

SMD CHIP INDUCTORS / AOIC Series

● Features

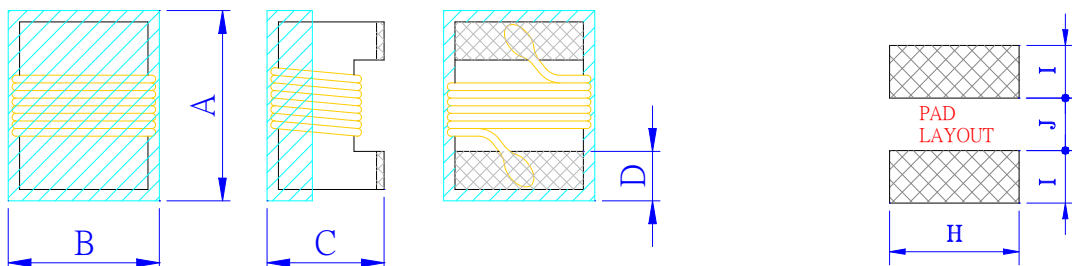
1. Utilizing a miniaturized winding structure.
2. These products provide low DC resistance and high current.
3. Precision inductance tolerance is available.

● Applications

1. Personal computers, Hard disk drives
2. ADSL modem Cable modem
3. Digital camera and other electronic equipment

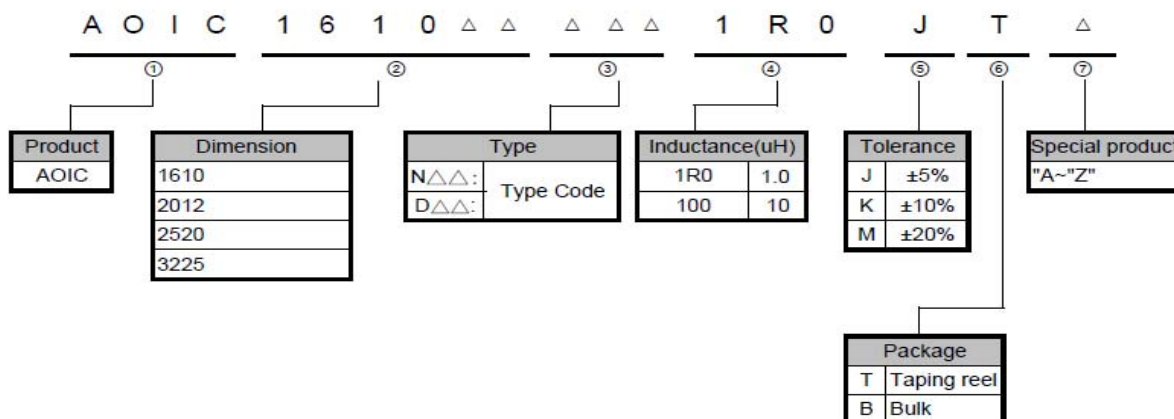


● Shape & Dimensions



TYPE	A (mm)	B (mm)	C (mm)	D (mm)	H (Ref.)	I (Ref.)	J (Ref.)
AOIC1610N	1.8 MAX.	1.2 MAX.	1.1 MAX.	0.33±0.1	1.02	0.64	0.64
AOIC2520N	2.9 MAX.	2.54 MAX.	2.03 MAX.	0.5±0.1	2.54	1.02	1.27
AOIC3225N	3.6 MAX.	2.9 MAX.	2.4 MAX.	0.5±0.1	2.70	1.20	2.00
AOIC1610D	1.8 MAX.	1.2 MAX.	1.0 MAX.	0.33	1.02	0.64	0.64
AOIC2012D	2.4 MAX.	1.65 MAX.	1.2±0.1	0.44±0.1	1.78	1.02	0.76

■ PRODUCT IDENTIFICATION



◆ AOIC1610N Series Specification :

