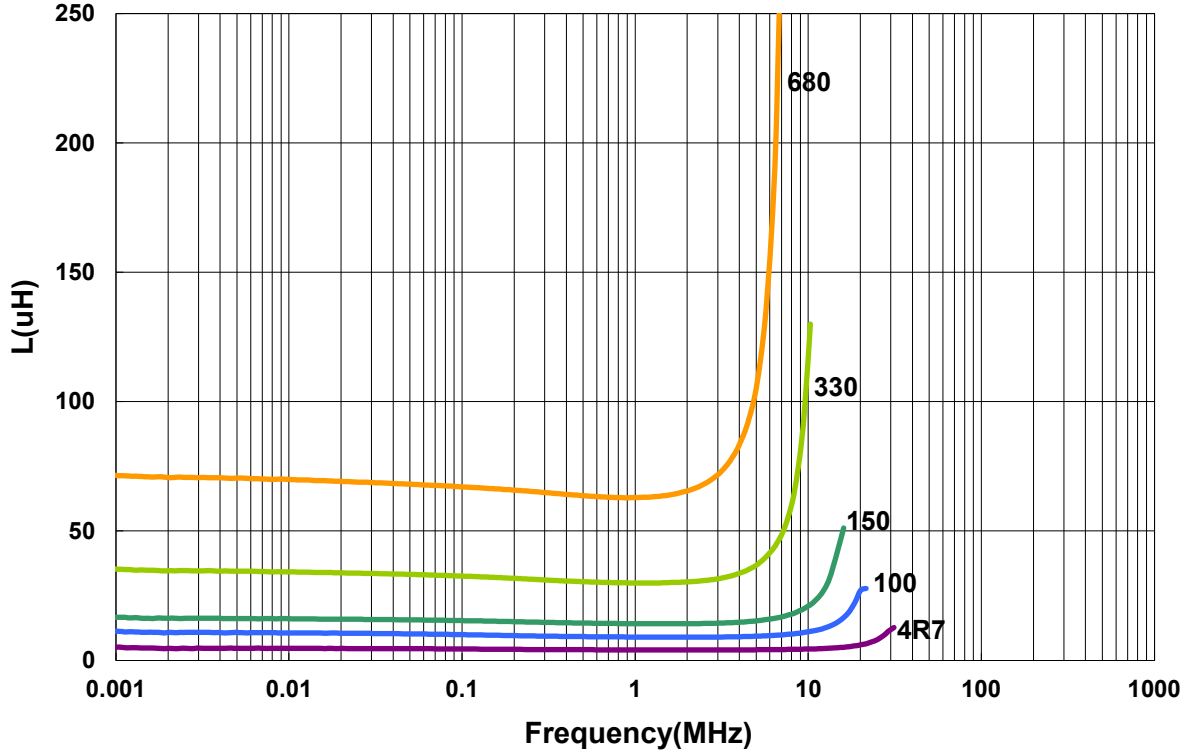
**Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%**

1. Operating temperature range -40°C ~ 125°C (Including self - temperature rise)
2. Isat for Inductance drop 35% from its value without current
3. Measure Equipment:  
L: Agilent E4980 or HP4284A  
RDC: CH502BC  
Isat: HP4284+42841A or WK3260B+WK3265B

