

AHSC Series

Features

- Can be used for high frequency bands up to GHz and stable inductance at high frequency.
- The high self resonant frequency realizes high Q value.
- Resin-coated surface enables excellent mounting.
- Low DC resistance design is ideal for low loss high output and low power consumption.

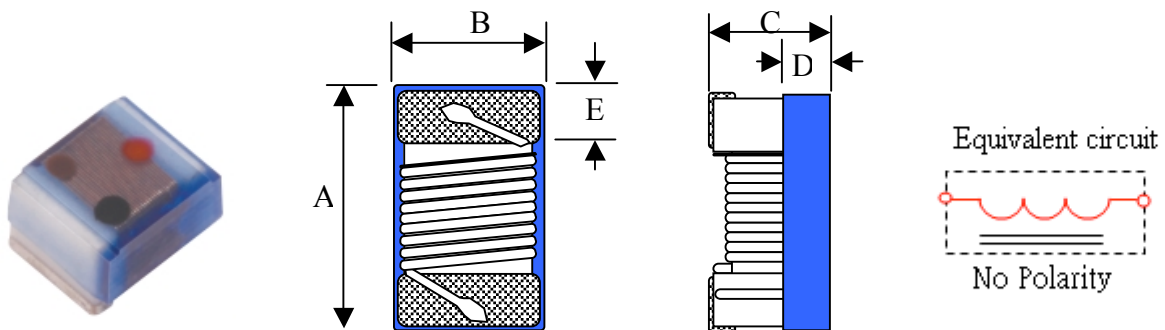
Applications

- For high-frequency applications including mobile phones, portable phones, such as PA, ANT, VCO, SAW tec.
- Mobile phones such as GSM, CDMA, PDC, tec.
- Bluetooth W-LAN.

Test Equipment and Conditions

- L, Q : Agilent/HP E4991A+ Agilent/HP16197A.
- SRF : Agilent/HP E4991A+ Agilent/HP 16197A.
- RDC : DIGITAL MILLIOHM METER Chroma 16502, or equivalent.
- IDC for Inductance drop 10% from its value without current.
- Operating temperature range from -40°C to 125°C.

External Dimensions (Unit:m/m)



TYPE	METRIC	A	B	C	D	E	Q'Ty / Reel
AHSC100505	0402	1.19Max	0.70 Max	0.66 Max	0.25Ref	0.23	4000
AHSC160808	0603	1.80 Max	1.20 Max	1.02 Max	0.45 Ref	0.33	4000
AHSC201212	0805	2.40 Max	1.65 Max	1.45 Max	0.65 Ref	0.44	2000
AHSC292520	1008	2.90 Max	2.54 Max	2.03 Max	1.30 Ref	0.50	2000

Part Number Code

AHSC 100505 □ 1N0
 A B C D

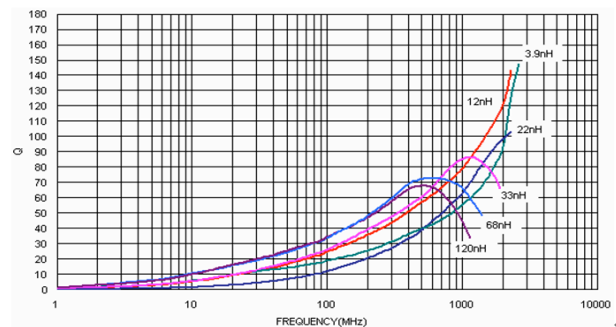
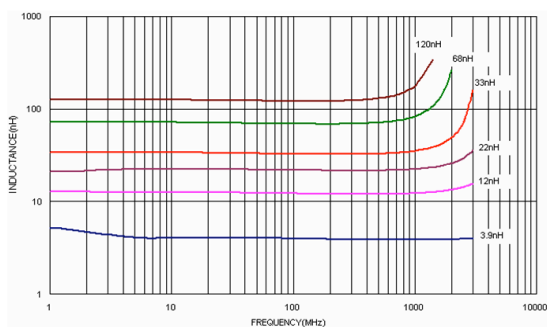
A: Series Name Wire Wound Inductors
 B: Dimensions(mm) 100505: 0402
 C: Tolerance G: ±2% J: ±5% K: ±10%
 D: Inductance 1N0=1.0nH