Part Number	Inductance (uH)/MHz	Inductance Tolerance	Q (Min.)/MHz	SRF(Min.) (MHz)	DCR (Ω) Max.	IDC (mA) Max.
AOIC1610N47N□T	0.047/7.9	K	10/7.9	2000	0.075	1800
AOIC1610N51N□T	0.051/7.9	J	12/7.9	1500	0.075	1800
AOIC1610N68N□T	0.068/7.9	J	12/7.9	1500	0.12	1800
AOIC1610N72N□T	0.072/7.9	K	12/7.9	1500	0.12	1800
AOIC1610NR10□T	0.10/7.9	K	12/7.9	1150	0.13	1700
AOIC1610NR12□T	0.12/7.9	J , K	12/7.9	1100	0.15	1700
AOIC1610NR15□T	0.15/7.9	J , K	15/7.9	1050	0.15	1600
AOIC1610NR18□T	0.18/7.9	J , K	15/7.9	950	0.15	1500
AOIC1610NR22□T	0.22/7.9	J , K	15/7.9	900	0.30	1200
AOIC1610NR24□T	0.24/7.9	J , K	15/7.9	850	0.33	1200
AOIC1610NR27□T	0.27/7.9	J , K	15/7.9	835	0.35	1180
AOIC1610NR33□T	0.33/7.9	J , K	15/7.9	725	0.46	1000
AOIC1610NR39□T	0.39/7.9	J , K	15/7.9	680	0.41	1400
AOIC1610NR47□T	0.47/7.9	J , K	15/7.9	640	0.43	1400
AOIC1610NR56□T	0.56/7.9	J , K	15/7.9	630	0.44	1400
AOIC1610NR68□T	0.68/7.9	J , K	15/7.9	510	0.52	1340
AOIC1610NR78□T	0.78/7.9	J , K	15/7.9	465	0.63	1300
AOIC1610NR82□T	0.82/7.9	J , K	15/7.9	460	0.69	1200
AOIC1610N1R0□T	1.0/7.9	J , K	15/7.9	320	0.81	1100
AOIC1610N1R2□T	1.2/7.9	J , K	15/7.9	270	0.87	1000
AOIC1610N1R5□T	1.5/7.9	J , K	15/7.9	230	0.96	920
AOIC1610N1R8□T	1.8/7.9	J , K	15/7.9	210	1.10	900
AOIC1610N2R2□T	2.2/7.9	J , K	15/7.9	115	1.20	740
AOIC1610N2R7□T	2.7/7.9	J , K	15/7.9	100	1.38	700
AOIC1610N3R3□T	3.3/7.9	J , K	15/7.9	84	1.50	680
AOIC1610N3R9□T	3.9/7.9	J , K	15/7.9	75	1.50	600
AOIC1610N4R7□T	4.7/7.9	J , K	15/7.9	67	2.10	580
AOIC1610N5R6□T	5.6/7.9	J , K	15/7.9	55	2.37	540
AOIC1610N6R8□T	6.8/7.9	J , K	15/7.9	48	3.10	500
AOIC1610N7R8□T	7.8/7.9	J , K	15/7.9	40	3.35	460
AOIC1610N8R2□T	8.2/7.9	J , K	15/7.9	38	3.50	440
AOIC1610N100□T	10/7.9	J , K	15/7.9	32	4.46	400

NOTE :

* The operating temperature range is -25°C to +105°C (Including self-temperature rise)

* □ Tolerance J : $\pm 5\%$, K : $\pm 10\%$

* IDC for inductance drop 10% from its value without current.

◆AOIC2520N Series Specification :

Part Number	Inductance (uH)/MHz	Inductance Tolerance	Q (Typ.)/MHz	SRF(Min.) (MHz)	DCR (Ω) Max.	IDC (mA) Max.
AOIC2520NR22□T	0.22/25	J , K	35/25	800	0.15	2600
AOIC2520NR47□T	0.47/25	K	35/25	460	0.20	2400
AOIC2520NR82□T	0.82/25	J , K	35/25	360	0.35	1800
AOIC2520N1R0□T	1.0/7.9	K	32/7.9	340	0.34	2100
AOIC2520N1R2□T	1.2/7.9	J , K	25/7.9	290	0.25	1900
AOIC2520N1R5□T	1.5/7.9	J , K	32/7.9	230	0.42	1500
AOIC2520N1R8□T	1.8/7.9	J , K	27/7.9	180	0.45	1500
AOIC2520N2R2□T	2.2/7.9	J , K	27/7.9	140	0.50	1200
AOIC2520N2R7□T	2.7/7.9	J , K	27/7.9	130	0.55	1300
AOIC2520N3R3□T	3.3/7.9	J , K	27/7.9	125	0.60	1300
AOIC2520N3R9□T	3.9/7.9	J , K	27/7.9	100	0.80	1200
AOIC2520N4R7□T	4.7/7.9	J , K	27/7.9	90	0.90	1100
AOIC2520N5R6□T	5.6/7.9	J , K	27/7.9	60	1.00	1000
AOIC2520N6R8□T	6.8/7.9	J , K	27/7.9	60	1.05	950
AOIC2520N8R2□T	8.2/7.9	J , K	25/7.9	55	1.20	850
AOIC2520N100□T	10/2.5	J , K	23/2.5	55	1.55	800
AOIC2520N120□T	12/2.5	J , K	23/2.5	36	2.10	630
AOIC2520N150□T	15/2.5	J , K	23/2.5	36	2.38	650
AOIC2520N180□T	18/2.5	J , K	23/2.5	32	2.50	550
AOIC2520N220□T	22/2.5	J , K	23/2.5	29	2.92	550
AOIC2520N330□T	33/2.5	J , K	23/2.5	21	4.10	450
AOIC2520N470□T	47/2.5	J , K	23/2.5	17	7.80	350
AOIC2520N101□T	100/1.0	J , K	13/1.0	4	13.20	200
AOIC2520N221□T	220/1.0	J , K	13/1.0	3	26.50	140
AOIC2520N331□T	330/1.0	J , K	13/1.0	2	32.50	110

NOTE :

* The operating temperature range is -25°C to +105°C (Including self-temperature rise)

* □ Tolerance J:±5% , K : ±10%

*IDC for inductance drop 10% from its value without current.

