

Power Inductor APSR Series

**Automotive
AEC-Q200**

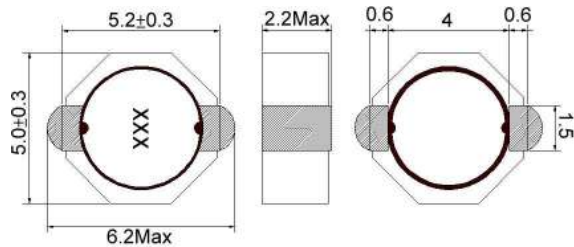
RoHS Compliant
Halogen Free
REACH Compliant



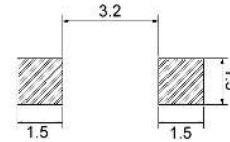
Power Circuit Shield Wire Wound Ferrite

Part Numbering

A	PSR	00	080725	1R0	M	00
Grade	Series Name	Control Code	Dimensions Code (mm)	Inductance (uH)	Tolerance	Internal Code
			050522 5.2x5.0x2.2	R47 0.47	M ±20%	
			080725 7.5x7.4x2.5	1R0 1.0	T ±30%	
			080740 7.5x7.4x4.0	101 100		

APSR00050522 Type
■ Dimensions


unit:mm

■ Recommended Land Pattern


unit:mm

■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (mΩ)Max.	Isat (A)	Irms (A)	Tolerance (±%)	Marking
APSR000505221R2□00	1.2	100kHz,1V	25	4.3	3.43	30	1R2
APSR000505221R8□00	1.8	100kHz,1V	32	3.6	3.12	30	1R8
APSR000505223R3□00	3.3	100kHz,1V	54	2.5	2.68	30	3R3
APSR000505224R7□00	4.7	100kHz,1V	81	2.0	2.18	30	4R7
APSR00050522100□00	10	100kHz,1V	160	1.4	1.51	20,30	100
APSR00050522220□00	22	100kHz,1V	320	0.9	1.02	20,30	220
APSR00050522330□00	33	100kHz,1V	490	0.77	0.80	20,30	330

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. Irms for a 40°C temperature rise from 25°C ambient with current
4. Measure Equipment:

L: Agilent E4980 or HP4284A

RDC: Chroma 16502

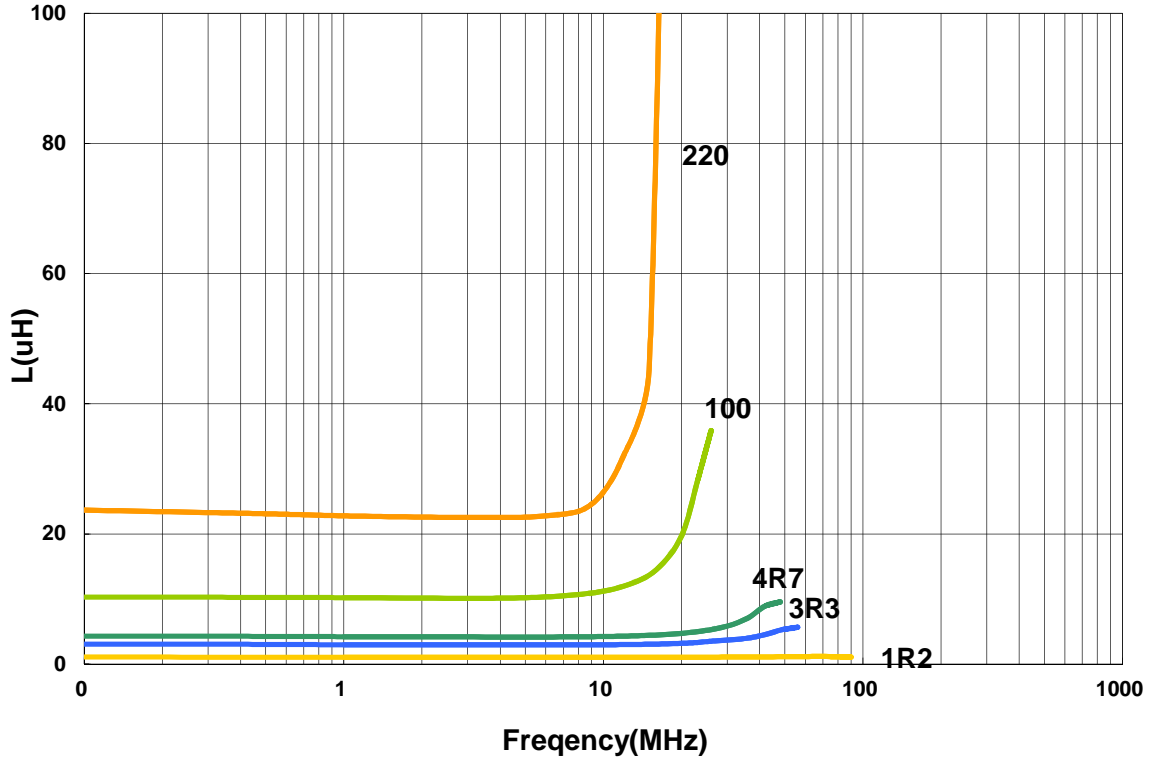
Isat: HP4284A+HP42841A or WK3260B+WK3265B

