

Chip Inductor CLAM Series

Automotive AEC-Q200

Product Identification

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Series name	Dimensions (LxWxH)		Internal Code
CLAM	100505	1.0 x 0.50 x 0.5 mm	T
	160808	1.6 x 0.80 x 0.8 mm	

Inductance		Tolerance	
1N0	1	S	0.3nH
27N	27	J	5%

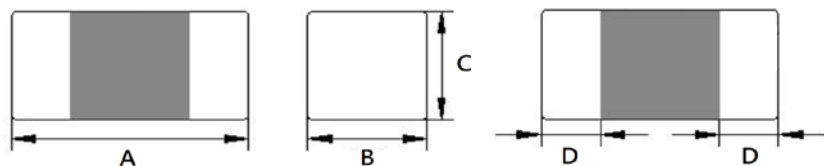
Rating

Operating Temperature range : -40°C ~ +125°C

Storage Temperature: -40°C ~ +125°C (after PCB)

-5°C~40°C, Humidity 40%~70% (before PCB)

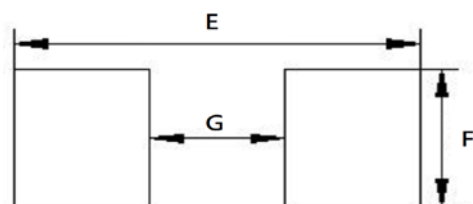
Shape and Dimension



Dimensions in mm

TYPE	A	B	C	D
CLAM100505	1.00±0.10	0.50±0.10	0.50±0.10	0.25±0.10
CLAM160808	1.60±0.15	0.80±0.15	0.80±0.15	0.30±0.20

Recommended PCB Pattern



Dimensions in mm

TYPE	E	F	G
CLAM100505	1.20-1.40	0.50	0.40
CLAM160808	1.80-2.00	0.60-0.80	0.70-0.80

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Electrical Characteristics (CLAM100505 TYPE)

Part No.	Inductance (nH)	Tolerance (%)	Q Min.	SRF (MHz) Min.	DC Resistance (Ω) Max.	Rated Current (mA) Max.	Test Frequency
CLAM100505T-1N0S	1.0	±0.3nH	8	10000	0.07	400	100 MHz / 200 mV
CLAM100505T-1N1S	1.1	±0.3nH	8	10000	0.10	400	100 MHz / 200 mV
CLAM100505T-1N2S	1.2	±0.3nH	8	10000	0.09	400	100 MHz / 200 mV
CLAM100505T-1N3S	1.3	±0.3nH	8	9000	0.10	400	100 MHz / 200 mV
CLAM100505T-1N5S	1.5	±0.3nH	8	9000	0.10	400	100 MHz / 200 mV
CLAM100505T-1N6S	1.6	±0.3nH	8	8700	0.10	400	100 MHz / 200 mV
CLAM100505T-1N8S	1.8	±0.3nH	8	8700	0.10	400	100 MHz / 200 mV
CLAM100505T-2N0S	2.0	±0.3nH	8	8100	0.10	400	100 MHz / 200 mV
CLAM100505T-2N2S	2.2	±0.3nH	8	8100	0.12	400	100 MHz / 200 mV
CLAM100505T-2N4S	2.4	±0.3nH	8	7700	0.15	400	100 MHz / 200 mV
CLAM100505T-2N7S	2.7	±0.3nH	8	7700	0.15	400	100 MHz / 200 mV
CLAM100505T-3N0S	3.0	±0.3nH	8	6300	0.15	400	100 MHz / 200 mV
CLAM100505T-3N3S	3.3	±0.3nH	8	6300	0.15	400	100 MHz / 200 mV
CLAM100505T-3N6S	3.6	±0.3nH	8	6100	0.15	400	100 MHz / 200 mV
CLAM100505T-3N9S	3.9	±0.3nH	8	6100	0.18	400	100 MHz / 200 mV
CLAM100505T-4N3S	4.3	±0.3nH	8	6000	0.18	400	100 MHz / 200 mV
CLAM100505T-4N7S	4.7	±0.3nH	8	6000	0.18	400	100 MHz / 200 mV
CLAM100505T-5N1S	5.1	±0.3nH	8	5300	0.20	400	100 MHz / 200 mV
CLAM100505T-5N6S	5.6	±0.3nH	8	5100	0.20	400	100 MHz / 200 mV
CLAM100505T-6N2S	6.2	±0.3nH	8	4500	0.22	400	100 MHz / 200 mV
CLAM100505T-6N8J	6.8	5%	8	4550	0.24	400	100 MHz / 200 mV
CLAM100505T-7N5J	7.5	5%	8	4200	0.24	300	100 MHz / 200 mV
CLAM100505T-8N2J	8.2	5%	8	4100	0.24	300	100 MHz / 200 mV
CLAM100505T-9N1J	9.1	5%	8	3900	0.26	300	100 MHz / 200 mV
CLAM100505T-10NJ	10	5%	8	3900	0.26	300	100 MHz / 200 mV
CLAM100505T-12NJ	12	5%	8	3000	0.28	300	100 MHz / 200 mV
CLAM100505T-15NJ	15	5%	8	2500	0.32	300	100 MHz / 200 mV
CLAM100505T-18NJ	18	5%	8	2200	0.36	300	100 MHz / 200 mV
CLAM100505T-22NJ	22	5%	8	1900	0.42	300	100 MHz / 200 mV
CLAM100505T-27NJ	27	5%	8	1700	0.46	300	100 MHz / 200 mV
CLAM100505T-33NJ	33	5%	8	1600	0.58	200	100 MHz / 200 mV
CLAM100505T-39NJ	39	5%	8	1200	0.65	200	100 MHz / 200 mV
CLAM100505T-47NJ	47	5%	8	1000	0.72	200	100 MHz / 200 mV
CLAM100505T-56NJ	56	5%	8	800	0.82	200	100 MHz / 200 mV
CLAM100505T-68NJ	68	5%	8	800	0.92	180	100 MHz / 200 mV
CLAM100505T-82NJ	82	5%	8	700	1.20	150	100 MHz / 200 mV
CLAM100505T-R10J	100	5%	8	900	2.00	100	100 MHz / 200 mV
CLAM100505T-R12J	120	5%	8	800	2.20	100	100 MHz / 200 mV
CLAM100505T-R15J	150	5%	8	700	3.50	100	100 MHz / 200 mV
CLAM100505T-R18J	180	5%	8	600	3.80	100	100 MHz / 200 mV
CLAM100505T-R22J	220	5%	8	500	4.20	100	100 MHz / 200 mV
CLAM100505T-R27J	270	5%	8	500	4.80	100	100 MHz / 200 mV