AHSC Series

Part Number	Inductance (nH)/MHz	Inductance Tolerance	Q Min.	900MHz		1.7GHz		SRF (GHz)	RDC (Ω)	IDC (mA)
				L typ	Q typ	L typ	Q typ	Min.	Max.	Max.
AHSC100505□-1N0	1.0 /250	J/K	16	1.02	77	1.02	69	12.70	0.045	1360
AHSC100505□-1N9	1.9 /250	J/K	16	1.72	68	1.74	82	11.30	0.070	1040
AHSC100505□-2N0	2.0/250	J/K	16	1.93	54	1.93	75	11.10	0.070	1040
AHSC100505□-2N2	2.2/250	J/K	19	2.19	59	2.23	100	10.80	0.070	960
AHSC100505□-2N4	2.4/250	J/K	15	2.24	51	2.27	68	10.50	0.068	790
AHSC100505□-2N7	2.7/250	J/K	16	2.58	42	2.60	61	10.40	0.120	640
AHSC100505□-3N3	3.3/250	J/K	19	3.10	65	3.12	87	7.00	0.066	840
AHSC100505□-3N6	3.6/250	J/K	19	3.56	45	3.62	71	6.80	0.066	840
AHSC100505□-3N9	3.9/250	J/K	19	3.89	50	4.00	75	6.00	0.066	840
AHSC100505□-4N3	4.3/250	J/K	18	4.19	47	4.30	71	6.00	0.091	700
AHSC100505□-4N7	4.7/250	J/K	15	4.55	48	4.68	68	4.77	0.130	640
AHSC100505□-5N1	5.1/250	J/K	20	5.15	56	5.25	82	4.80	0.083	800
AHSC100505□-5N6	5.6/250	J/K	20	5.16	54	5.28	81	4.80	0.083	760
AHSC100505□-6N2	6.2/250	J/K	20	6.16	52	6.37	76	4.80	0.083	760
AHSC100505□-6N8	6.8/250	J/K	20	6.56	63	6.93	78	4.80	0.120	680
AHSC100505□-7N5	7.5/250	J/K	22	7.91	60	8.22	88	4.80	0.100	680
AHSC100505□-8N2	8.2/250	J/K	22	8.50	57	8.85	84	4.40	0.100	680
AHSC100505□-8N7	8.7/250	J/K	18	8.78	54	9.21	73	4.10	0.200	480
AHSC100505□-9N0	9.0/250	J/K	22	9.07	62	9.53	78	4.16	0.100	680
AHSC100505□-9N5	9.5/250	J/K	18	9.42	54	9.98	69	4.00	0.200	480
AHSC100505□-10N	10/250	J/K	21	9.80	50	10.10	67	3.90	0.200	480
AHSC100505□-11N	11/250	J/K	24	10.70	52	11.20	78	3.68	0.120	640
AHSC100505□-12N	12/250	J/K	24	11.90	53	12.70	71	3.60	0.120	640
AHSC100505□-13N	13/250	J/K	24	13.40	51	14.63	57	3.45	0.210	440
AHSC100505□-15N	15/250	J/K	24	14.60	55	15.50	77	3.28	0.170	560
AHSC100505□-16N	16/250	J/K	24	16.60	46	18.86	47	3.10	0.220	560
AHSC100505□-18N	18/250	J/K	25	18.30	57	20.28	62	3.10	0.230	420
AHSC100505□-19N	19/250	J/K	24	19.10	50	21.10	67	3.04	0.200	480
AHSC100505□-20N	20/250	J/K	25	20.70	52	23.66	53	3.00	0.250	420
AHSC100505□-22N	22/250	J/K	25	23.20	53	26.75	53	2.80	0.300	400
AHSC100505□-23N	23/250	J/K	22	23.80	49	26.90	64	2.72	0.300	400
AHSC100505□-24N	24/250	J/K	25	25.10	51	29.50	50	2.70	0.300	400
AHSC100505□-27N	27/250	J/K	24	28.70	49	33.50	63	2.48	0.300	400
AHSC100505□-30N	30/250	J/K	25	31.10	46	38.50	39	2.35	0.300	400
AHSC100505□-33N	33/250	J/K	24	34.90	31	41.74	32	2.35	0.400	400
AHSC100505□-36N	36/250	J/K	24	39.50	44	48.40	53	2.32	0.440	320
AHSC100505□-39N	39/250	J/K	25	41.70	47	50.23	45	2.10	0.550	200
AHSC100505□-40N	40/250	J/K	24	39.00	44	47.40	33	2.24	0.440	320
AHSC100505□-43N	43/250	J/K	25	45.80	46	61.55	34	2.03	0.810	100
AHSC100505□-47N	47/250	J/K	20	50.00	38	--	--	2.10	0.830	150
AHSC100505□-51N	51/250	J/K	25	56.60	40	--	--	1.75	0.820	100
AHSC100505□-56N	56/250	J/K	22	62.80	42	--	--	1.76	0.970	100
AHSC100505□-68N	68/250	J/K	22	78.20	36	--	--	1.62	1.120	100
AHSC100505□-82N	82/250	J/K	20	--	--	--	--	1.26	1.550	50
AHSC100505□-R10	100/250	J/K	20	--	--	--	--	1.16	2.000	30

