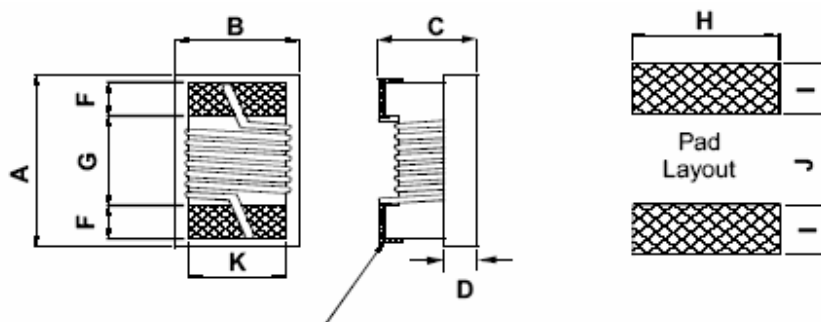


## Wire-Wound Chip Inductor 1206 (321611) Series

### Shape & Dimension



Terminal wraparound:  
Approx. 0.016/0.42 both ends

	A		B		C		D Ref.	F	G	H	I	J	K
	Max.	Ref.	Max.	Ref.	Max.	Ref.							
Inch	0.14	0.13	0.085	0.079	0.060	0.051	0.020	0.020	0.087	0.076	0.04	0.07	0.063
mm	3.56	3.30	2.16	2.00	1.52	1.30	0.50	0.50	2.20	1.93	1.02	1.78	1.60

Parts/Reel: 7" 2,000 PCS

Tape Width: 8mm

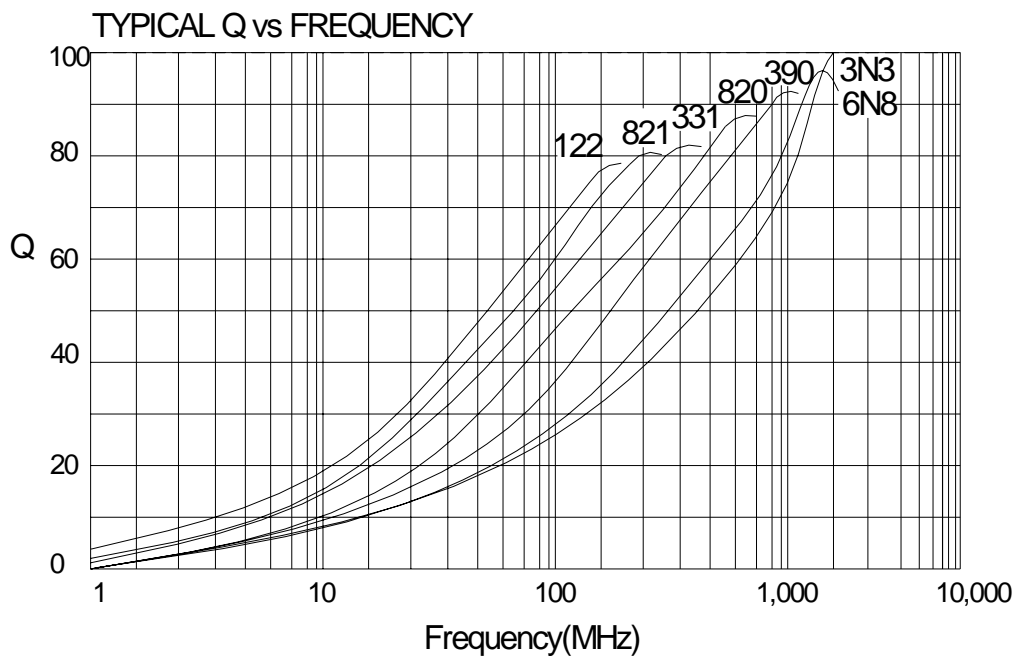
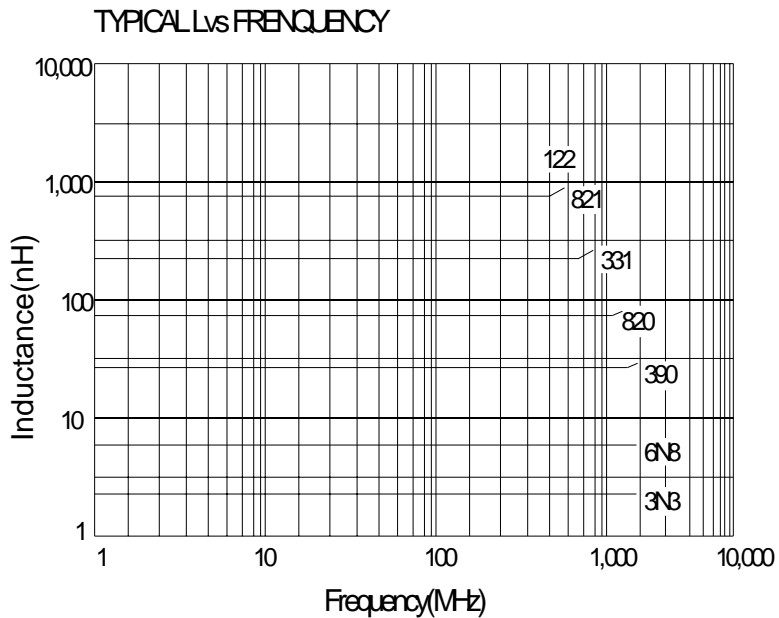
# Specification For Approval