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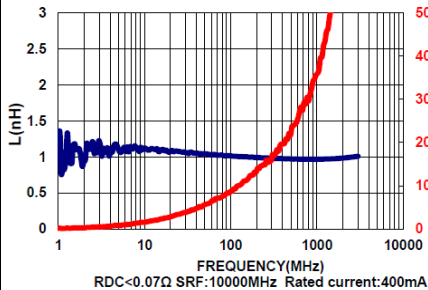
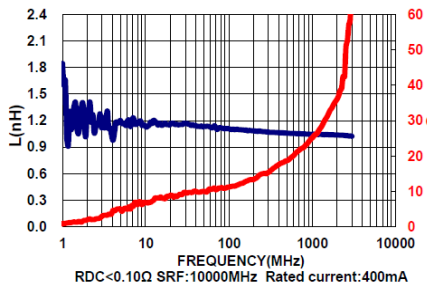
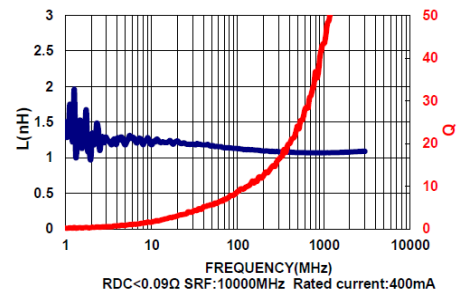
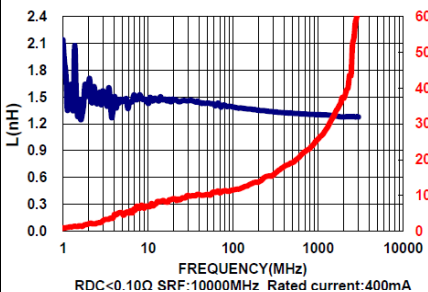
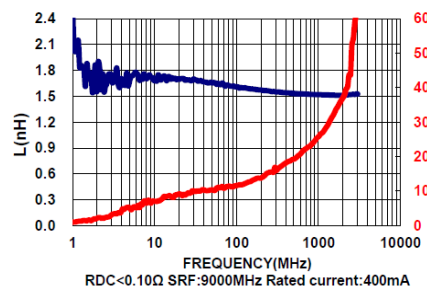
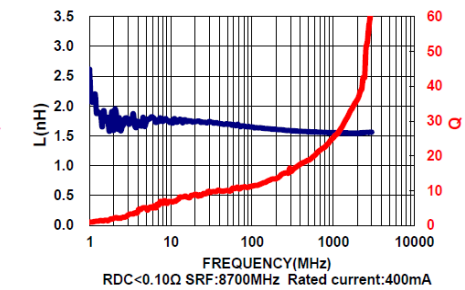
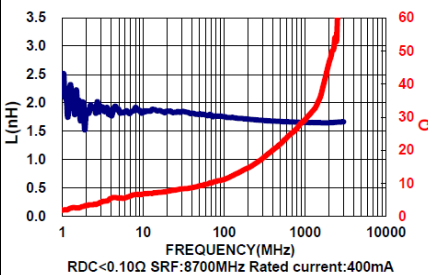
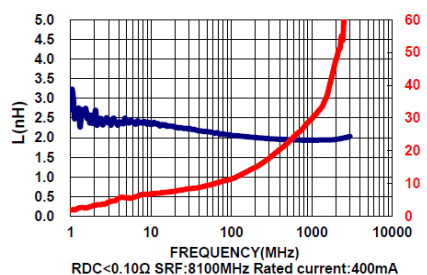
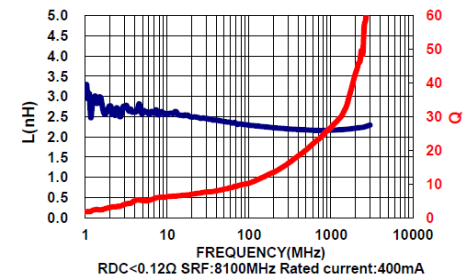
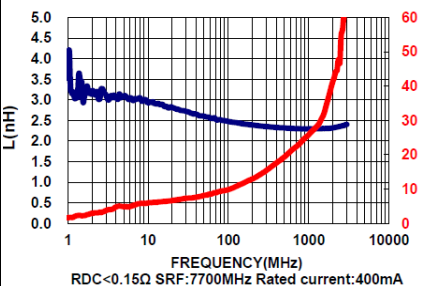
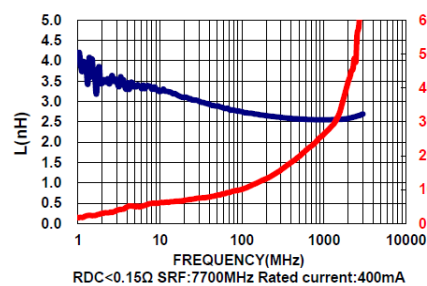
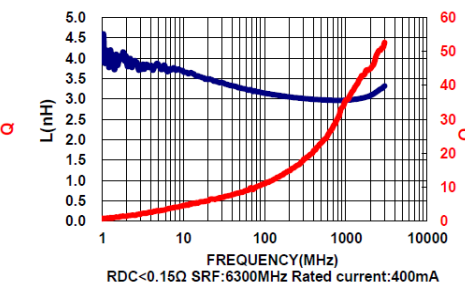
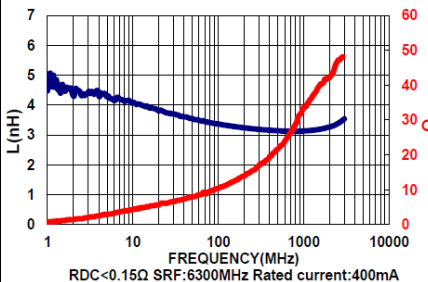
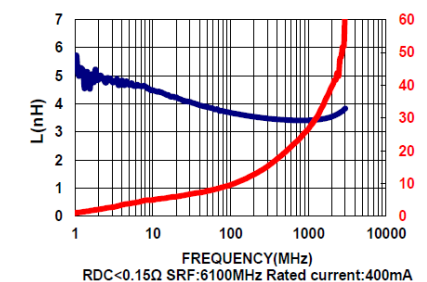
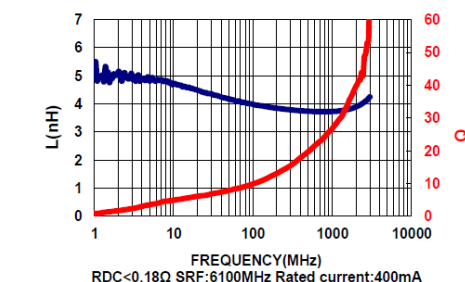
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Electrical Characteristics (CLAM160808 TYPE)

