

Chip Inductor AWP Series

**Automotive
AEC-Q200**

RoHS Compliant
Halogen Free
REACH Compliant



- RF
Circuit
- Unshield
- Wire
Wound
- Ceramic
- High
Q

Part Numbering

A	WHP	00	110706	10N	H	00
Grade	Series Name	Control Code	Dimensions Code (mm)	Inductance (nH)	Tolerance	Internal Code
			110706 1.1x0.7x0.6	3N3 3.3	B ±0.1nH	
			161008 1.6x1x0.82	10N 10	C ±0.2nH	
				R10 100	H ±3%	
					J ±5%	

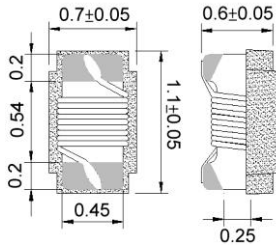
This specification applies to Wire Wound Chip Inductors for Automotive Electronics based on AEC-Q200 except for Power train and Safety.

Chip Inductor AWHP Series

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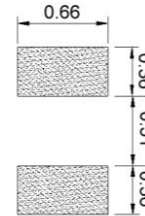
AWHP00110706 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance (nH)	L/Q Test		Q Typ.	SRF (MHz)Typ.	RDC (Ω)Max.	I _{rms} (mA)Max.	Tolerance
		Freq. (MHz)						
AWHP001107061N0□00	1	250/250		18	16000	0.03	2300	0.1nH
AWHP001107062N0□00	2	250/250		18	15200	0.038	2100	0.2nH
AWHP001107062N2□00	2.2	250/250		25	15100	0.045	2100	0.2nH
AWHP001107062N4□00	2.4	250/250		25	14000	0.045	2000	0.2nH
AWHP001107062N7□00	2.7	250/250		20	13000	0.09	1500	0.2nH
AWHP001107063N3□00	3.3	250/250		20	12800	0.05	1700	3,5
AWHP001107063N6□00	3.6	250/250		28	11700	0.065	1700	3,5
AWHP001107063N9□00	3.9	250/250		28	9500	0.065	1700	3,5
AWHP001107064N3□00	4.3	250/250		22	7150	0.06	1600	3,5
AWHP001107064N7□00	4.7	250/250		18	6850	0.115	1500	3,5
AWHP001107065N1□00	5.1	250/250		20	6800	0.125	1200	3,5
AWHP001107065N6□00	5.6	250/250		28	6800	0.07	1600	3,5
AWHP001107066N2□00	6.2	250/250		25	5800	0.07	1600	3,5
AWHP001107066N8□00	6.8	250/250		25	5800	0.095	1500	3,5
AWHP001107067N5□00	7.5	250/250		25	5400	0.13	1400	3,5
AWHP001107068N2□00	8.2	250/250		30	5400	0.08	1500	3,5
AWHP001107068N7□00	8.7	250/250		30	5000	0.085	1500	3,5
AWHP001107069N0□00	9	250/250		28	5000	0.09	1400	3,5
AWHP001107069N5□00	9.5	250/250		30	4700	0.095	1400	3,5
AWHP0011070610N□00	10	250/250		30	4700	0.12	1300	3,5
AWHP0011070611N□00	11	250/250		30	4700	0.095	1400	3,5
AWHP0011070612N□00	12	250/250		25	4400	0.11	1200	3,5
AWHP0011070613N□00	13	250/250		30	4200	0.14	870	3,5
AWHP0011070615N□00	15	250/250		30	3900	0.13	1100	3,5
AWHP0011070616N□00	16	250/250		30	3700	0.15	850	3,5
AWHP0011070618N□00	18	250/250		30	3550	0.16	900	3,5
AWHP0011070619N□00	19	250/250		30	3500	0.175	850	3,5
AWHP0011070620N□00	20	250/250		30	3500	0.22	780	3,5
AWHP0011070621N□00	21	250/250		30	1700	0.36	450	3,5
AWHP0011070622N□00	22	250/250		30	3300	0.21	800	3,5
AWHP0011070623N□00	23	250/250		30	3150	0.21	700	3,5

Note: When ordering, please specify tolerance code. Tolerance: B=±0.1nH / C=±0.2nH / H=±3% / J=±5%

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- I_{rms} for a 15°C temperature rise from 25°C ambient.
- Measure Equipment:

L & Q: Agilent E4991A+Agilent HP16197A

SRF: Agilent HP8753D/Agilent E4991A

RDC: Chroma 16502

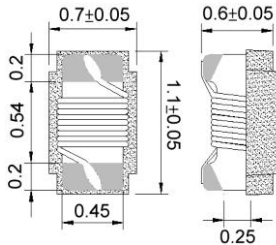
I_{rms}: HP4284A+HP42841A/HP4285A+HP42841A

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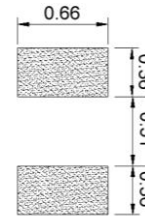
AWHP00110706 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance (nH)	L/Q Test		Q Typ.	SRF (MHz)Typ.	RDC (Ω)Max.	I _{rms} (mA)Max.	Tolerance
		Freq. (MHz)						
AWHP0011070624N□00	24	250/250		30	3150	0.26	700	3,5
AWHP0011070625N□00	25	250/250		30	3150	0.31	700	3,5
AWHP0011070626N□00	26	250/250		30	3150	0.275	700	3,5
AWHP0011070627N□00	27	250/250		30	3200	0.3	450	3,5
AWHP0011070630N□00	30	250/250		30	2900	0.35	450	3,5
AWHP0011070633N□00	33	250/250		30	2800	0.38	490	3,5
AWHP0011070636N□00	36	250/250		30	2800	0.48	480	3,5
AWHP0011070637N□00	37	250/250		30	2700	0.49	470	3,5
AWHP0011070639N□00	39	250/250		30	2600	0.52	450	3,5
AWHP0011070640N□00	40	250/250		30	2600	0.52	450	3,5
AWHP0011070643N□00	43	250/250		29	2500	0.72	450	3,5
AWHP0011070647N□00	47	250/250		30	2400	0.72	420	3,5
AWHP0011070647N□00	47	250/250		30	2400	0.72	420	3,5
AWHP0011070651N□00	51	250/250		30	2300	0.98	360	3,5

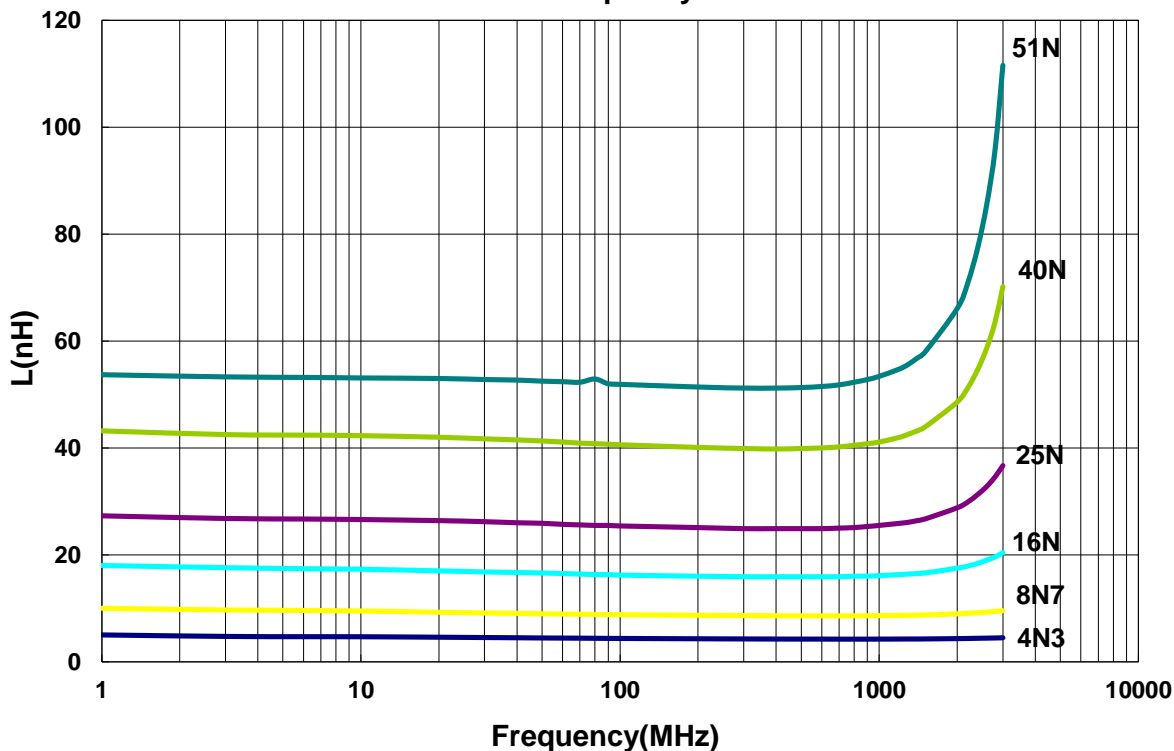
Note: When ordering, please specify tolerance code. Tolerance: B=±0.1nH / C=±0.2nH / H=±3% / J=±5%