Irms: Agilent 6641 SYSTEM DC POWER SUPPLY

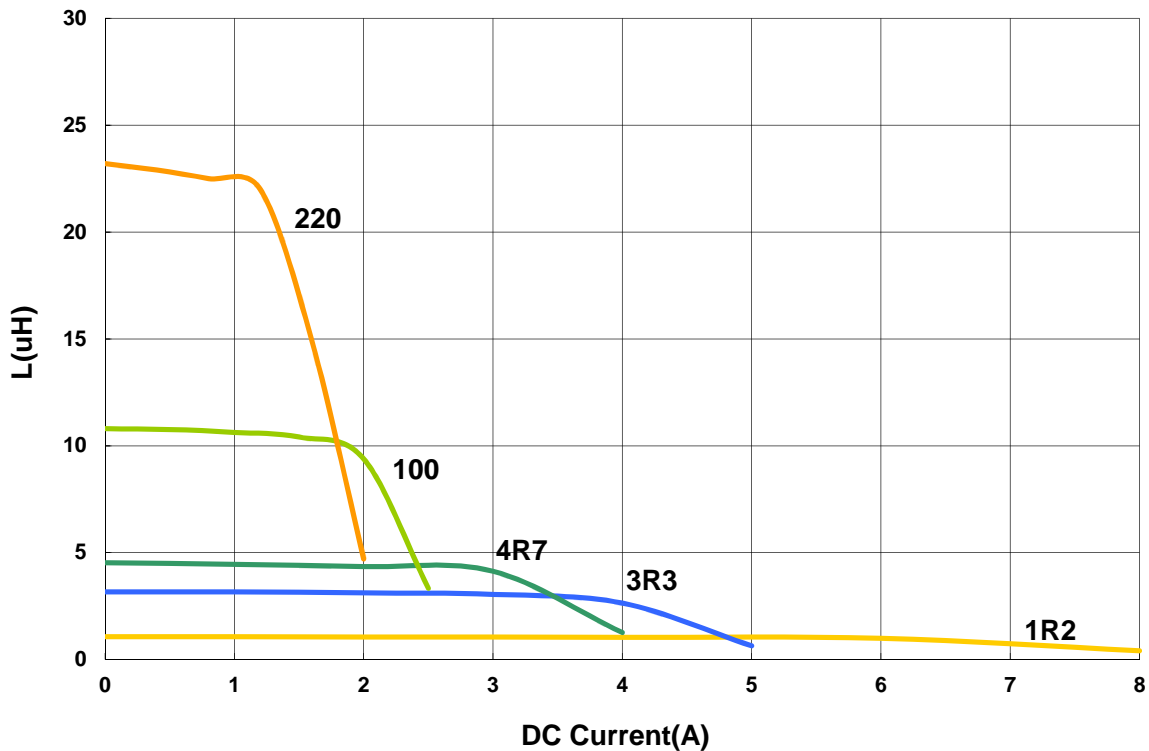
APSR00050522 Type

■ **Characteristics Graph**

Inductance vs. Frequency Characteristics



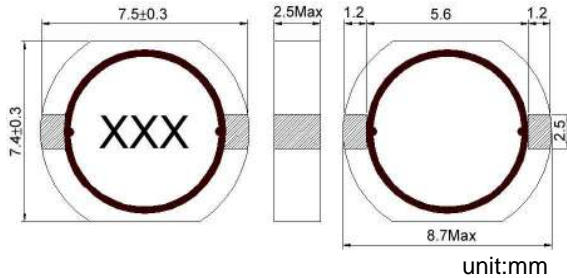
Inductance vs. DC Current



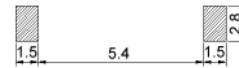
Please be sure to request approval specifications that provide further details of the products. Kindly note that the content of these specifications are subject to change or may be discontinued without prior notice. This product may not be designed/used in medical or high risk applications without Chilisin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

APSR00080725 Type

■ Dimensions



■ Recommended Land Pattern



■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (mΩ)Max.	Isat (A)	Irms (A)	Tolerance (±%)	Marking