Part No.	Inductance (nH)	Tolerance (%)	Q Min.	SRF (MHz) Min.	DC Resistance (Ω) Max.	IDC (mA) Max.	Test Frequency
CLAM160808T-1R0S	1.0	±0.3nH	8	10000	0.10	600	100 MHz / 200 mV
CLAM160808T-1R2S	1.2	±0.3nH	8	10000	0.10	600	100 MHz / 200 mV
CLAM160808T-1R5S	1.5	±0.3nH	8	8000	0.10	600	100 MHz / 200 mV
CLAM160808T-1R6S	1.6	±0.3nH	8	8000	0.10	600	100 MHz / 200 mV
CLAM160808T-1R8S	1.8	±0.3nH	8	8000	0.10	600	100 MHz / 200 mV
CLAM160808T-2R2S	2.2	±0.3nH	8	7200	0.10	600	100 MHz / 200 mV
CLAM160808T-2R7S	2.7	±0.3nH	10	6200	0.10	600	100 MHz / 200 mV
CLAM160808T-3R0S	3.0	±0.3nH	10	5200	0.12	600	100 MHz / 200 mV
CLAM160808T-3R3S	3.3	±0.3nH	10	5200	0.12	600	100 MHz / 200 mV
CLAM160808T-3R6S	3.6	±0.3nH	10	5000	0.14	600	100 MHz / 200 mV
CLAM160808T-3R9S	3.9	±0.3nH	10	5000	0.14	600	100 MHz / 200 mV
CLAM160808T-4R3S	4.3	±0.3nH	10	4750	0.16	600	100 MHz / 200 mV
CLAM160808T-4R7S	4.7	±0.3nH	10	4750	0.16	600	100 MHz / 200 mV
CLAM160808T-5R1S	5.1	±0.3nH	10	4100	0.18	600	100 MHz / 200 mV
CLAM160808T-5R6S	5.6	±0.3nH	10	4100	0.18	600	100 MHz / 200 mV
CLAM160808T-6R2S	6.2	±0.3nH	10	3750	0.22	600	100 MHz / 200 mV
CLAM160808T-6R8J	6.8	5%	10	3750	0.22	600	100 MHz / 200 mV
CLAM160808T-7R5J	7.5	5%	10	3300	0.24	600	100 MHz / 200 mV
CLAM160808T-8R2S	8.2	5%	10	3300	0.24	600	100 MHz / 200 mV
CLAM160808T-10NS	10	5%	12	3000	0.26	600	100 MHz / 200 mV
CLAM160808T-12NS	12	5%	12	2600	0.28	600	100 MHz / 200 mV
CLAM160808T-15NS	15	5%	12	2500	0.32	600	100 MHz / 200 mV
CLAM160808T-16NS	16	5%	12	2400	0.35	600	100 MHz / 200 mV
CLAM160808T-18NS	18	5%	12	2400	0.35	600	100 MHz / 200 mV
CLAM160808T-22NS	22	5%	12	2000	0.40	500	100 MHz / 200 mV
CLAM160808T-27NS	27	5%	12	1900	0.45	500	100 MHz / 200 mV
CLAM160808T-33NS	33	5%	12	1600	0.55	400	100 MHz / 200 mV
CLAM160808T-39NS	39	5%	12	1400	0.60	400	100 MHz / 200 mV
CLAM160808T-47NS	47	5%	12	1300	0.70	400	100 MHz / 200 mV
CLAM160808T-56NS	56	5%	12	1100	0.75	400	100 MHz / 200 mV
CLAM160808T-62NS	62	5%	12	1050	0.85	400	100 MHz / 200 mV
CLAM160808T-68NS	68	5%	12	1050	0.85	400	100 MHz / 200 mV
CLAM160808T-75NS	75	5%	12	900	1.00	300	100 MHz / 200 mV
CLAM160808T-82NS	82	5%	12	900	1.00	300	100 MHz / 200 mV