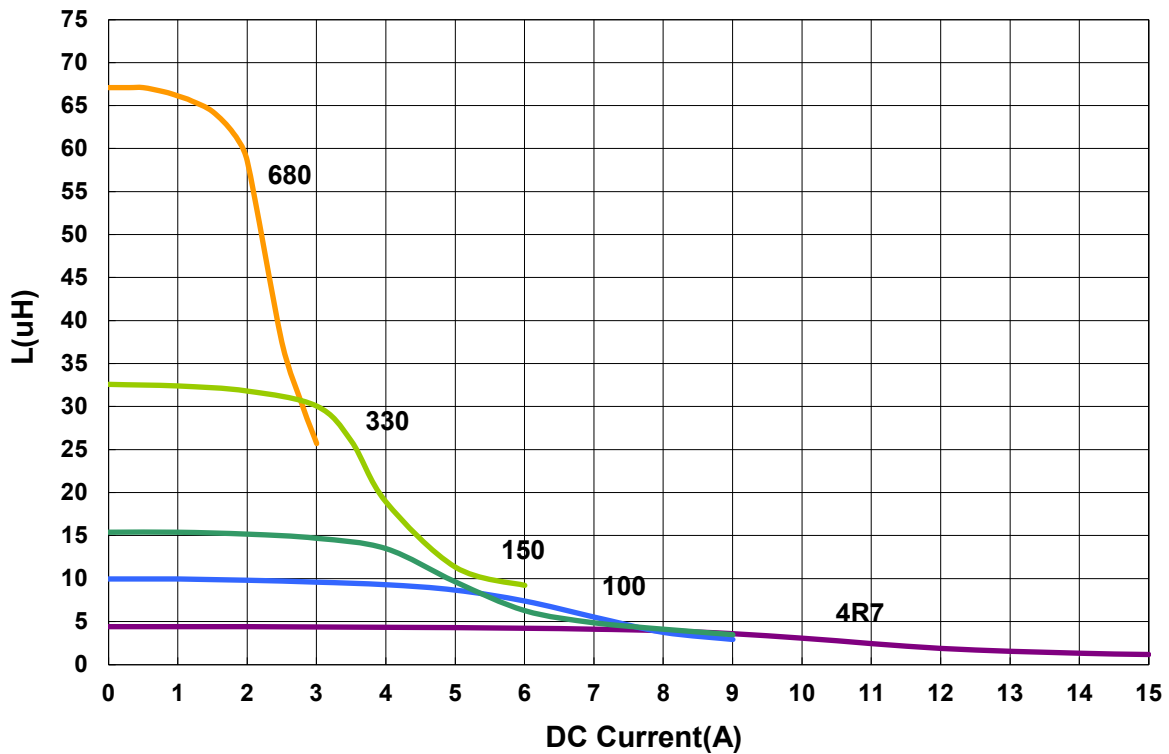
APSC00131345 Type

**Characteristics Graph**

**Inductance vs. Frequency Characteristics**



**Inductance vs. DC Current**

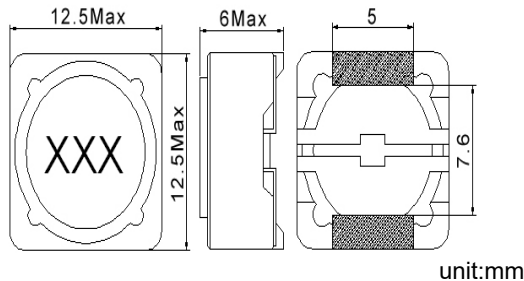


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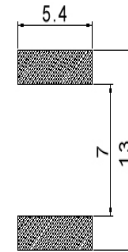
**APSC00131360 Type**