◆ AOIC3225N Series Specification :

Part Number	Inductance (uH)/MHz	Inductance Tolerance	Q (Min.)/MHz	SRF(Min.) (MHz)	DCR (Ω) Max.	IDC (mA) Max.
AOIC3225NR39□T	0.39/25	J	40/25	500	0.090	3000
AOIC3225NR47□T	0.47/25	J , K	40/25	500	0.090	3000
AOIC3225NR56□T	0.56/25	K	40/25	500	0.100	3000
AOIC3225N1R0□T	1.0/7.9	J , K	35/7.9	340	0.125	2600
AOIC3225N1R2□T	1.2/7.9	K	35/7.9	280	0.135	2400
AOIC3225N1R5□T	1.5/7.9	K	30/7.9	160	0.145	2200
AOIC3225N1R8□T	1.8/7.9	J , K	30/7.9	120	0.160	2000
AOIC3225N2R2□T	2.2/7.9	J , K	30/7.9	100	0.170	1900
AOIC3225N2R5□T	2.5/7.9	J , K	30/7.9	80	0.190	1700
AOIC3225N3R3□T	3.3/7.9	J , K	30/7.9	70	0.210	1500
AOIC3225N4R7□T	4.7/7.9	J , K	28/7.9	55	0.300	1300
AOIC3225N6R8□T	6.8/7.9	J , K	28/7.9	45	0.370	1000
AOIC3225N8R2□T	8.2/7.9	J , K	28/7.9	45	0.470	940
AOIC3225N100□T	10/2.5	J , K	22/2.5	47	0.500	900
AOIC3225N120□T	12/2.5	J , K	22/2.5	42	0.680	770
AOIC3225N150□T	15/2.5	J , K	22/2.5	34	0.720	740
AOIC3225N180□T	18/2.5	J , K	22/2.5	28	0.950	630
AOIC3225N220□T	22/2.5	J , K	22/2.5	25	1.100	600
AOIC3225N270□T	27/2.5	J , K	20/2.5	18	1.250	520
AOIC3225N330□T	33/2.5	J , K	20/2.5	13	1.370	490
AOIC3225N470□T	47/2.5	J , K	20/2.5	12	1.880	400
AOIC3225N560□T	56/2.5	J , K	22/2.5	10	2.750	360
AOIC3225N680□T	68/2.5	J , K	22/2.5	10	3.000	340
AOIC3225N820□T	82/2.5	J , K	22/2.5	10	4.100	300
AOIC3225N101□T	100/1.0	J , K	15/1.0	8	4.682	270
AOIC3225N121□T	120/1.0	J , K	15/1.0	7	5.800	220
AOIC3225N151□T	150/1.0	J , K	13/1.0	7	6.102	220
AOIC3225N181□T	180/1.0	J , K	13/1.0	3	7.100	200
AOIC3225N221□T	220/1.0	J , K	13/1.0	3	7.650	180
AOIC3225N331□T	330/1.0	J , K	13/1.0	3	12.620	160
AOIC3225N471□T	470/1.0	J , K	13/1.0	3	25.00	120
AOIC3225N561□T	560/1.0	J , K	13/1.0	2	27.00	100
AOIC3225N681□T	680/1.0	J , K	13/1.0	2	31.00	100
AOIC3225N821□T	820/1.0	J , K	10/1.0	2	42.00	50
AOIC3225N102□T	1000/1.0	J , K	10/1.0	2	46.00	50

NOTE :

* The operating temperature range is -40°C to +125°C (Including self-temperature rise)

* □ Tolerance J : $\pm 5\%$, K : $\pm 10\%$

* IDC for inductance drop 10% from its value without current.