NOTE

- When ordering, please specify tolerance code. Tolerance: S=±0.3nH , J=±5%
- Applied the current to coils, the inductance shall be less than 10% initial value
- Residual impedance of short chip : 0nH
L & Q: Agilent E4991A+Agilent 16197A
SRF: Agilent E4991A or HP19196C
RDC: HP4338B or CHEN HWA 502

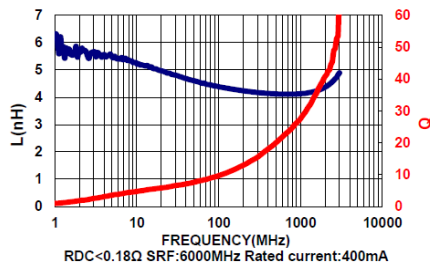
Characteristics Graph (CLAM100505 Type)
CLAM100505T-1N0S

CLAM100505T-1N1S

CLAM100505T-1N2S

CLAM100505T-1N3S

CLAM100505T-1N5S

CLAM100505T-1N6S

CLAM100505T-1N8S

CLAM100505T-2N0S

CLAM100505T-2N2S

CLAM100505T-2N4S

CLAM100505T-2N7S

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CLAM100505T-3N3S

CLAM100505T-3N6S

CLAM100505T-3N9S


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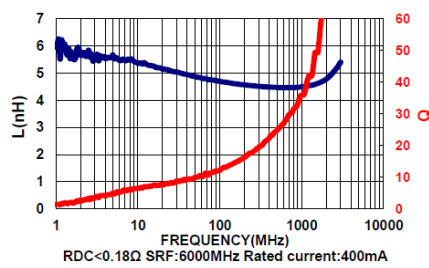
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Characteristics Graph (CLAM100505 Type)

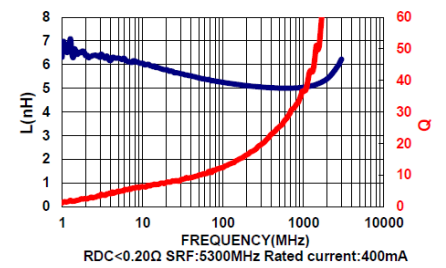
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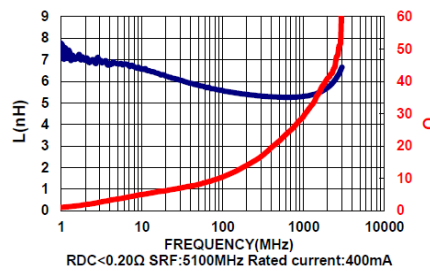
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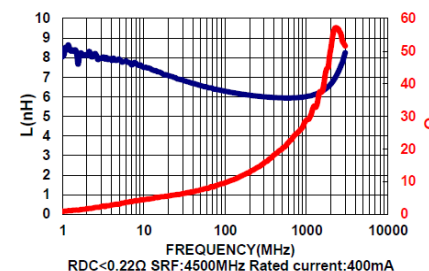
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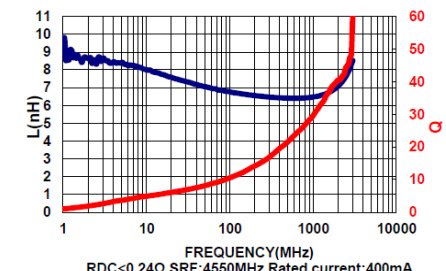
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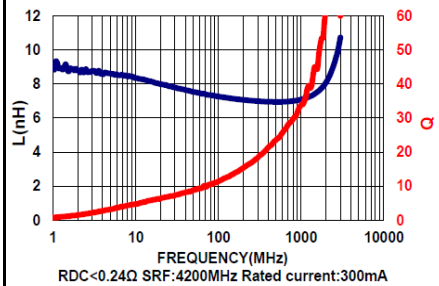
CLAM100505T-6N2S