**■ Dimensions**



unit:mm

**■ Recommended Land Pattern**



unit:mm

**■ Electrical Characteristics**

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)Max.	Isat(A) Max(Typ)	Irms (A)Typ	Tolerance (±%)	Marking
APSC001313604R7□00	4.7	1 kHz, 1 V	0.018	7.6(9.2)	5.70	30	4R7
APSC001313606R4□00	6.4	1 kHz, 1 V	0.018	6.4(8.1)	5.70	30	6R4
APSC001313608R2□00	8.2	1 kHz, 1 V	0.02	5.8(7.4)	5.00	30	8R2
APSC00131360100□00	10	1 kHz, 1 V	0.025	5.3(6.8)	4.00	20,30	100
APSC00131360120□00	12	1 kHz, 1 V	0.027	5.3(6.8)	3.50	20,30	120
APSC00131360150□00	15	1 kHz, 1 V	0.03	4.0(5.2)	3.30	20,30	150
APSC00131360180□00	18	1 kHz, 1 V	0.034	3.8(4.9)	3.00	20,30	180
APSC00131360220□00	22	1 kHz, 1 V	0.036	3.6(4.8)	2.80	20,30	220
APSC00131360270□00	27	1 kHz, 1 V	0.051	3.2(4.1)	2.30	20,30	270
APSC00131360330□00	33	1 kHz, 1 V	0.057	2.9(3.7)	2.10	20,30	330
APSC00131360390□00	39	1 kHz, 1 V	0.068	2.7(3.5)	2.00	20,30	390
APSC00131360470□00	47	1 kHz, 1 V	0.084	2.4(3.1)	1.90	20,30	470
APSC00131360560□00	56	1 kHz, 1 V	0.1	2.1(2.7)	1.70	20,30	560