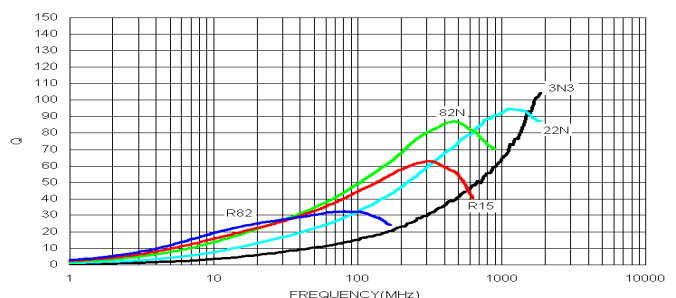
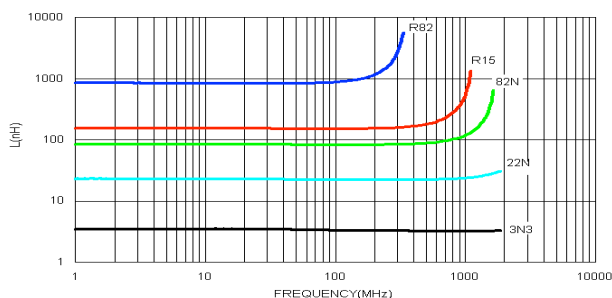
AHSC Series

Part Number	Inductance (nH)/MHz	Inductance Tolerance	Q/MHz Min.	SRF(MHz) Min.	RDC(Ω) Max.	IDC(mA) Max.
AHSC160808□-1N6	1.6/250	J/K	18/250	12500	0.030	700
AHSC160808□-1N8	1.8/250	J/K	16/250	12500	0.045	700
AHSC160808□-3N3	3.3/250	J/K	30/250	5900	0.045	700
AHSC160808□-3N6	3.6/250	J/K	22/250	5900	0.063	700
AHSC160808□-3N9	3.9/250	J/K	22/250	6900	0.080	700
AHSC160808□-4N3	4.3/250	J/K	22/250	5900	0.063	700
AHSC160808□-4N7	4.7/250	J/K	20/250	5800	0.085	700
AHSC160808□-5N1	5.1/250	J/K	20/250	5700	0.115	700
AHSC160808□-5N6	5.6/250	J/K	18/250	5800	0.160	700
AHSC160808□-6N3	6.3/250	J/K	26/250	5700	0.115	700
AHSC160808□-6N8	6.8/250	J/K	27/250	5800	0.125	700
AHSC160808□-7N5	7.5/250	J/K	28/250	4800	0.115	700
AHSC160808□-8N2	8.2/250	J/K	30/250	4700	0.125	700
AHSC160808□-8N7	8.7/250	J/K	28/250	4600	0.109	700
AHSC160808□-9N5	9.5/250	J/K	28/250	5400	0.145	700
AHSC160808□-10N	10/250	G/J/K	31/250	4800	0.145	700
AHSC160808□-11N	11/250	G/J/K	30/250	4000	0.145	700
AHSC160808□-12N	12/250	G/J/K	35/250	4000	0.145	700
AHSC160808□-15N	15/250	G/J/K	35/250	4000	0.180	700
AHSC160808□-16N	16/250	G/J/K	34/250	3300	0.170	700
AHSC160808□-18N	18/250	G/J/K	35/250	3100	0.180	700
AHSC160808□-22N	22/250	G/J/K	38/250	3000	0.205	700
AHSC160808□-23N	23/250	G/J/K	38/250	2850	0.205	700
AHSC160808□-24N	24/250	G/J/K	36/250	2650	0.205	700
AHSC160808□-27N	27/250	G/J/K	40/250	2800	0.220	600
AHSC160808□-30N	30/250	G/J/K	37/250	2250	0.220	600
AHSC160808□-33N	33/250	G/J/K	40/250	2300	0.240	600
AHSC160808□-36N	36/250	G/J/K	37/250	2080	0.250	600
AHSC160808□-39N	39/250	G/J/K	40/250	2200	0.260	600
AHSC160808□-43N	43/250	G/J/K	38/250	2000	0.280	600
AHSC160808□-47N	47/200	G/J/K	38/200	2000	0.280	600
AHSC160808□-56N	56/200	G/J/K	38/200	1900	0.310	600
AHSC160808□-68N	68/200	G/J/K	37/200	1700	0.340	600
AHSC160808□-72N	72/150	G/J/K	34/150	1700	0.490	400
AHSC160808□-82N	82/150	G/J/K	34/150	1700	0.540	400
AHSC160808□-R10	100/150	G/J/K	34/150	1400	0.580	400
AHSC160808□-R11	110/150	G/J/K	32/150	1350	0.610	300
AHSC160808□-R12	120/150	G/J/K	32/150	1300	0.750	300
AHSC160808□-R15	150/150	G/J/K	28/150	990	0.920	280
AHSC160808□-R18	180/100	G/J/K	25/100	990	1.250	240
AHSC160808□-R22	220/100	G/J/K	25/100	900	1.700	200
AHSC160808□-R27	270/100	G/J/K	24/100	900	2.450	170
AHSC160808□-R33	330/100	G/J/K	25/100	900	2.750	100
AHSC160808□-R39	390/100	G/J/K	25/100	900	3.150	100
AHSC160808□-R47	470/100	G/J/K	25/100	750	4.000	80