APSR000807251R0□00	1.0	100kHz,1V	14.28	2.20	6.22	30	1R0
APSR000807251R5□00	1.5	100kHz,1V	19.70	2.08	5.00	30	1R5
APSR000807252R2□00	2.2	100kHz,1V	24.09	1.86	4.40	30	2R2
APSR000807253R3□00	3.3	100kHz,1V	41.2	1.80	3.70	30	3R3
APSR000807254R7□00	4.7	100kHz,1V	49.7	1.80	3.20	30	4R7
APSR000807255R6□00	5.6	100kHz,1V	58.9	1.39	2.90	20,30	5R6
APSR000807256R8□00	6.8	100kHz,1V	66.3	1.32	2.70	20,30	6R8
APSR00080725100□00	10	100kHz,1V	92.4	1.25	1.90	20,30	100
APSR00080725150□00	15	100kHz,1V	170	1.20	1.70	20,30	150
APSR00080725220□00	22	100kHz,1V	210	1.13	1.52	20,30	220
APSR00080725330□00	33	100kHz,1V	320	0.91	1.10	20,30	330
APSR00080725470□00	47	100kHz,1V	490	0.85	0.95	20,30	470

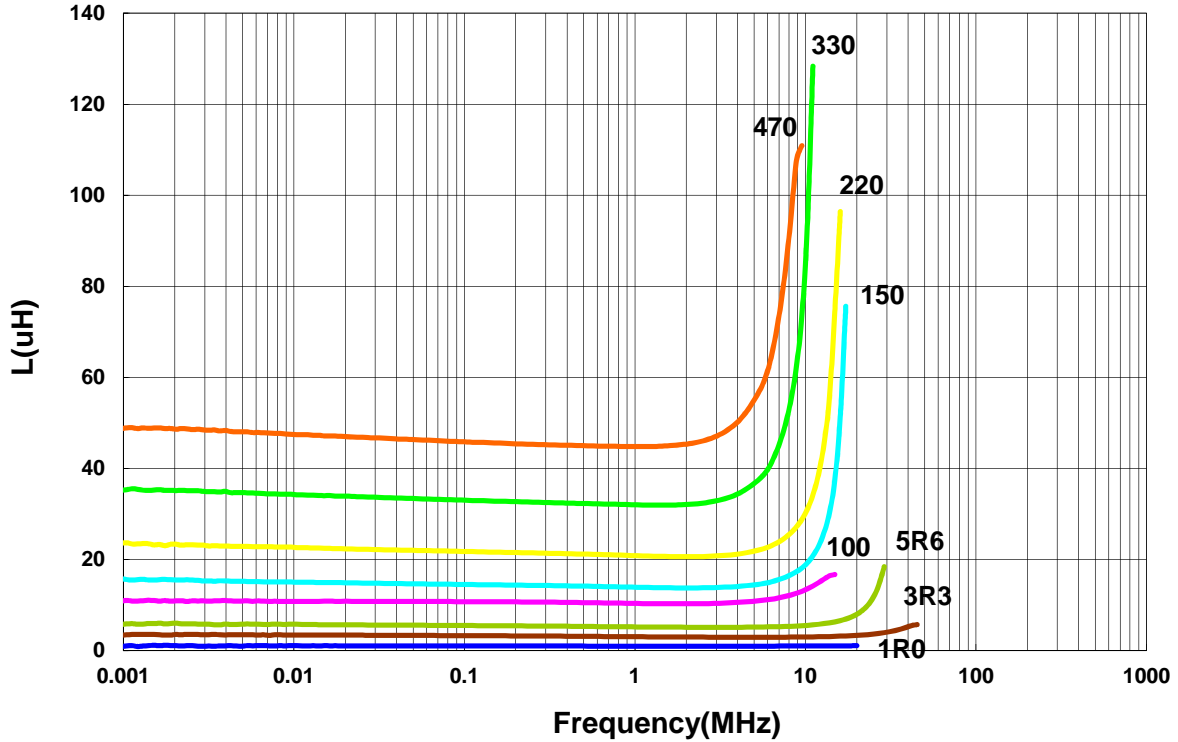
Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%