APSC00131360680□00	68	1 kHz, 1 V	0.12	2.0(2.6)	1.50	20,30	680
APSC00131360820□00	82	1 kHz, 1 V	0.14	1.8(2.3)	1.40	20,30	820
APSC00131360101□00	100	1 kHz, 1 V	0.16	1.6(2.1)	1.30	20,30	101
APSC00131360121□00	120	1 kHz, 1 V	0.18	1.5(1.9)	1.05	20,30	121
APSC00131360151□00	150	1 kHz, 1 V	0.23	1.3(1.7)	1.00	20,30	151
APSC00131360181□00	180	1 kHz, 1 V	0.29	1.2(1.6)	0.90	20,30	181
APSC00131360221□00	220	1 kHz, 1 V	0.32	1.0(1.4)	0.85	20,30	221
APSC00131360271□00	270	1 kHz, 1 V	0.38	0.9(1.2)	0.83	20,30	271
APSC00131360331□00	330	1 kHz, 1 V	0.48	0.75(1.1)	0.73	20,30	331
APSC00131360391□00	390	1 kHz, 1 V	0.6	0.7(1.0)	0.67	20,30	391
APSC00131360471□00	470	1 kHz, 1 V	0.7	0.65(0.99)	0.66	20,30	471
APSC00131360561□00	560	1 kHz, 1 V	0.86	0.6(0.91)	0.54	20,30	561
APSC00131360681□00	680	1 kHz, 1 V	1.1	0.55(0.82)	0.52	20,30	681
APSC00131360821□00	820	1 kHz, 1 V	1.34	0.5(0.71)	0.43	20,30	821
APSC00131360102□00	1000	1 kHz, 1 V	1.53	0.45(0.64)	0.30	20,30	102

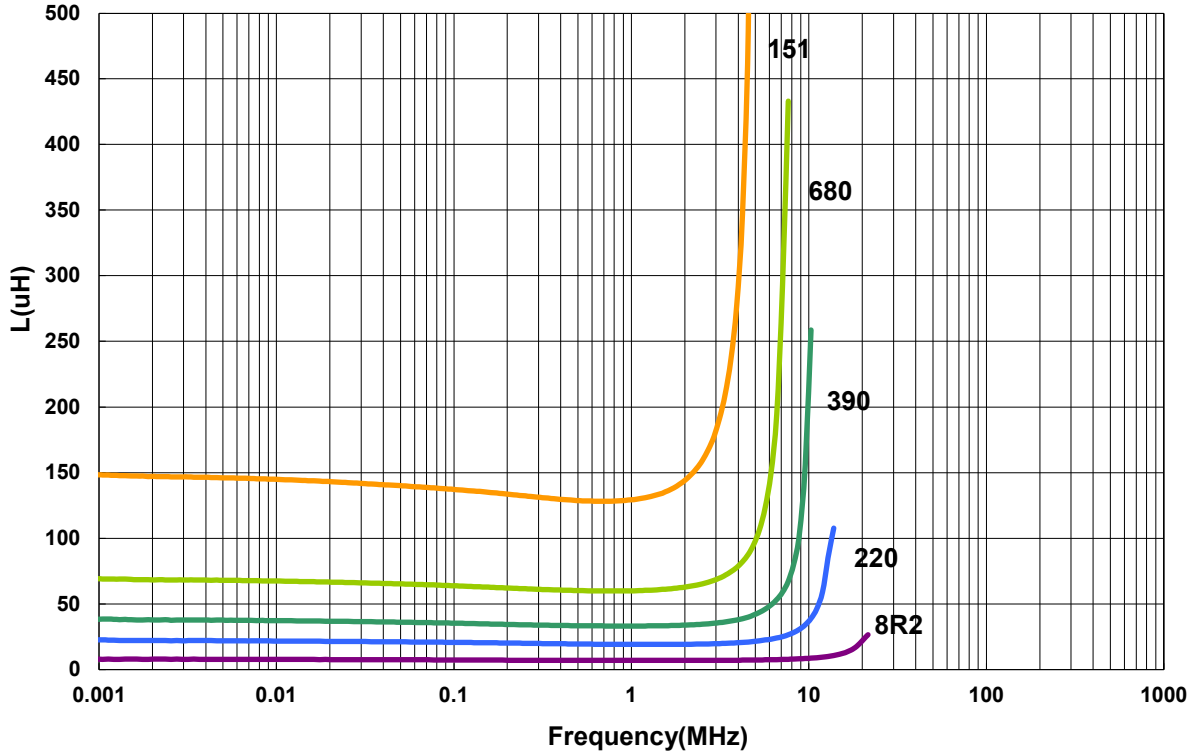
**Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%**