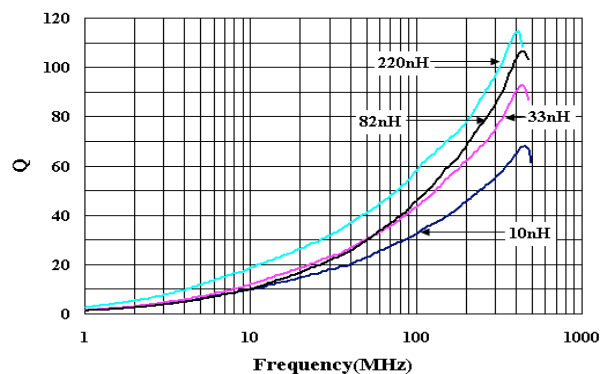
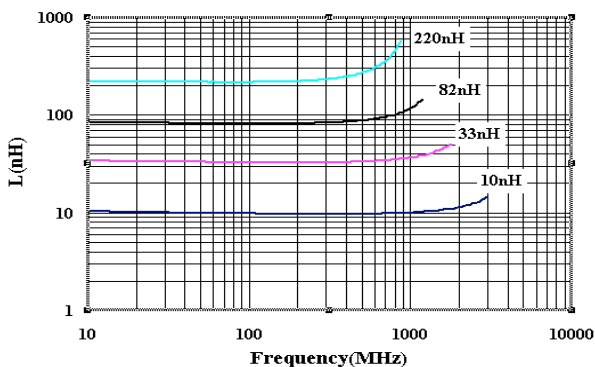
AHSC Series