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 with current
4. Measure Equipment:
 L: Agilent E4980 or HP4284A
 RDC: Chroma 16502
 Isat: HP4284A+HP42841A or WK3260B+WK3265B
 I rms: Agilent 6641 SYSTEM DC POWER SUPPLY

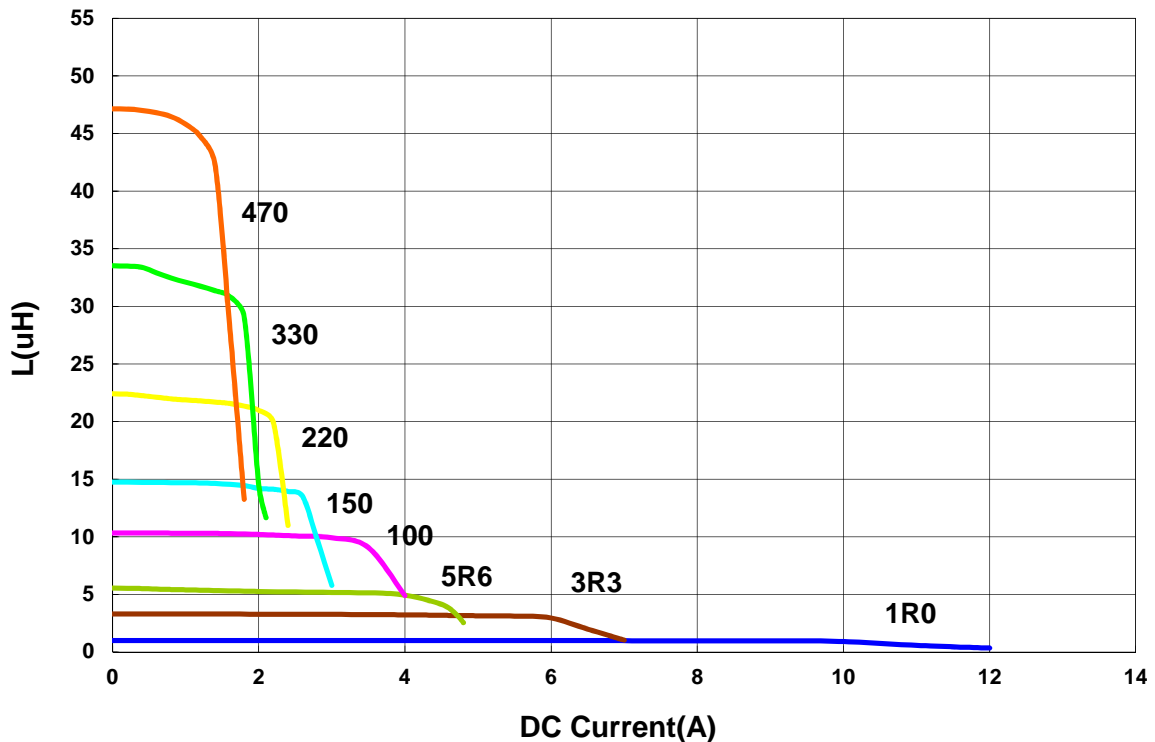
APSR00080725 Type

Characteristics Graph

Inductance vs. Frequency Characteristics



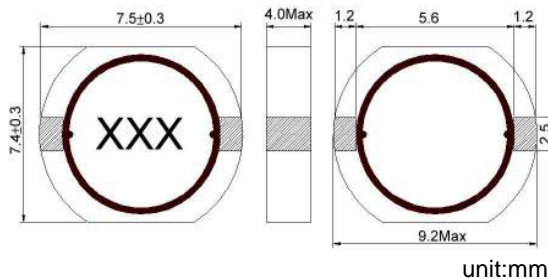
Inductance vs. DC Current



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.

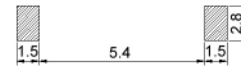
APSR00080740 Type

Dimensions



unit:mm

Recommended Land Pattern



unit:mm

Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (mΩ)Max.	Isat(A) Max(Typ)	Irms (A)	Tolerance (±%)	Marking
APSR000807401R0□00	1.0	100kHz,1V	6.38	8.0(12)	9.00	30	1R0
APSR000807401R5□00	1.5	100kHz,1V	8.64	7.0(10)	8.00	30	1R5
APSR000807401R8□00	1.8	100kHz,1V	9.60	6.5(8.6)	7.92	30	1R8
APSR000807402R5□00	2.5	100kHz,1V	13.6	4.8(7.2)	7.40	30	2R5