## Wire-Wound Chip Inductor 1206 (321611) Series

Part Number	Inductance nH	Percent Tolerance	Q Min	SRF Min MHz	R <sub>DC</sub> Max Ohms	I <sub>DC</sub> Max mA	Color Code
BCCWH-321611-6N8	6.8 @ 100MHz	10,5	30 @ 300MHz	5500	0.07	1000	Brown
BCCWH-321611-10N	10.0 @ 100MHz	10,5	40 @ 300MHz	4000	0.08	1000	Red
BCCWH-321611-12N	12.0 @ 100MHz	10,5	40 @ 300MHz	3200	0.08	1000	Orange
BCCWH-321611-15N	15.0 @ 100MHz	10,5	40 @ 300MHz	3200	0.10	1000	Yellow
BCCWH-321611-18N	18.0 @ 100MHz	10,5	50 @ 300MHz	2800	0.10	1000	Green
BCCWH-321611-22N	22.0 @ 100MHz	10,5	50 @ 300MHz	2200	0.10	1000	Blue
BCCWH-321611-24N	24.0 @ 100MHz	10,5	50 @ 300MHz	2000	0.10	1000	Red
BCCWH-321611-27N	27.0 @ 100MHz	10,5,2	50 @ 300MHz	1800	0.11	1000	Violet
BCCWH-321611-33N	33.0 @ 100MHz	10,5,2	55 @ 300MHz	1800	0.11	1000	Gray
BCCWH-321611-39N	39.0 @ 100MHz	10,5,2	55 @ 300MHz	1800	0.12	1000	White
BCCWH-321611-47N	47.0 @ 100MHz	10,5,2	55 @ 300MHz	1500	0.13	1000	Black
BCCWH-321611-56N	56.0 @ 100MHz	10,5,2	55 @ 300MHz	1450	0.14	1000	Brown
BCCWH-321611-62N	62.0 @ 100MHz	10,5,2	55 @ 300MHz	1200	0.20	1000	Violet
BCCWH-321611-68N	68.0 @ 100MHz	10,5,2	55 @ 300MHz	1200	0.26	950	Red
BCCWH-321611-82N	82.0 @ 100MHz	10,5,2	55 @ 300MHz	1200	0.21	920	Orange
BCCWH-321611-91N	91.0 @ 100MHz	10,5,2	55 @ 300MHz	1100	0.24	900	White
BCCWH-321611-R10	100 @ 100MHz	10,5,2	55 @ 300MHz	1100	0.26	850	Yellow
BCCWH-321611-R12	120 @ 100MHz	10,5,2	55 @ 300MHz	750	0.26	800	Green
BCCWH-321611-R15	150 @ 100MHz	10,5,2	60 @ 300MHz	950	0.31	750	Blue
BCCWH-321611-R18	180 @ 50MHz	10,5,2	55 @ 300MHz	900	0.43	700	Violet
BCCWH-321611-R22	220 @ 50MHz	10,5,2	55 @ 300MHz	760	0.50	670	Gray
BCCWH-321611-R27	270 @ 50MHz	10,5,2	55 @ 300MHz	740	0.56	630	White
BCCWH-321611-R30	300 @ 50MHz	10,5,2	50 @ 150MHz	680	0.60	600	Green
BCCWH-321611-R33	330 @ 50MHz	10,5,2	45 @ 150MHz	650	0.62	590	Black
BCCWH-321611-R36	360 @ 50MHz	10,5,2	45 @ 150MHz	600	0.65	550	Blue
BCCWH-321611-R39	390 @ 50MHz	10,5,2	45 @ 150MHz	600	0.75	530	Brown
BCCWH-321611-R47	470 @ 50MHz	10,5,2	45 @ 150MHz	550	1.30	490	Red
BCCWH-321611-R56	560 @ 35MHz	10,5,2	45 @ 150MHz	470	1.34	460	Orange
BCCWH-321611-R62	620 @ 35MHz	10,5,2	45 @ 150MHz	470	1.58	460	Gray
BCCWH-321611-R68	680 @ 35MHz	10,5,2	45 @ 150MHz	450	1.58	430	Yellow
BCCWH-321611-R75	750 @ 35MHz	10,5,2	45 @ 150MHz	440	2.25	320	White
BCCWH-321611-R82	820 @ 35MHz	10,5,2	45 @ 150MHz	420	1.82	400	Green
BCCWH-321611-R91	910 @ 35MHz	10,5,2	45 @ 150MHz	410	2.95	310	Gray
BCCWH-321611-1R0	1000 @ 35MHz	10,5,2	45 @ 150MHz	400	2.80	320	Blue
BCCWH-321611-1R2	1200 @ 35MHz	10,5,2	45 @ 150MHz	380	3.20	300	Violet