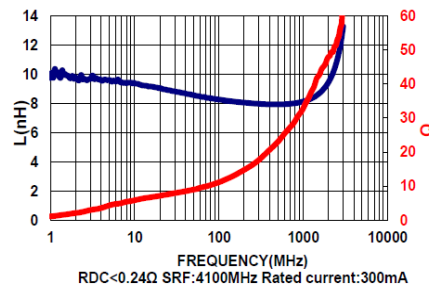
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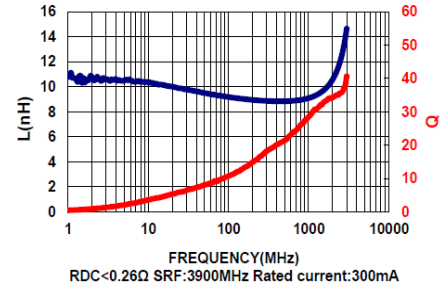
CLAM100505T-7N5J



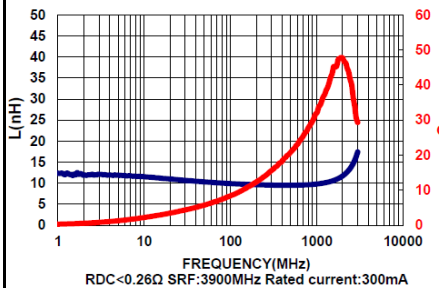
CLAM100505T-8N2J



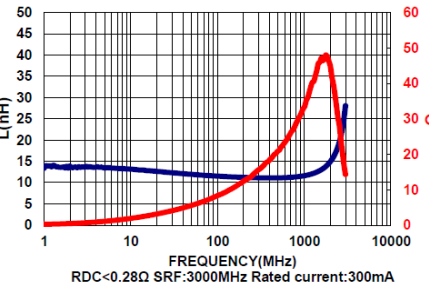
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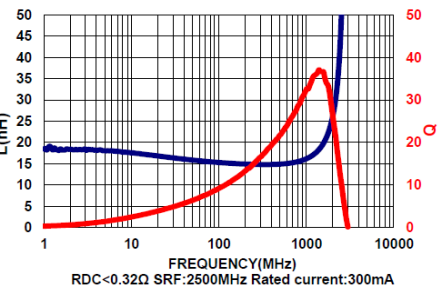
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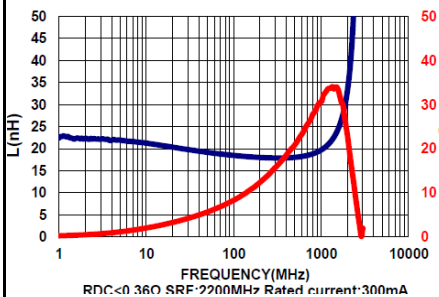
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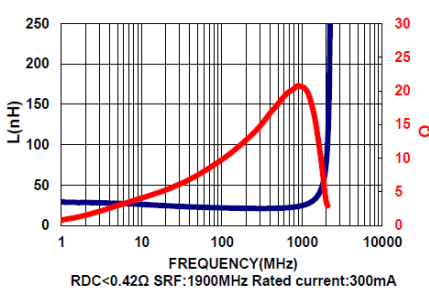
CLAM100505T-15NJ



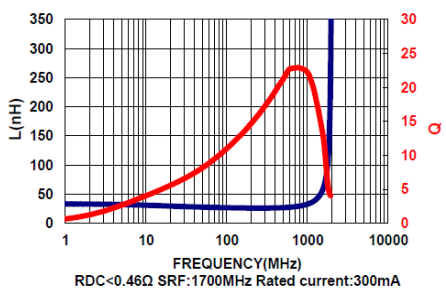
CLAM100505T-18NJ



CLAM100505T-22NJ



CLAM100505T-27NJ

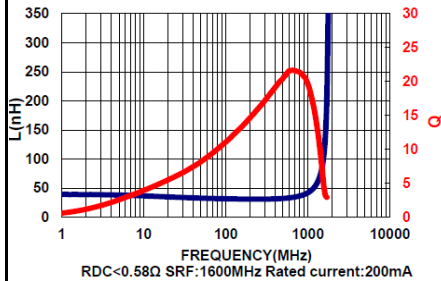


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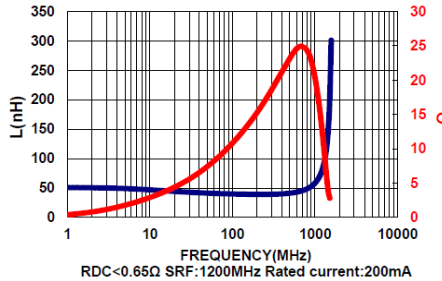
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Characteristics Graph (CLAM100505 Type)