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- I_{rms} for a 15°C temperature rise from 25°C ambient.
- Measure Equipment:
L & Q: Agilent E4991A+Agilent HP16197A
SRF: Agilent HP8753D/Agilent HP8722ES
RDC: Chroma 16502
I_{rms}: HP4284A+HP42841A/HP4285A+HP42841A

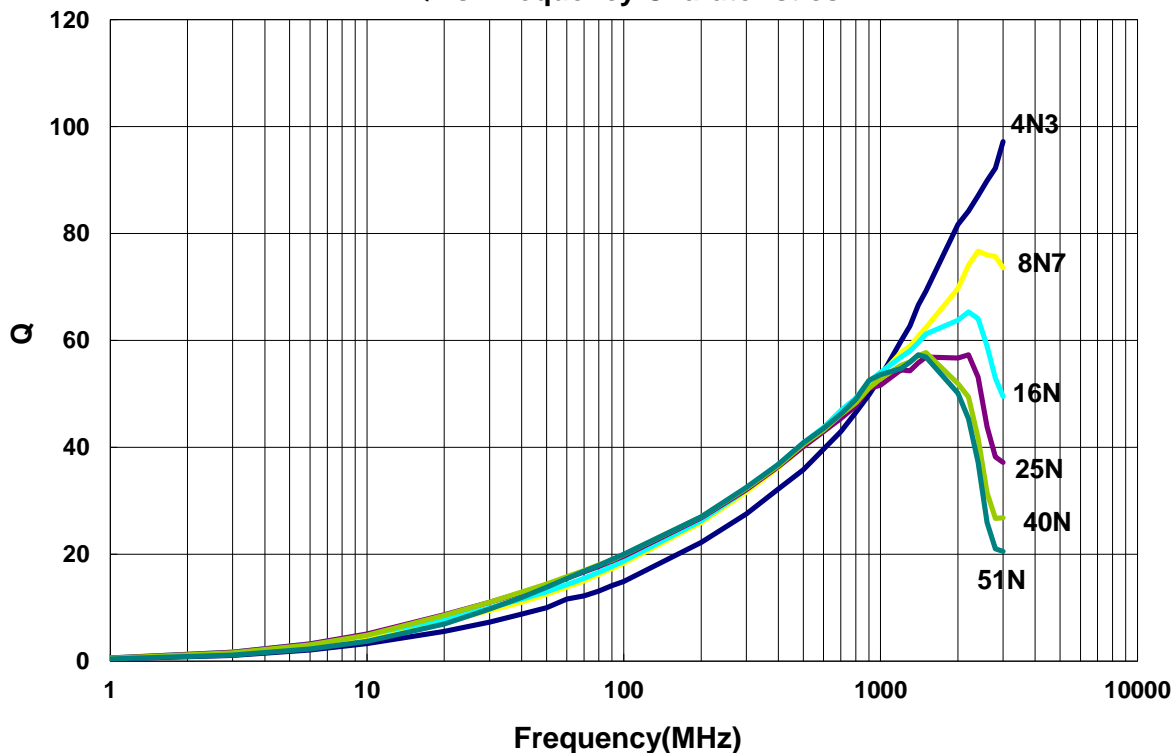
AWHP00110706 Type

■ Characteristics Graph

Inductance vs. Frequency Characteristics



Q vs. Frequency Characteristics

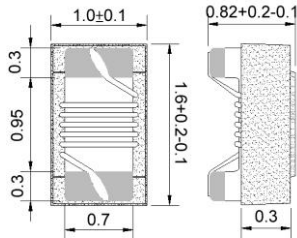


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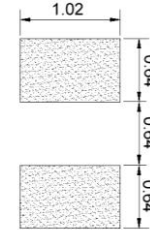
AWHP00161008 Type