Part Number	Inductance (nH)/MHz	Inductance Tolerance	Q/MHz Min.	SRF(MHz) Min.	RDC(Ω) Max.	IDC(mA) Max.
AHSC201212□-2N8	2.8/250	J/K	70/1500	7900	0.06	800
AHSC201212□-3N0	3.0/250	J/K	55/1500	7900	0.08	800
AHSC201212□-3N3	3.3/250	J/K	45/1500	7900	0.12	600
AHSC201212□-5N6	5.6/250	J/K	65/1000	5500	0.08	600
AHSC201212□-6N8	6.8/250	J/K	50/1000	5500	0.11	600
AHSC201212□-7N5	7.5/250	J/K	50/1000	4500	0.14	600
AHSC201212□-8N2	8.2/250	J/K	50/1000	4700	0.16	600
AHSC201212□-10N	10/250	G/J/K	60/500	4200	0.10	600
AHSC201212□-12N	12/250	G/J/K	50/500	4000	0.15	600
AHSC201212□-15N	15/250	G/J/K	50/500	3400	0.17	600
AHSC201212□-18N	18/250	G/J/K	50/500	3300	0.20	600
AHSC201212□-22N	22/250	G/J/K	55/500	2600	0.22	500
AHSC201212□-24N	24/250	G/J/K	50/500	2000	0.22	500
AHSC201212□-27N	27/250	G/J/K	55/500	2500	0.25	500
AHSC201212□-33N	33/250	G/J/K	60/500	2050	0.27	500
AHSC201212□-36N	36/250	G/J/K	55/500	1700	0.27	500
AHSC201212□-39N	39/250	G/J/K	60/500	2000	0.29	500
AHSC201212□-43N	43/200	G/J/K	60/500	1650	0.34	500
AHSC201212□-47N	47/200	G/J/K	60/500	1650	0.31	500
AHSC201212□-56N	56/200	G/J/K	60/500	1550	0.34	500
AHSC201212□-68N	68/200	G/J/K	60/500	1450	0.38	500
AHSC201212□-82N	82/150	G/J/K	65/500	1300	0.42	400
AHSC201212□-91N	91/150	G/J/K	65/500	1200	0.48	400
AHSC201212□-R10	100/150	G/J/K	65/500	1200	0.46	400
AHSC201212□-R11	110/150	G/J/K	50/250	1000	0.48	400
AHSC201212□-R12	120/150	G/J/K	50/250	1100	0.51	400
AHSC201212□-R15	150/100	G/J/K	50/250	920	0.56	400
AHSC201212□-R16	160/100	G/J/K	50/250	900	0.60	400
AHSC201212□-R18	180/100	G/J/K	50/250	870	0.64	400
AHSC201212□-R20	200/100	G/J/K	50/250	865	0.68	400
AHSC201212□-R22	220/100	G/J/K	50/250	850	0.70	400
AHSC201212□-R24	240/100	G/J/K	44/250	690	1.00	350
AHSC201212□-R25	250/100	G/J/K	48/250	680	1.00	350
AHSC201212□-R27	270/100	G/J/K	48/250	650	1.00	350
AHSC201212□-R33	330/100	G/J/K	48/250	600	1.40	310
AHSC201212□-R39	390/100	G/J/K	48/250	560	1.50	290
AHSC201212□-R47	470/50	G/J/K	30/100	375	1.76	250
AHSC201212□-R56	560/25	G/J/K	23/50	340	1.90	230
AHSC201212□-R62	620/25	G/J/K	23/50	220	2.20	210
AHSC201212□-R68	680/25	G/J/K	23/50	188	2.20	190
AHSC201212□-R82	820/25	G/J/K	23/50	215	2.35	180
AHSC201212□-1R0	1000/25	G/J/K	22/50	200	2.45	170