APSR000807403R3□00	3.3	100kHz,1V	17.8	3.9(6.8)	6.70	30	3R3
APSR000807404R7□00	4.7	100kHz,1V	26.6	3.5(4.6)	4.90	20,30	4R7
APSR000807405R6□00	5.6	100kHz,1V	29.0	3.3(4.1)	4.60	20,30	5R6
APSR000807406R8□00	6.8	100kHz,1V	34.0	3.2(3.9)	3.90	20,30	6R8
APSR00080740100□00	10	100kHz,1V	55.6	2.5(3.4)	3.25	20,30	100
APSR00080740150□00	15	100kHz,1V	71.4	2.1(3.0)	2.70	20,30	150
APSR00080740220□00	22	100kHz,1V	98.1	1.7(2.4)	2.40	20,30	220
APSR00080740330□00	33	100kHz,1V	140	1.4(2.0)	1.90	20,30	330
APSR00080740470□00	47	100kHz,1V	217	1.2(1.7)	1.48	20,30	470
APSR00080740560□00	56	100kHz,1V	260	1.0(1.5)	1.33	20,30	560
APSR00080740680□00	68	100kHz,1V	310	0.95(1.36)	1.20	20,30	680
APSR00080740820□00	82	100kHz,1V	360	0.9(1.20)	1.12	20,30	820
APSR00080740101□00	100	100kHz,1V	480	0.85(1.12)	0.95	20,30	101
APSR00080740121□00	120	100kHz,1V	560	0.75(1.00)	0.89	20,30	121
APSR00080740151□00	150	100kHz,1V	710	0.65(0.92)	0.82	20,30	151