Dimensions



unit:mm

Recommended Land Pattern



unit:mm

Electrical Characteristics

Part No.	Inductance (nH)	L/Q Test		Q Typ.	SRF (MHz)Typ.	RDC (Ω)Max.	I _{rms} (mA)Max.	Tolerance
		Freq. (MHz)						
AWHP001610081N8□00	1.8	250/250		23	16000	0.033	2100	5
AWHP001610082N2□00	2.2	250/250		13	15000	0.182	900	5
AWHP001610083N9□00	3.9	250/250		26	7500	0.062	1600	5
AWHP001610084N3□00	4.3	250/250		26	7500	0.088	1300	3,5
AWHP001610084N7□00	4.7	250/250		25	7900	0.13	1100	3,5
AWHP001610086N8□00	6.8	250/250		40	5800	0.065	1400	3,5
AWHP001610087N2□00	7.2	250/250		32	5400	0.1	1400	3,5
AWHP001610087N5□00	7.5	250/250		32	5300	0.1	1300	3,5
AWHP0016100811N□00	11	250/250		41	4100	0.086	1400	3,5
AWHP0016100815N□00	15	250/250		42	3600	0.11	1200	3,5
AWHP0016100816N□00	16	250/250		40	3500	0.125	1100	3,5
AWHP0016100822N□00	22	250/250		40	3150	0.195	850	3,5
AWHP0016100823N□00	23	250/250		40	3000	0.15	850	3,5
AWHP0016100824N□00	24	250/250		42	2950	0.125	1100	3,5
AWHP0016100827N□00	27	250/250		42	2800	0.2	780	3,5
AWHP0016100830N□00	30	250/250		49	2800	0.13	920	3,5
AWHP0016100833N□00	33	250/250		45	2700	0.17	680	3,5
AWHP0016100836N□00	36	250/250		44	2500	0.225	720	3,5
AWHP0016100839N□00	39	250/250		48	2450	0.19	680	3,5
AWHP0016100843N□00	43	250/250		45	2450	0.225	810	3,5
AWHP0016100847N□00	47	200/250		43	2300	0.24	680	3,5
AWHP0016100851N□00	51	200/250		42	2300	0.28	660	3,5
AWHP0016100856N□00	56	200/250		43	2200	0.3	610	3,5
AWHP0016100868N□00	68	200/250		43	2000	0.33	600	3,5
AWHP0016100872N□00	72	150/250		37	1900	0.42	550	3,5
AWHP0016100875N□00	75	150/250		37	1900	0.52	500	3,5
AWHP0016100882N□00	82	150/250		38	1800	0.46	510	3,5
AWHP0016100891N□00	91	150/250		45	1650	0.58	440	3,5
AWHP00161008R10□00	100	150/250		49	1700	0.54	470	3,5
AWHP00161008R11□00	110	150/250		47	1600	0.62	440	3,5

Note: When ordering, please specify tolerance code. Tolerance: H=±3% / J=±5%

1. Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
2. I_{rms} for a 15°C temperature rise from 25°C ambient.
3. Measure Equipment:

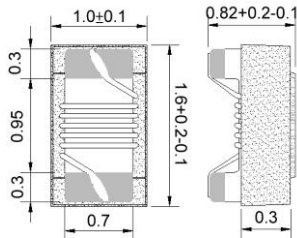
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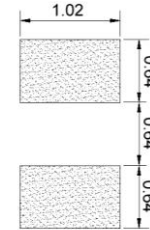
AWCS00161008 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance (nH)	L/Q Test		Q Typ.	SRF (MHz)Typ.	RDC (Ω)Max.	I _{rms} (mA)Max.	Tolerance
		Freq. (MHz)						
AWHP00161008R12□00	120	150/250		47	1550	0.72	420	3,5
AWHP00161008R15□00	150	150/250		47	1350	1.15	390	3,5
AWHP00161008R18□00	180	100/250		48	1300	1.5	310	3,5
AWHP00161008R20□00	200	100/250		47	1250	2	280	3,5
AWHP00161008R21□00	210	100/250		48	1200	2	280	3,5
AWHP00161008R22□00	220	100/250		47	1100	2	280	3,5
AWHP00161008R25□00	250	100/250		45	1050	3	240	3,5
AWHP00161008R27□00	270	100/250		46	1050	2.25	260	3,5
AWHP00161008R30□00	300	100/250		47	990	2.8	220	3,5
AWHP00161008R33□00	330	100/250		46	930	3.6	180	3,5
AWHP00161008R36□00	360	100/250		47	930	4	170	3,5
AWHP00161008R39□00	390	100/250		47	880	4	170	3,5

Note: When ordering, please specify tolerance code. Tolerance: H=±3% / J=±5%

1. Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
2. I_{rms} for a 15°C temperature rise from 25°C ambient.
3. Measure Equipment:

L & Q: Agilent E4991A+Agilent HP16197A

SRF: Agilent HP8753D/Agilent HP8722ES

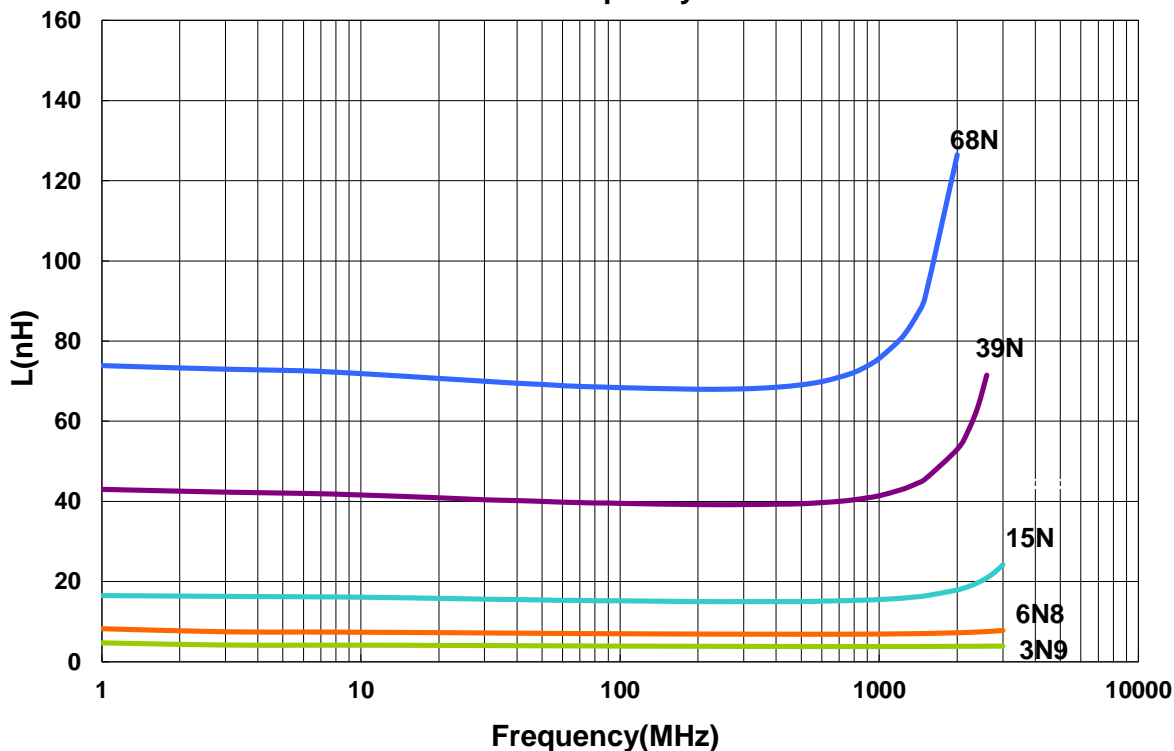
RDC: Chroma 16502

I_{rms}: HP4284A+HP42841A/HP4285A+HP42841A

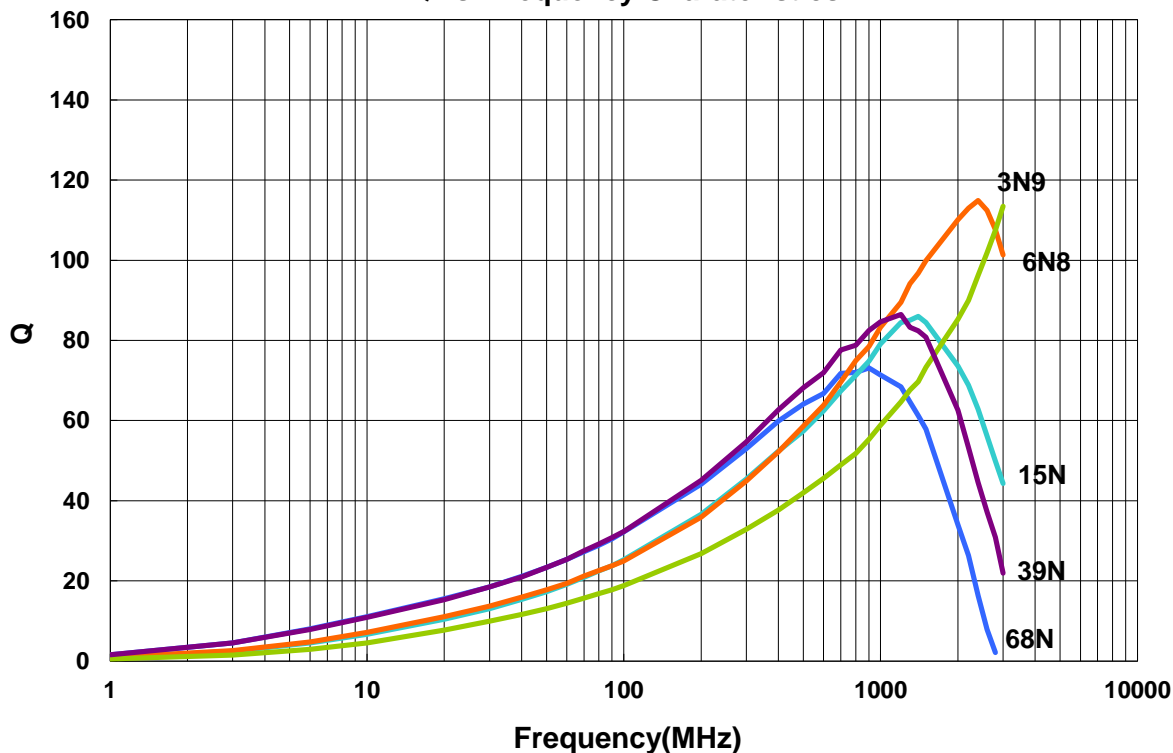
AWHP00161008 Type

■ Characteristics Graph

Inductance vs. Frequency Characteristics



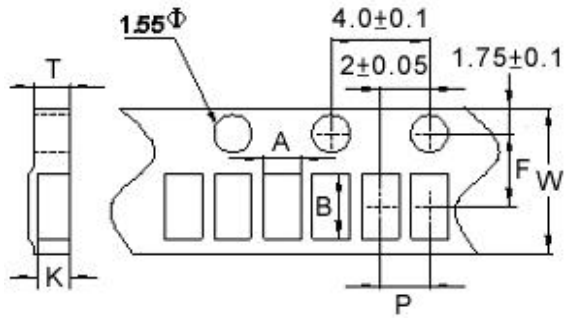
Q vs. Frequency Characteristics



■ Packaging

Tape Dimensions