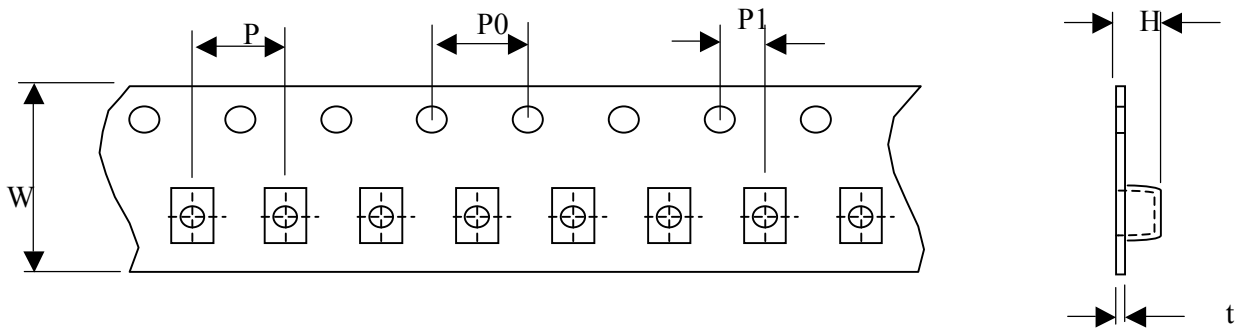
AHSC Series

Part Number	Inductance (nH)/MHz	Inductance Tolerance	Q/MHz Min.	SRF(MHz) Min.	RDC(Ω) Max.	IDC(mA) Max.
AHSC292520-10N	10/50	G/J/K	50/500	4100	0.08	1000
AHSC292520-12N	12/50	G/J/K	50/500	3300	0.09	1000
AHSC292520-15N	15/50	G/J/K	45/500	2500	0.10	1000
AHSC292520-18N	18/50	G/J/K	50/350	2500	0.11	1000
AHSC292520-22N	22/50	G/J/K	55/350	2400	0.12	1000
AHSC292520-27N	27/50	G/J/K	55/350	1600	0.13	1000
AHSC292520-33N	33/50	G/J/K	60/350	1600	0.14	1000
AHSC292520-39N	39/50	G/J/K	60/350	1500	0.15	1000
AHSC292520-47N	47/50	G/J/K	65/350	1500	0.16	1000
AHSC292520-56N	56/50	G/J/K	65/350	1300	0.18	1000
AHSC292520-68N	68/50	G/J/K	65/350	1300	0.20	1000
AHSC292520-82N	82/50	G/J/K	60/350	1000	0.22	1000
AHSC292520-R10	100/25	G/J/K	60/350	1000	0.56	650
AHSC292520-R12	120/25	G/J/K	60/350	950	0.63	650
AHSC292520-R15	150/25	G/J/K	45/100	850	0.70	580
AHSC292520-R18	180/25	G/J/K	45/100	750	0.77	620
AHSC292520-R22	220/25	G/J/K	45/100	700	0.84	500
AHSC292520-R27	270/25	G/J/K	45/100	600	0.91	500
AHSC292520-R33	330/25	G/J/K	45/100	570	1.05	450
AHSC292520-R39	390/25	G/J/K	45/100	500	1.12	470
AHSC292520-R47	470/25	G/J/K	45/100	450	1.19	470
AHSC292520-R56	560/25	G/J/K	45/100	415	1.33	400
AHSC292520-R62	620/25	G/J/K	45/100	375	1.40	300
AHSC292520-R68	680/25	G/J/K	45/100	375	1.47	400
AHSC292520-R75	750/25	G/J/K	45/100	360	1.54	360
AHSC292520-R82	820/25	G/J/K	45/100	350	1.65	400
AHSC292520-R91	910/25	G/J/K	35/50	320	1.68	380
AHSC292520-1R0	1000/25	G/J/K	35/50	290	1.75	370
AHSC292520-1R2	1200/7.9	G/J/K	35/50	250	2.00	310
AHSC292520-1R5	1500/7.9	G/J/K	28/50	200	2.30	330
AHSC292520-1R8	1800/7.9	G/J/K	28/50	160	2.60	300
AHSC292520-2R2	2200/7.9	G/J/K	28/50	160	2.80	280
AHSC292520-2R7	2700/7.9	G/J/K	22/25	135	3.20	290
AHSC292520-3R3	3300/7.9	G/J/K	22/25	110	3.40	290
AHSC292520-3R9	3900/7.9	G/J/K	20/25	100	3.60	260
AHSC292520-4R7	4700/7.9	G/J/K	20/25	90	4.00	260
AHSC292520-5R6	5600/7.9	G/J/K	18/7.9	40	4.00	240
AHSC292520-6R8	6800/7.9	G/J/K	18/7.9	40	4.90	200
AHSC292520-8R2	8200/7.9	G/J/K	18/7.9	25	6.10	170
AHSC292520-100	10000/2.5	G/J/K	18/7.9	25	8.00	150



Packaging

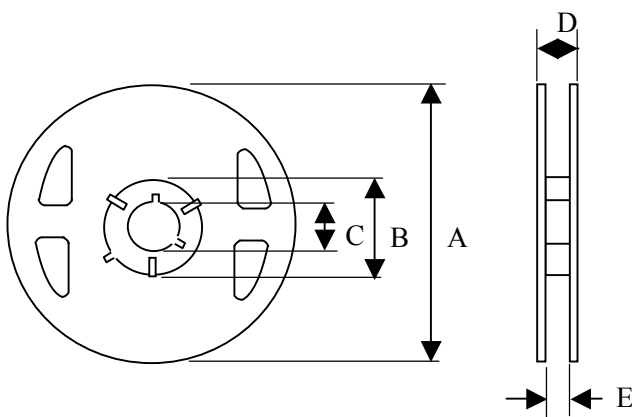
1. Tape dimensions



Unit: mm

TYPE	METRIC	W	P	P0	P1	H	T
AHSC100505	0402	8	2	4	2	NA	1
AHSC160808	0603	8	4	4	2	2.5	0.22
AHSC201212	0805	8	4	4	2	2.5	0.22
AHSC292520	1008	8	4	4	2	NA	0.23