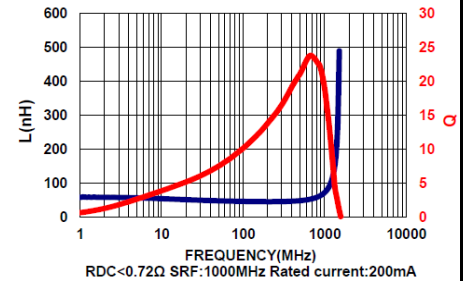
CLAM100505T-33NJ



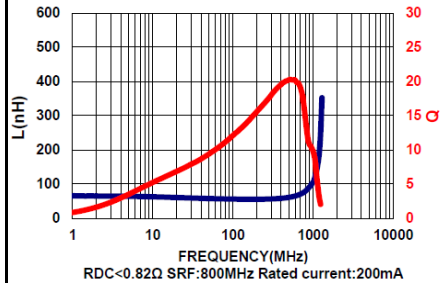
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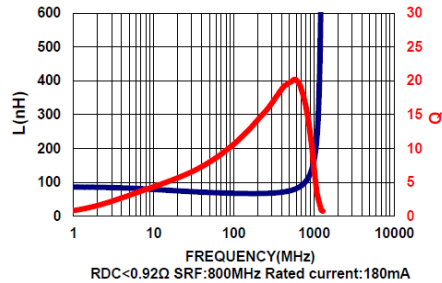
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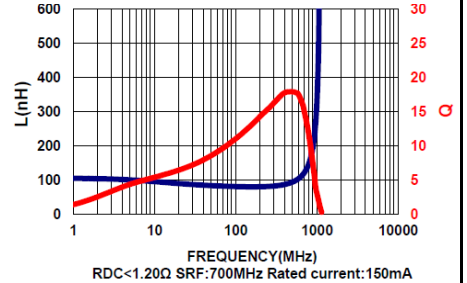
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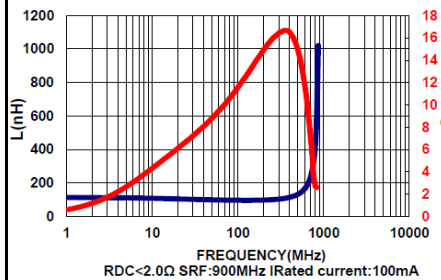
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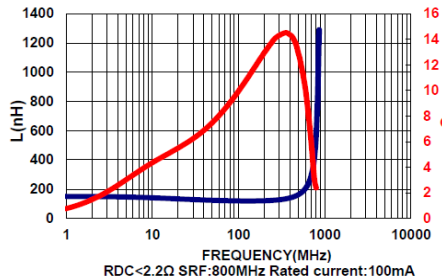
CLAM100505T-82NJ



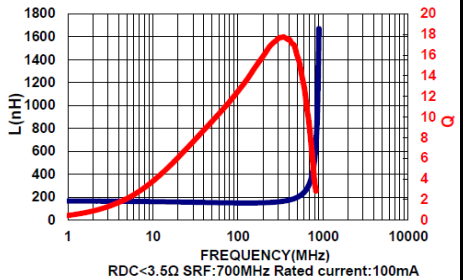
CLAM100505T-R10J



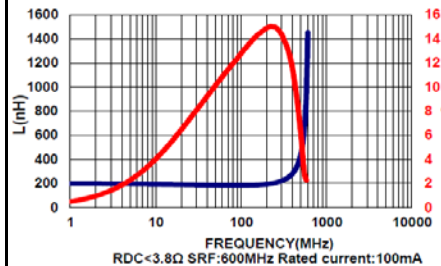
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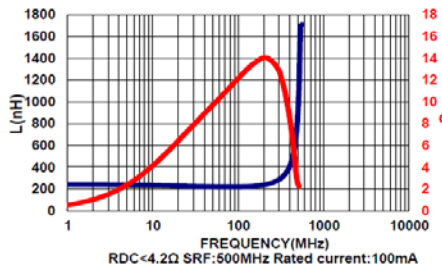
CLAM100505T-R15J



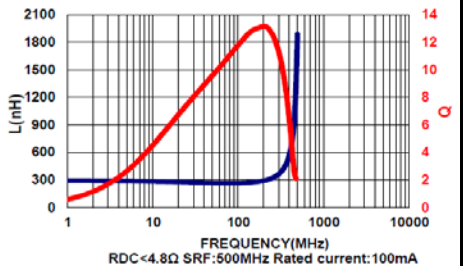
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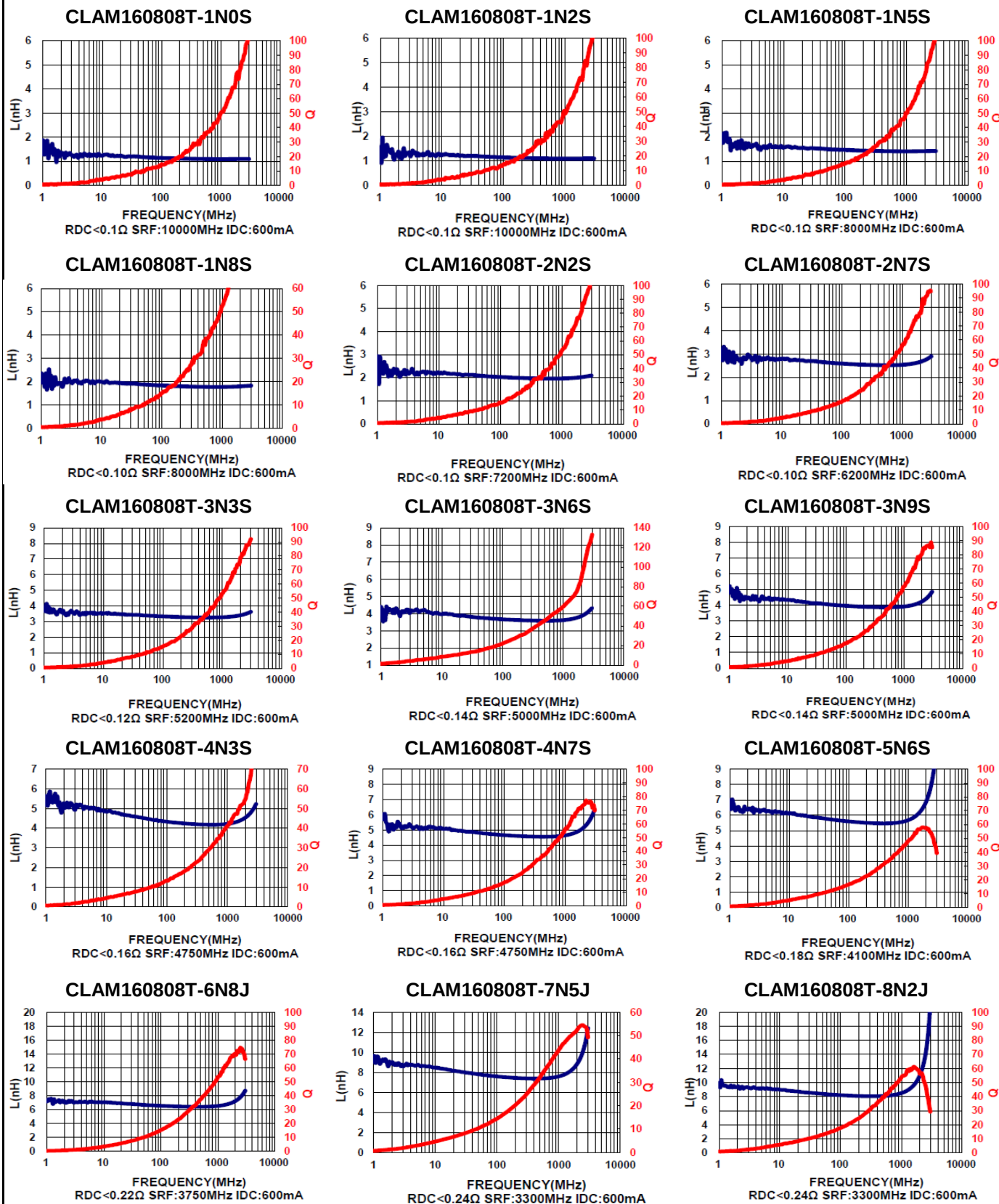
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CLAM100505T-R27J