Working Temperature : -40 °C ~ 125 °C

## Wire-Wound Chip Inductor 1206 (321611) Series



## Wire-Wound Chip Inductor 1206 (321611) Series

### RELIABILITY TEST

TEST ITEMS	SPECIFICATIONS	TEST CONDITIONS / TEST METHODS
<b>*ELECTRICAL PERFORMANCE TEST</b>		
INDUCTANCE	REF.ER TO STANDARD ELECTRICAL CHARACTERISTIC LIST	HP 4291B
Q		HP 4291B
SRF		HP 8753D
DC RESISTANCE $R_{DC}$		Micro-Ohmmeter (GOM-801G)
RATED CURRENT IDC		APPLIED THE CURRENT TO COILS, THE INDUCTANCE CHANGE SHOULD BE LESS THAN 10% TO INITIAL VALUE
WITHSTANDING VOLTAGE TEST	1.AFTER TEST, INDUCTORS SHALL BE NO EVIDENCE OF ELECTRICAL AND MECHANICAL DAMAGE	AC VOLTAGE OF 500 VAC APPLIED BETWEEN INDUCTORS TERMINAL AND CASE FOR 1 MINUTE
INSULATION RESISTANCE TEST	1000 MOHM MIN.	100 VDC APPLIED BETWEEN INDUCTOR TERMINAL AND CASE
<b>*MECHANICAL PERFORMANCE TEST</b>		
VIBRATION TEST (LOW FREQUENCY)	1.INDUCTORS SHOULD HAVE NO EVIDENCE OF ELECTRICAL AND MECHANICAL DAMAGE 2.INDUCTANCE SHOULD NOT CHANGE MORE THAN $\pm 10\%$ 3.Q SHOULD NOT CHANGE MORE THAN $\pm 20\%$	1. AMPLITUDE: 1.5m/m 2. FREQUENCY: 10-55-10 Hz(1min) 3. DIRECTION: X, Y, Z 4. DURATION: 2 HRS/X, Y, Z
RESISTANCE TO SOLDERING TEST	1.INDUCTORS SHOULD HAVE NO EVIDENCE OF ELECTRICAL AND MECHANICAL DAMAGE 2.INDUCTANCE SHOULD NOT CHANGE MORE THAN $\pm 5\%$ 3.Q SHOULD NOT CHANGE MORE THAN $\pm 10\%$	1. PLUMBIC INDUCTOR: INDUCTORS SHOULD BE REF.LOW TO A .P.C BOARD. USING 63Sn/37Pb SOLDER PASTE.SOLDER PROCESS SHOULD BE 230 $^{\circ}$ C FOR 10 $\pm 2$ SECONDS 2. LEAD-FREE INDUCTOR: INDUCTORS SHOULD BE REF.LOW TO A .P.C BOARD. USING 96.5Sn/3.5Ag SOLDER PASTE.SOLDER PROCESS SHOULD BE 270 $^{\circ}$ C FOR 10 $\pm 2$ SECONDS.
COMPONENT ADHESION (PUSH TEST)	1 lbs. FOR 0402 2 lbs. FOR 0603 4 lbs. FOR THE REST	1. PLUMBIC INDUCTOR: THE DEVICE SHOULD BE REF.LOW SOLDERED (230 $^{\circ}$ C $\pm 5^{\circ}$ C FOR 10 SECONDS) TO A TINNED COPPER SUBSTRATE. A DYNAMETER FORCE GAUGE SHOULD BE APPLIED TO THE SIDE OF THE COMPONENT. THE DEVICE MUST WITHSTAND A MINIMUM FORCE OF 2 OR 4 POUNDS WITHOUT A FAILURE OF THE TERMINATION ATTACHED TO COMPONENT 2. LEAD-FREE INDUCTOR: . THE DEVICE SHOULD BE REF.LOW SOLDERED (260 $^{\circ}$ C $\pm 5^{\circ}$ C FOR 10 SECONDS) TO A TINNED COPPER SUBSTRATE. A DYNAMETER FORCE GAUGE SHOULD BE APPLIED TO THE SIDE OF THE COMPONENT. THE DEVICE MUST WITHSTAND A MINIMUM FORCE OF 2 OR 4 POUNDS WITHOUT A FAILURE OF THE TERMINATION ATTACHED TO COMPONENT
DROP TEST	AFTER TEST ,THE CHIP INDUCTOR DON'T FELL OR BROKE ON THE P.C BOARD.	DROP 1 TIME FOR EACH FACE AND 1 TIME FOR EACH CORNER.TOTAL DROP 10 TIMES. DROP HEIGHT :100 CM DROP WEIGHT :125 g (1. PLUMBIC INDUCTOR: THE INDUCTOR SHOULD SOLDER INTO P.C BOARD WITH 63Sn/37Pb 2. LEAD-FREE INDUCTOR: THE INDUCTOR SHOULD SOLDER INTO P.C BOARD WITH 96.5Sn/3.5Ag)