- Operating temperature range -40°C ~ 125°C (Including self - temperature rise)
- Isat for Inductance drop 35% from its value without current
- Irms for a 40°C temperature rise from 25°C ambient.
- Measure Equipment:  
L: Agilent E4980 or HP4284A  
RDC: CH502BC  
Isat: HP4284+42841A or WK3260B+WK3265B  
Irms: WK3255BQ+ WK3265B

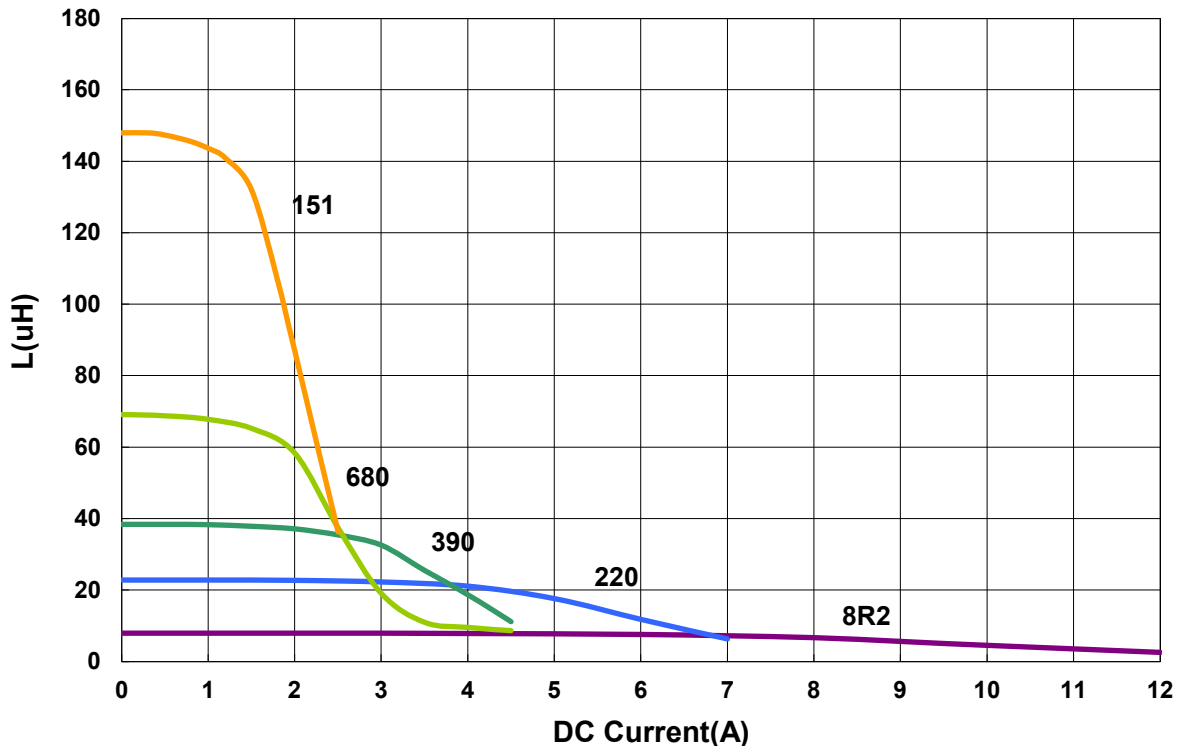
**APSC00131360 Type**

**Characteristics Graph**

**Inductance vs. Frequency Characteristics**



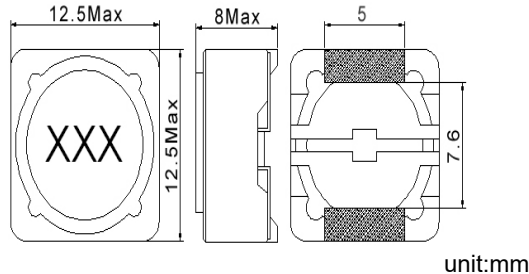
**Inductance vs. DC Current**



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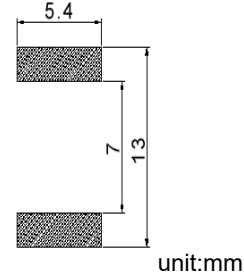
**APSC00131380 Type**

**Dimensions**



unit:mm

**Recommended Land Pattern**



unit:mm

**Electrical Characteristics**

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)Max.	Isat(A) Max(Typ)	Irms (A)Typ	Tolerance (±%)	Marking
APSC001313803R5□00	3.5	100 kHz, 1 V	0.0123	13.8(17.4)	7.70	30, <sup>+40</sup> <sub>-20</sub>	3R5
APSC001313804R7□00	4.7	100 kHz, 1 V	0.0158	12.3(15.4)	6.80	30	4R7
APSC001313806R1□00	6.1	100 kHz, 1 V	0.0176	10.9(13.8)	6.60	30, <sup>+40</sup> <sub>-20</sub>	6R1
APSC001313806R8□00	6.8	100 kHz, 1 V	0.018	10.8(13.7)	6.50	30	6R8
APSC001313807R6□00	7.6	100 kHz, 1 V	0.02	10(12.6)	5.90	30	7R6
APSC00131380100□00	10	1 kHz, 1 V	0.022	8.9(11.2)	5.40	20,30	100
APSC00131380120□00	12	1 kHz, 1 V	0.03	7.4(9.4)	4.30	20,30	120
APSC00131380150□00	15	1 kHz, 1 V	0.034	7.1(9.0)	4.10	20,30	150