Figure 1



Tape Material

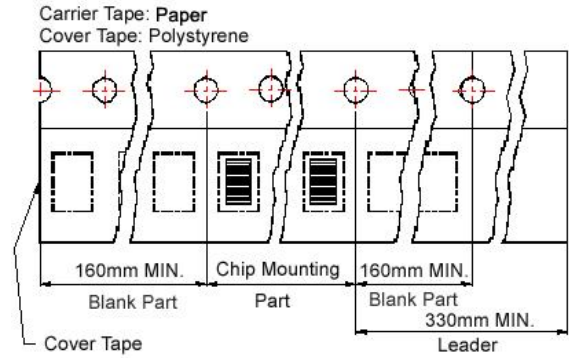
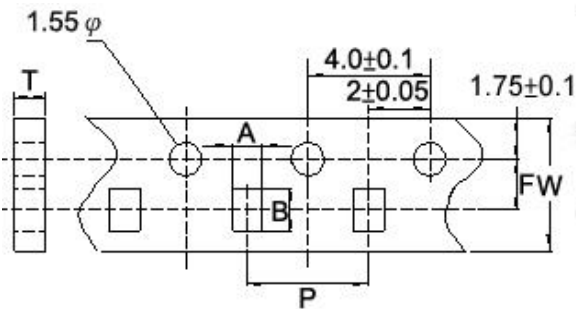
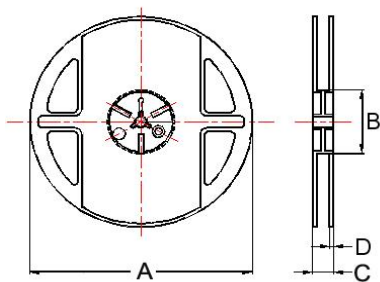


Figure 2



Reel Dimensions



Dimensions in mm

TYPE	Fig.	Tape Dimensions							Reel Dimensions				Quantity PCS / Reel
		A	B	T	W	P	F	K	A	B	C	D	
AWHP00110706	1	0.8	1.20	0.75	8	2	3.5	0.62	178	60	12	1.5	4000
AWHP00161008	2	1.23	1.90	1.05	8	4	3.5	-	178	60	12	1.5	4000