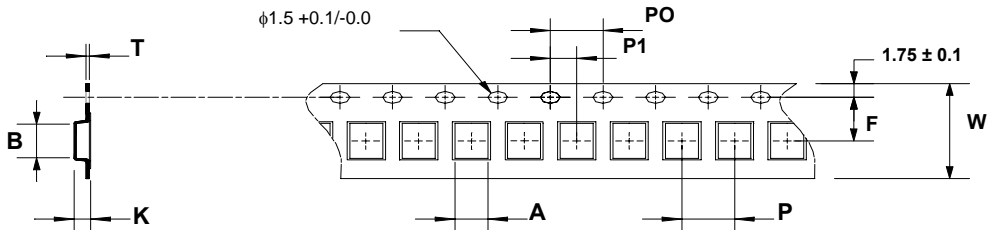
# Specification For Approval

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SOLDERABILITY TEST	THE TERMINAL SHOULD AT LEAST BE 90% COVERED WITH SOLDER	1. PLUMBIC INDUCTOR: AFTER FLUXING (ALPHA 100 OR EQUIV), INDUCTOR SHALL BE DIPPED IN A MELTED SOLDER BATH (63Sn/37Pb) AT $232 \pm 5^\circ\text{C}$ FOR 5 SECONDS. 2. LEAD-FREE INDUCTOR: AFTER FLUXING (ALPHA 100 OR EQUIV), INDUCTOR SHALL BE DIPPED IN A MELTED SOLDER BATH (SnCuNi) AT $250 \pm 5^\circ\text{C}$ FOR 3 SECONDS.
RESISTANCE TO SOLVENT TEST	THERE SHALL BE NO CASE OF DEFORMATION CHANGE IN APPEARANCE OR OBLITERATION OF MARKING.	MIL-STD202F, METHOD 215D
*CLIMATIC TEST		
TEMPERATURE CHARACTERISTIC	1. INDUCTOR SHALL HAVE NO EVIDENCE OF ELECTRICAL AND MECHANICAL DAMAGE 2. INDUCTANCE SHALL NOT CHANGE MORE THAN $\pm 10\%$ 3. SHALL NOT CHANGE MORE THAN $\pm 20\%$	$-40^\circ\text{C} \sim +125^\circ\text{C}$
HUMIDITY TEST		1. TEMP : $40 \pm 2^\circ\text{C}$ 2. R.H. : 90 – 95% 3. TIME : $96 \pm 2$ HOURS
LOW TEMPERATURE STORAGE TEST		1. TEMP : $-40 \pm 2^\circ\text{C}$ 2. TIME : $96 \pm 2$ HOURS 3. INDUCTORS ARE TO BE TESTED AFTER 1 HOUR AT ROOM TEMPERATURE.
THERMAL SHOCK TEST		<p>TOTAL : 5 CYCLES (1. PLUMBIC INDUCTOR: THE INDUCTOR SHOULD SOLDER INTO P.C BOARD WITH 63Sn/37Pb 2. LEAD-FREE INDUCTOR: THE INDUCTOR SHOULD SOLDER INTO P.C BOARD WITH 96.5Sn/3.5Ag)</p>
HIGH TEMPERATURE STORAGE TEST		1. TEMP : $125 \pm 2^\circ\text{C}$ 2. TIME : $96 \pm 2$ HOURS 3. INDUCTORS ARE TO BE TESTED AFTER 1 HOUR AT ROOM TEMPERATURE.
HIGH TEMPERATURE LOAD LIFE TEST	THERE SHOULD BE NO EVIDENCE OF SHORT OR OPEN CIRCUIT	1. TEMP : $85 \pm 2^\circ\text{C}$ 2. TIME : $1000 \pm 12$ HOURS 3. LOAD : ALLOWED DC CURRENT (1. PLUMBIC INDUCTOR: THE INDUCTOR SHOULD SOLDER INTO P.C BOARD WITH 63Sn/37Pb (2. LEAD-FREE INDUCTOR: THE INDUCTOR SHOULD SOLDER INTO P.C BOARD WITH 96.5Sn/3.5Ag)
HUMIDITY LOAD LIFE		1. TEMP : $40 \pm 2^\circ\text{C}$ 2. R.H. : 90 – 95% 3. TIME : $1000 \pm 12$ HOURS 4. LOAD : ALLOWED DC CURRENT (1. PLUMBIC INDUCTOR: THE INDUCTOR SHOULD SOLDER INTO P.C BOARD WITH 63Sn/37Pb (2. LEAD-FREE INDUCTOR: THE INDUCTOR SHOULD SOLDER INTO P.C BOARD WITH 96.5Sn/3.5Ag)
NOTE : UNLESS OTHERWISE SPECIFIED, ALLOW THE SPECIMEN TO STAND AT ROOM TEMPERATURE FOR 1 HOUR OR MORE BUT NOT MORE THAN 2 HOURS, MEASURE THE ELECTRICAL AND MECHANICAL PERFORMANCES.		