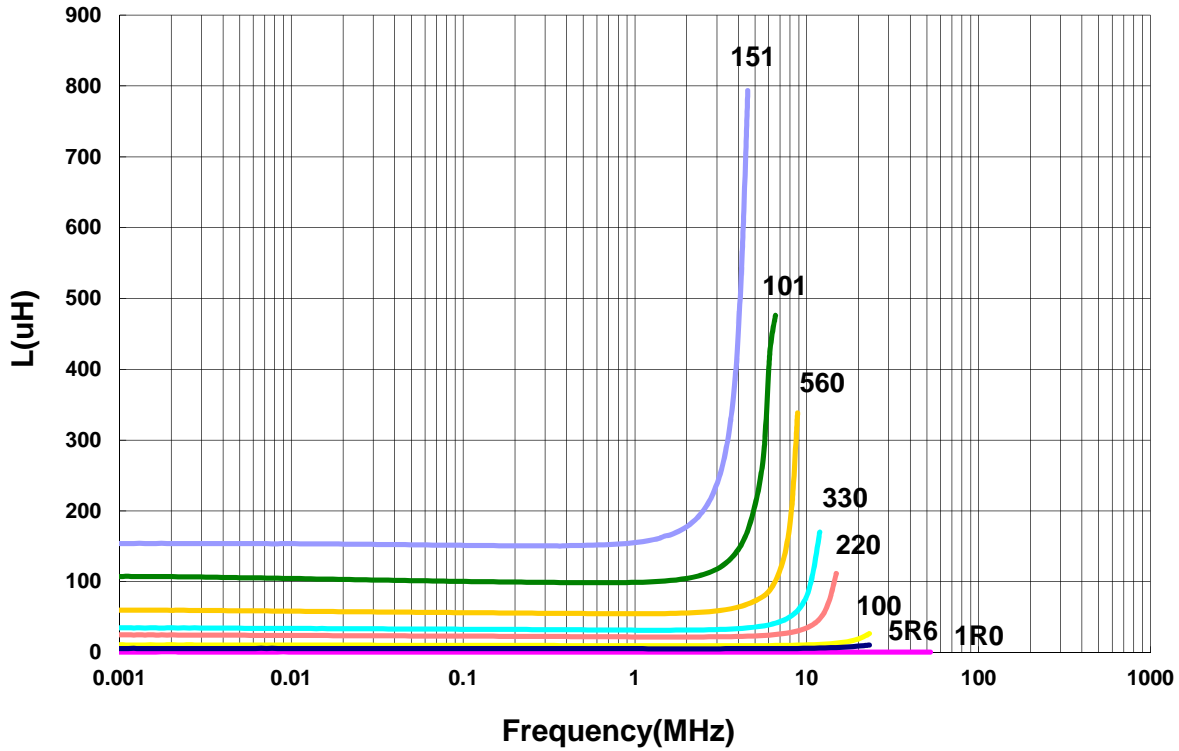
Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%

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 temprature rise from 25°C ambient with current
4. Measure Equipment:
L: Agilent E4980 or HP4284A
RDC: Chroma 16502
Isat: HP4284A+HP42841A or WK3260B+WK3265B
I rms: Agilent 6641 SYSTEM DC POWER SUPPLY