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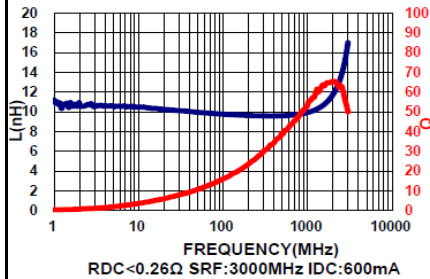


Chip Inductor CLAM Series

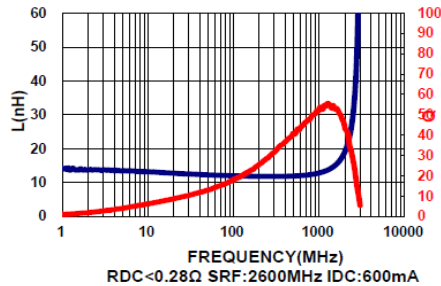
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Characteristics Graph (CLAM160808 Type)

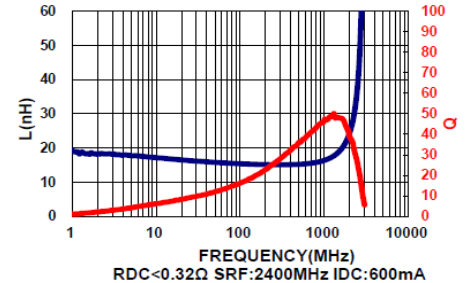
CLAM160808T-10NJ



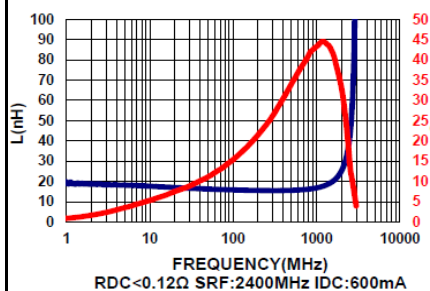
CLAM160808T-12NJ



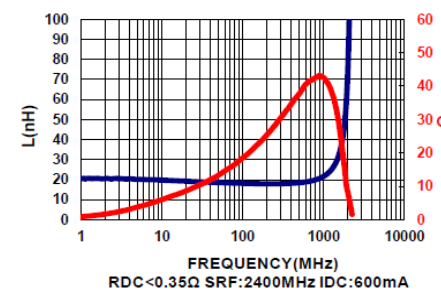
CLAM160808T-15NJ



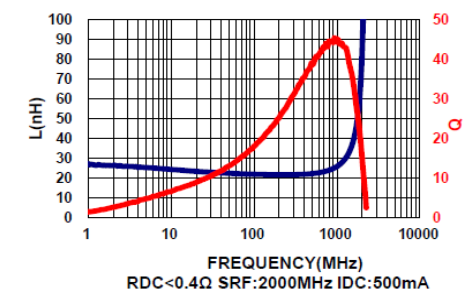
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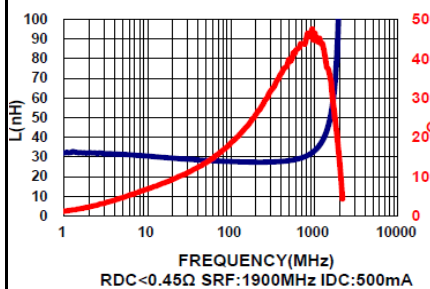
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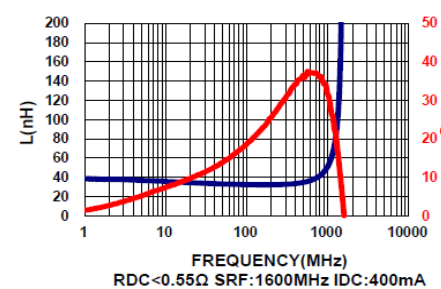
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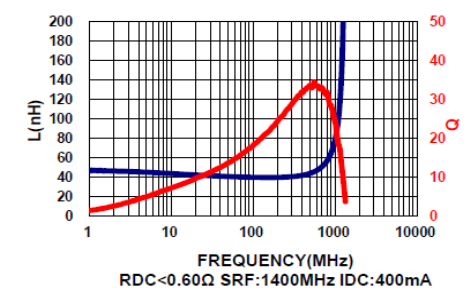
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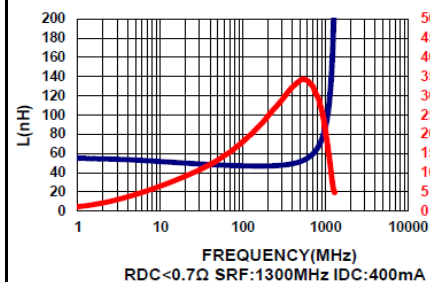