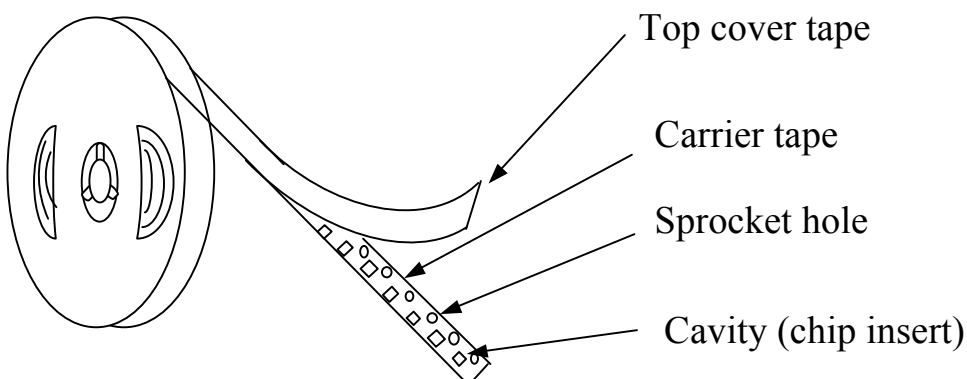
2 . Reel Dimensions



Unit: mm

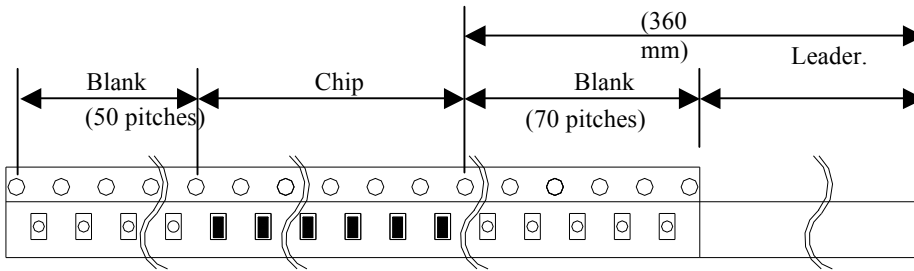
Symbol	A	B	C	D	E
T	180	60	13	14.4	8.4

3 . Tapping figure



4 . Packaging Form

There shall not continuation more than two vacancies of the product.



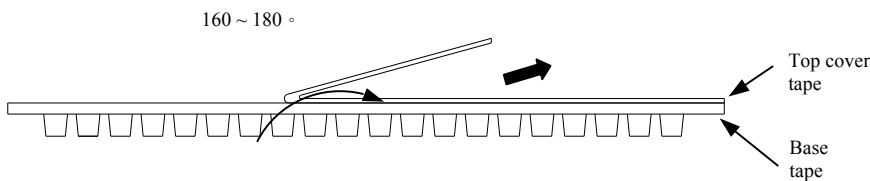
5 . Cover Tape Peel Strength

The force for tearing off cover tape is 0.1~0.6(N) in the arrow direction at the following conditions:

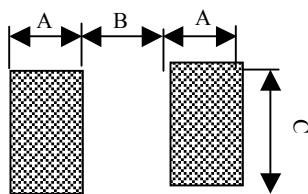
Temperature : 5 ~ 35°C

Humidity : 45 ~ 85%

Atmospheric pressure : 860 ~ 1060 hpa



6 . Recommended Footprint



Unit: mm

TYPE	METRIC	A	B	C
AHSC100505	0402	0.36	0.46	0.66
AHSC160808	0603	0.64	0.64	1.02
AHSC201212	0805	1.02	0.76	1.78
AHSC292520	1008	1.02	1.27	2.54

7 . Recommended Reflow Pattern

Reflow at 260°C/3 Cycles