APSC00131380180□00	18	1 kHz, 1 V	0.0392	6.5(8.2)	3.90	20,30	180
APSC00131380220□00	22	1 kHz, 1 V	0.048	5.8(7.5)	3.20	20,30	220
APSC00131380270□00	27	1 kHz, 1 V	0.052	5.3(6.7)	3.10	20,30	270
APSC00131380330□00	33	1 kHz, 1 V	0.0648	4.8(6.1)	3.00	20,30	330
APSC00131380390□00	39	1 kHz, 1 V	0.065	3.9(5.6)	3.00	20,30	390
APSC00131380470□00	47	1 kHz, 1 V	0.1	3.6(5.2)	2.50	20,30	470
APSC00131380560□00	56	1 kHz, 1 V	0.11	3.4(4.8)	2.35	20,30	560
APSC00131380680□00	68	1 kHz, 1 V	0.12	2.8(4.1)	2.30	20,30	680
APSC00131380820□00	82	1 kHz, 1 V	0.16	2.7(4.0)	1.95	20,30	820
APSC00131380101□00	100	1 kHz, 1 V	0.17	2.5(3.5)	1.90	20,30	101
APSC00131380121□00	120	1 kHz, 1 V	0.19	2.2(3.2)	1.80	20,30	121
APSC00131380151□00	150	1 kHz, 1 V	0.25	2.0(2.9)	1.60	20,30	151
APSC00131380181□00	180	1 kHz, 1 V	0.31	1.8(2.6)	1.37	20,30	181
APSC00131380221□00	220	1 kHz, 1 V	0.35	1.7(2.4)	1.30	20,30	221
APSC00131380271□00	270	1 kHz, 1 V	0.43	1.5(2.2)	1.10	20,30	271
APSC00131380331□00	330	1 kHz, 1 V	0.51	1.2(2.0)	1.08	20,30	331
APSC00131380391□00	390	1 kHz, 1 V	0.6	1.1(1.6)	0.95	20,30	391
APSC00131380471□00	470	1 kHz, 1 V	0.71	0.99(1.6)	0.88	20,30	471
APSC00131380561□00	560	1 kHz, 1 V	0.88	0.95(1.4)	0.85	20,30	561
APSC00131380681□00	680	1 kHz, 1 V	1.04	0.84(1.2)	0.75	20,30	681
APSC00131380821□00	820	1 kHz, 1 V	1.36	0.77(1.1)	0.70	20,30	821
APSC00131380102□00	1000	1 kHz, 1 V	1.66	0.73(1.0)	0.59	20,30	102