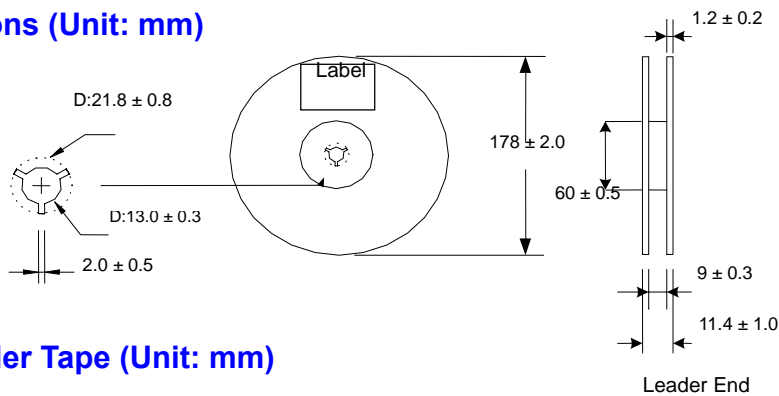
## Wire-Wound Chip Inductor 1206 (321611) Series

### Tape Dimensions (Unit:mm)

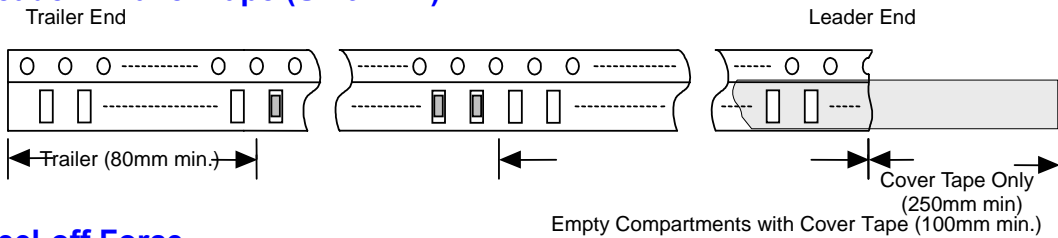


	Tape Dimensions (mm)									Parts (pcs)
	A	B	K	T	F	P	P0	P1	W	7"
321611	1.95	3.50	1.50	0.23	3.5	4	4	2	8	2000

### Reel Dimensions (Unit: mm)



### Leader / Trailer Tape (Unit: mm)



### Peel-off Force

Peel-off force should be in the range of 0.1~0.6N at a peel-off speed of  $300 \pm 10$  mm/min

Peel-off force should be in the range of 0.05~0.7N at a peel-off speed of  $300 \pm 10$  mm/min (paper carrier)