◆ AOIC1610D Series Specification :

Part Number	Inductance (uH)/MHz	Inductance Tolerance	Q (Typ.)/MHz	SRF(Typ.) (MHz)	DCR (Ω) $\pm 30\%$	IDC (mA)Typ.	Irms (mA) Typ.
AOIC1610D1R0□T	1.0/7.9	K,M	16/7.9	390	0.32	860	700
AOIC1610D1R5□T	1.5/7.9	K,M	16/7.9	160	0.40	720	600
AOIC1610D1R8□T	1.8/7.9	K ,M	16/7.9	121	0.43	640	580
AOIC1610D2R2□T	2.2/7.9	K,M	16/7.9	103	0.56	600	580
AOIC1610D2R7□T	2.7/7.9	K,M	16/7.9	72	0.62	540	500
AOIC1610D3R3□T	3.3/7.9	K,M	16/7.9	66	0.70	500	500
AOIC1610D3R9□T	3.9/7.9	K,M	16/7.9	61	0.83	460	460
AOIC1610D4R7□T	4.7/7.9	K,M	16/7.9	51	0.97	400	420
AOIC1610D5R6□T	5.6/7.9	K,M	16/7.9	47	1.10	380	380
AOIC1610D6R8□T	6.8/7.9	K,M	16/7.9	43	1.50	340	340
AOIC1610D8R2□T	8.2/7.9	K,M	16/7.9	40	1.68	300	300
AOIC1610D100□T	10/2.5	K,M	14/2.5	36	1.85	280	280
AOIC1610D120□T	12/2.5	K,M	14/2.5	32	2.28	260	260
AOIC1610D150□T	15/2.5	K,M	14/2.5	29	2.60	240	240
AOIC1610D180□T	18/2.5	K,M	14/2.5	28	2.90	220	220
AOIC1610D220□T	22/2.5	K,M	14/2.5	24	3.61	200	200
AOIC1610D270□T	27/2.5	K,M	14/2.5	20	5.20	140	140
AOIC1610D330□T	33/2.5	K,M	14/2.5	15	6.60	120	120

NOTE :

* The operating temperature range is -40°C to +105°C (Including self-temperature rise)

* □ Tolerance K : $\pm 10\%$, M : $\pm 20\%$

*IDC for inductance drop 10% from its value without current.

*Irms for 15°C rise above 25°C ambient.

◆ AOIC2012D Series Specification :

Part Number	Inductance (uH)/MHz	Inductance Tolerance	Q (Typ.)/MHz	SRF(Typ.) (MHz)	DCR (Ω) $\pm 30\%$	IDC (mA)Typ.	Irms (mA) Typ.
AOIC2012D1R0□T	1.0/7.9	K,M	14/7.9	208	0.13	1100	1300
AOIC2012D1R2□T	1.2/7.9	K,M	14/7.9	159	0.16	960	1270
AOIC2012D1R5□T	1.5/7.9	K,M	14/7.9	159	0.17	920	1260
AOIC2012D1R8□T	1.8/7.9	K,M	14/7.9	112	0.20	860	1080
AOIC2012D2R2□T	2.2/7.9	K,M	13/7.9	87	0.22	740	1040
AOIC2012D2R7□T	2.7/7.9	K,M	13/7.9	72	0.25	680	1040
AOIC2012D3R3□T	3.3/7.9	K,M	12/7.9	70	0.28	620	1020
AOIC2012D3R9□T	3.9/7.9	K,M	14/7.9	61	0.38	580	960
AOIC2012D4R7□T	4.7/7.9	K,M	14/7.9	51	0.43	520	840
AOIC2012D5R6□T	5.6/7.9	K,M	12/7.9	47	0.50	480	800
AOIC2012D6R8□T	6.8/7.9	K,M	14/7.9	46	0.68	420	700
AOIC2012D8R2□T	8.2/7.9	K,M	13/7.9	33	0.73	400	680
AOIC2012D100□T	10/2.5	J,K,M	14/2.5	31	0.85	360	560
AOIC2012D120□T	12/2.5	J,K,M	14/2.5	30	0.90	340	460
AOIC2012D150□T	15/2.5	J,K,M	15/2.5	28	1.40	300	380
AOIC2012D180□T	18/2.5	J,K,M	15/2.5	27	1.55	280	360
AOIC2012D220□T	22/2.5	J,K,M	15/2.5	20	1.76	240	340
AOIC2012D270□T	27/2.5	J,K,M	15/2.5	17	2.00	220	300
AOIC2012D330□T	33/2.5	J,K,M	15/2.5	17	2.35	200	300
AOIC2012D470□T	47/2.5	J,K,M	14/2.5	15	3.40	160	280
AOIC2012D560□T	56/2.5	J,K,M	14/2.5	10	4.42	150	240
AOIC2012D680□T	68/2.5	J,K,M	14/2.5	10	4.45	140	240
AOIC2012D820□T	82/2.5	J,K,M	14/2.5	10	7.50	100	180
AOIC2012D101□T	100/1.0	J,K,M	10/1.0	9	7.50	100	180

NOTE :

* The operating temperature range is -40°C to +125°C (Including self-temperature rise)

* □ Tolerance J : $\pm 5\%$, K : $\pm 10\%$, M : $\pm 20\%$

* IDC for inductance drop 10% from its value without current.

* Irms for 15°C rise above 25°C ambient.