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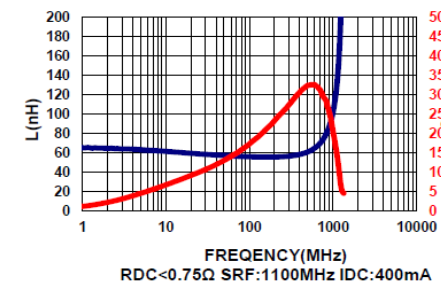
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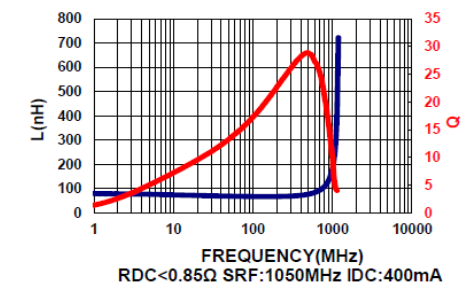
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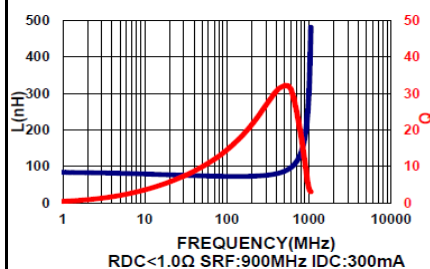
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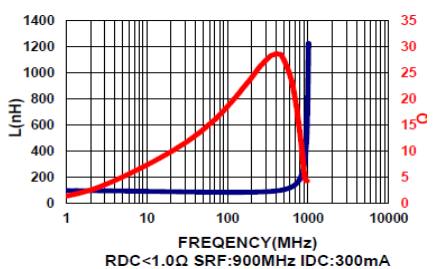
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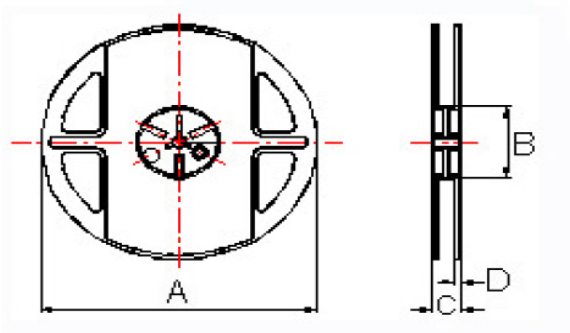


Chip Inductor CLAM Series

Automotive AEC-Q200

4. Packing Specifications

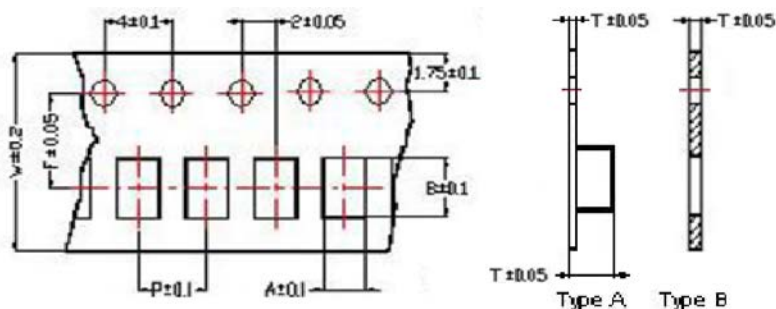
1. Reel Dimensions



Reel Dimension(mm)

TYPE	PCS / Reel	A	B	C	D
CLAM100505	10000	178	60	12	1.5
CLAM160808	4000	178	60	12	1.5

2. Tape Dimensions



Tape Dimension(mm)

TYPE	A	B	T	W	P	F	K	Tape
CLAM100505	0.62	1.12	0.60	8	2	3.5	-	B
CLAM160808	1.00	1.80	0.95	8	4	3.5	-	B

3. Tape Material

Cover Tape: Polystyrene