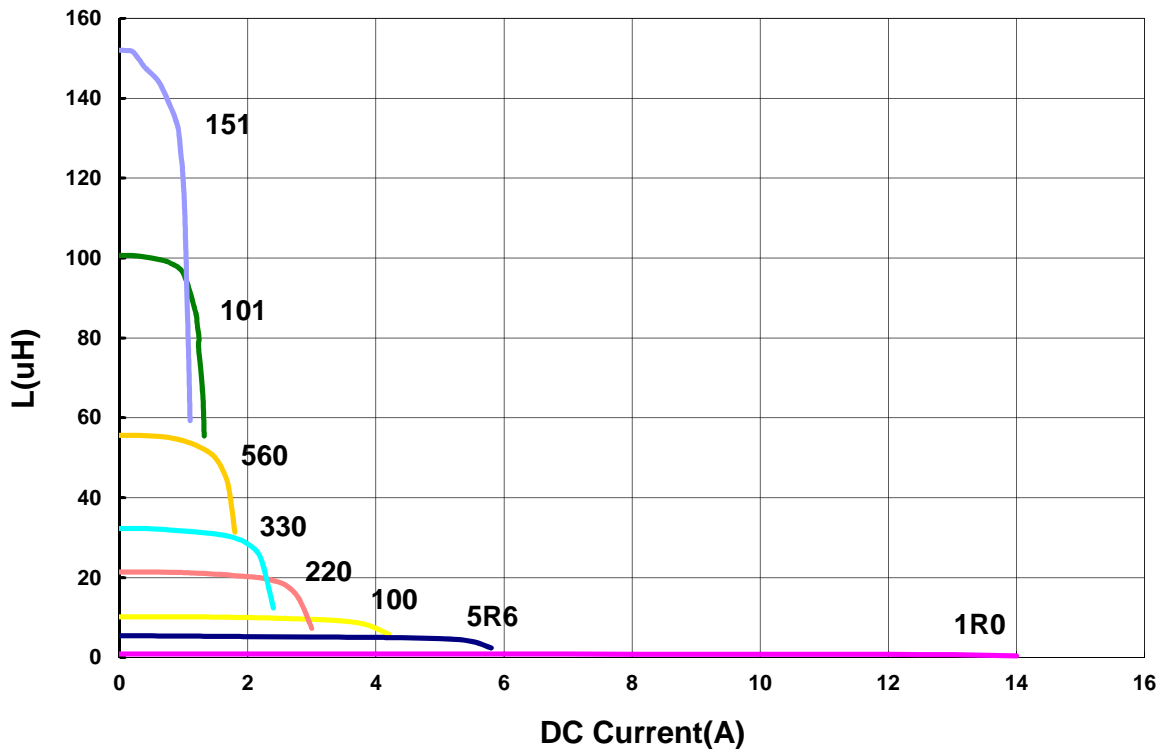
APSR00080740 Type

Characteristics Graph

Inductance vs. Frequency Characteristics



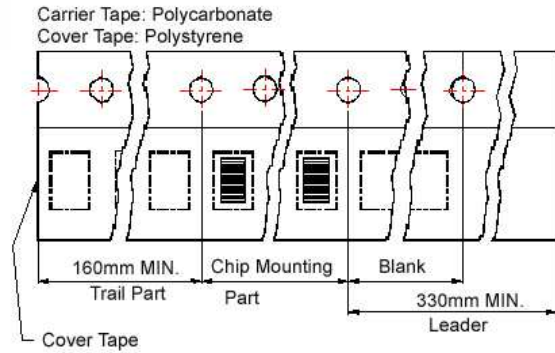
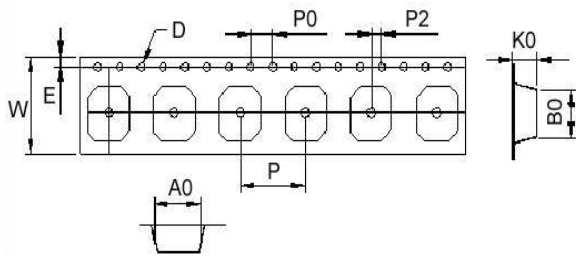
Inductance vs. DC Current



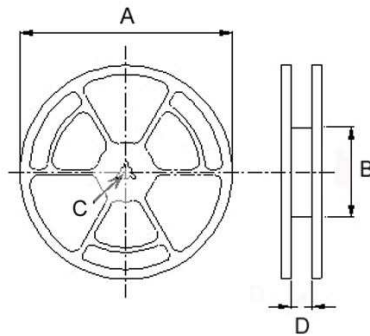
Please be sure to request approval specifications that provide further details of the products. Kindly note that the content of these specifications are subject to change or may be discontinued without prior notice. This product may not be designed/used in medical or high risk applications without Chilisin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

■ Packaging

Tape Dimensions



Reel Dimensions



Dimensions in mm

TYPE										Reel Dimensions				Quantity
	A0	B0	K0	D	E	W	P	P0	P2	A	B	C	D	PCS / REEL
APSR00050522	5.25	6.25	2.4	1.55	1.75	12	8	4	2	330	100	13	13.4	2000
APSR00080725	7.60	8.65	2.8	1.55	1.75	16	12	4	2	330	100	13	16	1500
APSR00080740	7.60	9.00	4.3	1.55	1.75	16	12	4	2	330	100	13	16	1000