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30% / N=<sup>+40</sup><sub>-20</sub>%**

1. Operating temperature range -40°C ~ 125°C (Including self - temperature rise)
2. Isat for Inductance drop 35% from its value without current
3. I rms for a 40°C temperature rise from 25°C ambient.

4. Measure Equipment:

L: Agilent E4980 or HP4284A

RDC: CH502BC

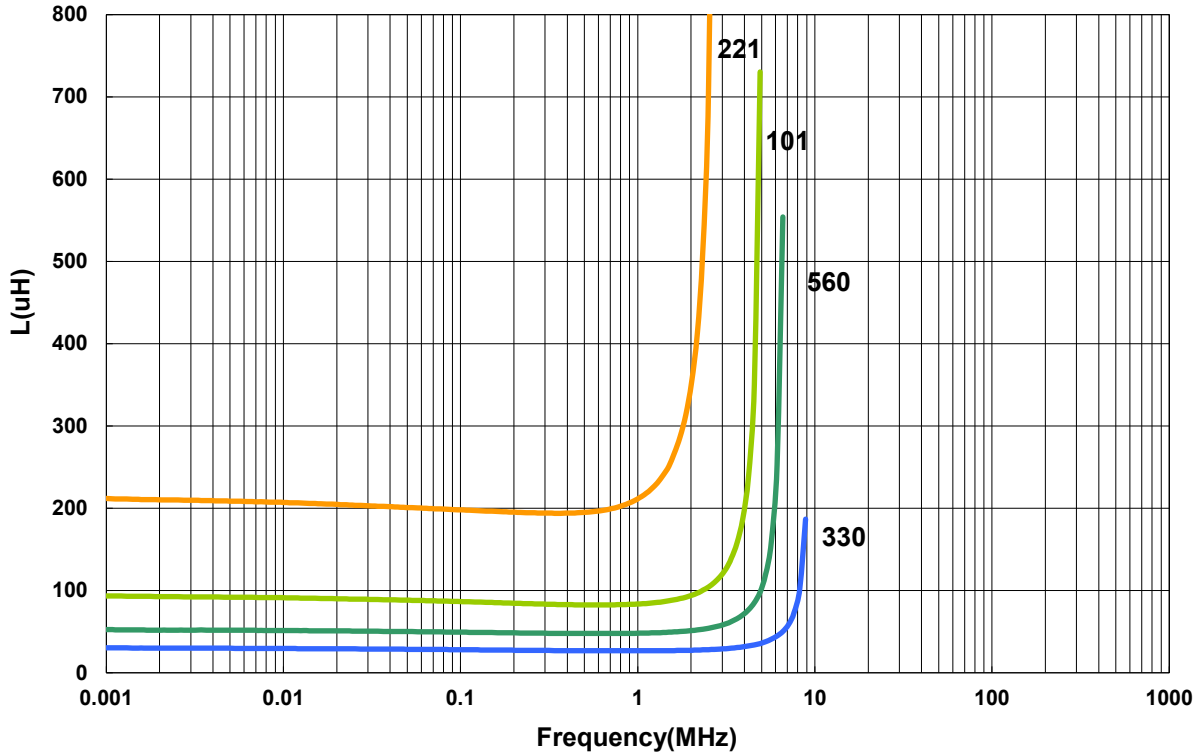
Isat: HP4284+42841A or WK3260B+WK3265B

I rms: WK3255BQ+ WK3265B

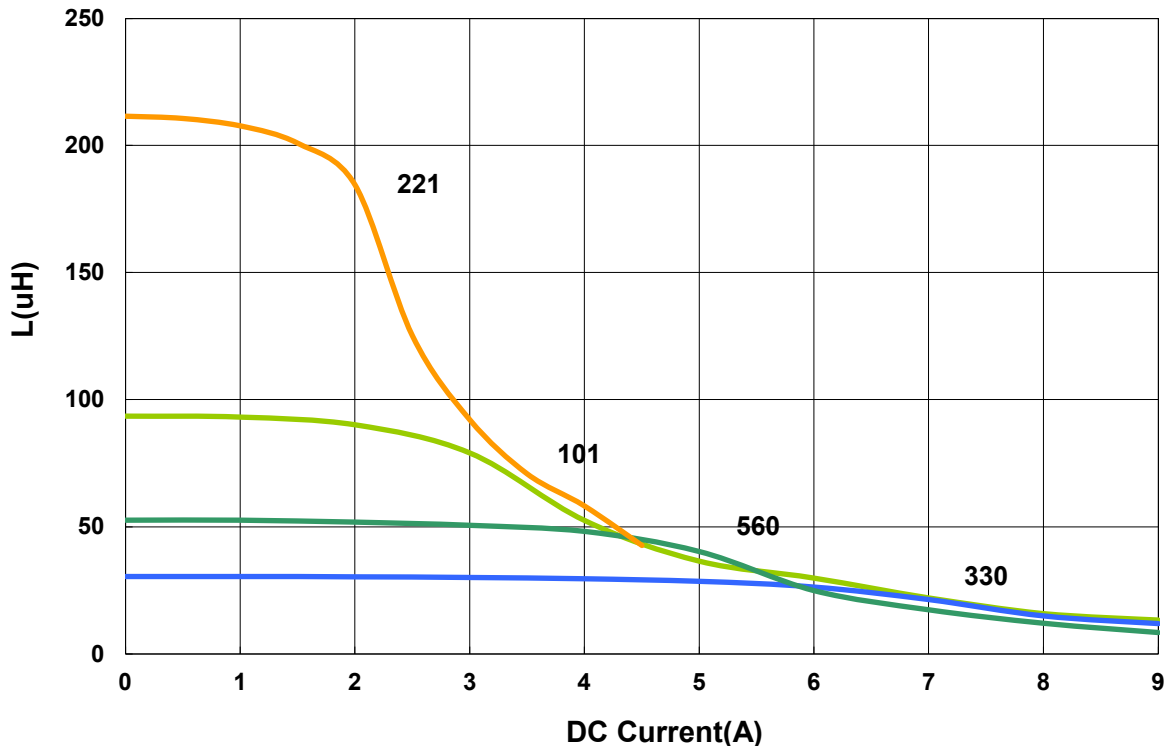
**APSC00131380 Type**

**Characteristics Graph**

**Inductance vs. Frequency Characteristics**



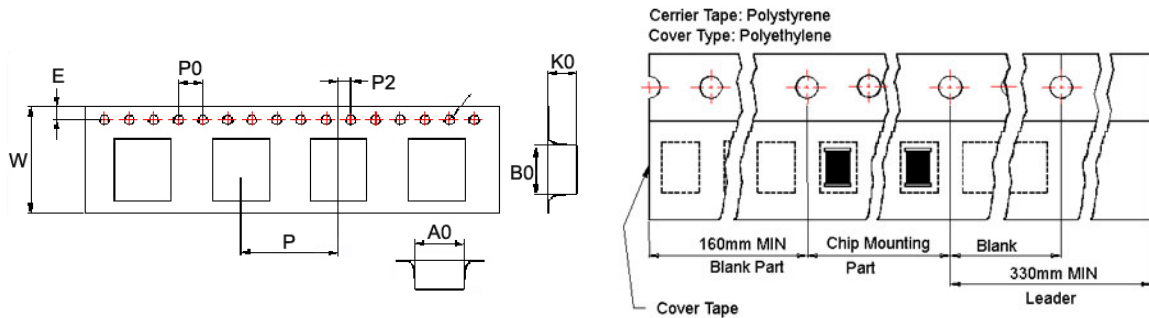
**Inductance vs. DC Current**



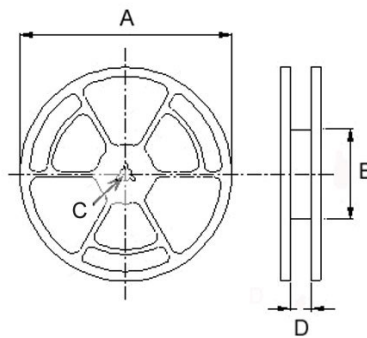
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**■ Packaging**

Tape Dimensions



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions									Reel Dimensions				Quantity PCS / REEL
	A0	B0	K0	D	E	W	P	P0	P2	A	B	C	D	
APSC00030316	3.35	3.35	1.7	1.55	1.75	12	8	4	2	178	60	13	13.2	1000
APSC00040418	4.1	4.1	2.0	1.50	1.75	12	8	4	2	178	60	13	13.2	1000
APSC00040430	4.2	4.2	3.2	1.55	1.75	12	8	4	2	178	60	13	13.2	500
APSC00050220	5.3	5.3	2.4	1.50	1.75	12	8	4	2	330	100	13	13.4	2000
APSC00050530	5.3	5.3	3.4	1.50	1.75	12	8	4	2	330	100	13	13.4	2000
APSC00050540	5.35	5.35	4.1	1.55	1.75	12	8	4	2	330	100	13	13.4	1000
APSC00060620	6.2	6.2	2.2	1.55	1.75	16	12	4	2	330	100	13	13.4	1500
APSC00060630	6.2	6.2	3.1	1.55	1.75	16	12	4	2	330	100	13	17.4	1500
APSC00070730	7.25	7.25	3.35	1.55	1.75	16	12	4	2	330	100	13	17.4	1500
APSC00070740	7.1	7.1	4.1	1.55	1.75	16	12	4	2	330	100	13	17.4	1000
APSC00101131	10.6	10.75	4.2	1.55	1.75	24	16	4	2	300	100	13	24.4	1000
APSC00101140	10.6	10.75	4.2	1.50	1.75	24	16	4	2	330	100	13	24.4	1000
APSC00101151	10.6	10.6	5.0	1.50	1.75	24	16	4	2	330	100	13	24.4	500
APSC00080846	7.6	7.6	5.0	1.55	1.75	16	12	4	2	330	100	13	16.0	1000
APSC00131345	13.0	12.8	5.1	1.55	1.75	24	16	4	2	330	100	13	24.4	500
APSC00131360	12.6	12.6	6.7	1.55	1.75	24	16	4	2	330	100	13	24.4	600
APSC00131380	12.6	12.6	8.7	1.55	1.75	24	16	4	2	330	100	13	24.4	500

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