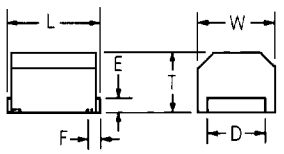
TYPE WIC

FEATURES

- Excellent solderability by reflow soldering, flow soldering or soldering iron.
- Excellent for automatic insertion in the higher density circuit design.
- Resistant to external shocks and pressure.
- Highly reliable in wide temperature and humidity ranges. Excellent Q characteristics.
- Inductance of 0.01 to 1.00 µH (WIC1008), 0.01 to 220 µH (WIC1210) and 1 to 1000 µH (WIC1812).
- Ideal application for radio, auto, telecommunications, tuners, instrumental and hybrid ICs.

DIMENSIONS

(Dimensions in inches)

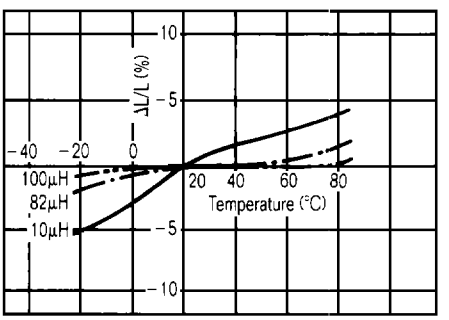


Type	L	W	T	D	E	F
WIC1008	.100 ± .008	.080 ± .008	.072 ± .008	.056 ± .004	.02 ± .002	.016 ± .002
WIC1210	.126 ± .008	.098 ± .008	.087 ± .008	.075 ± .004	.02 ± .002	.016 ± .002
WIC1812	.177 ± .008	.126 ± .008	.126 ± .008	.102 ± .004	.02 ± .002	.016 ± .002

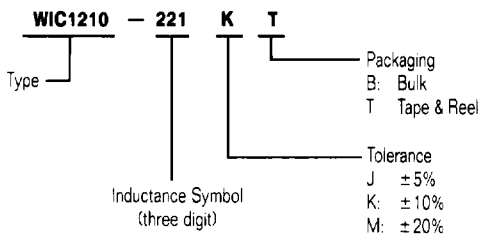
CHARACTERISTICS

Temperature rise	20°C max.
Ambient temperature	80°C
Storage temperature	−40°C to +100°C
Operating temperature	−20°C to +100°C
Terminal tensile strength	1 kg min. (0.5kg for the WIC1210)
Current rating	Value obtained when current flows and when temperature has risen to 20°C or value obtained when DC current flows and when the initial value of inductance has fallen by 10%, whichever smaller.
Resistance to soldering heat	250°C, 10 seconds
Resistance to solvent	Conforms to MIL-STD-202E

TEMPERATURE CHARACTERISTICS



ORDERING INFORMATION



TAPE PACKAGING

Size	Qty/Reel
1008	2,000
1210	2,000
1812	500

WOUND INDUCTOR CHIPS — TYPE WIC

ELECTRICAL SPECIFICATIONS

Type	Inductance (µH)	Inductance Symbol	Q min.	L,Q test frequency (MHz)	Self resonant frequency (MHz) min.	DC resistance (Ω) max.	Idc (mA) max.
WIC1008	0.010	10N	15	100	2150	0.26	530
	0.012	12N	15	100	2050	0.27	500
	0.015	15N	15	100	1850	0.29	480
	0.018	18N	15	100	1650	0.31	450
	0.022	22N	15	100	1550	0.37	420
	0.027	27N	15	100	1400	0.40	410
	0.033	33N	20	100	1250	0.42	400
	0.039	39N	20	100	1100	0.45	380
	0.047	47N	20	100	1050	0.50	360
	0.056	56N	20	100	950	0.60	340
	0.068	68N	20	100	900	0.65	320
	0.082	82N	20	100	850	0.75	300
WIC1008	0.10	R10	20	100	750	0.80	280
	0.12	R12	30	25.2	700	0.30	550
	0.15	R15	30	25.2	550	0.35	500
	0.18	R18	30	25.2	500	0.40	460
	0.22	R22	30	25.2	450	0.50	430
	0.27	R27	30	25.2	425	0.55	420
	0.33	R33	30	25.2	400	0.60	400
	0.39	R39	30	25.2	375	0.65	375
	0.47	R47	30	25.2	350	0.68	350
	0.56	R56	30	25.2	325	0.75	325
	0.68	R68	30	25.2	300	0.85	300
	0.82	R82	30	25.2	260	1.00	260
WIC1008	1.0	1R0	30	7.96	245	1.10	245
	1.2	1R2	30	7.96	230	1.20	230
	1.5	1R5	30	7.96	182	1.30	220
	1.8	1R8	30	7.96	135	1.45	210
	2.2	2R2	30	7.96	105	1.55	200
	2.7	2R7	30	7.96	70	1.70	195
	3.3	3R3	30	7.96	55	1.90	185
	3.9	3R9	30	7.96	48	2.10	180
	4.7	4R7	30	7.96	43	2.30	175
	5.6	5R6	25	7.96	42	2.50	175
	6.8	6R8	25	7.96	39	2.70	165
	8.2	8R2	25	7.96	36	3.05	160
WIC1008	10	100	25	2.52	33	3.50	155
	12	120	25	2.52	30	3.80	150
	15	150	25	2.52	26	4.40	140
	18	180	25	2.52	24	4.80	130
	22	220	25	2.52	22	5.50	125
	27	270	25	2.52	21	6.30	115
	33	330	25	2.52	20	7.10	110
	39	390	20	2.52	18	9.50	90
	47	470	20	2.52	17	11.10	80
	56	560	20	2.52	16	12.10	75
	68	680	20	2.52	15	16.60	70
	82	820	20	2.52	13	19.00	65
	100	101	15	0.796	12	21.00	60

Inductance and Q are measured with a Q-meter.

ELECTRICAL SPECIFICATIONS

Type	Inductance (µH)	Inductance Symbol	Q min.	L, Q test frequency (MHz)	Self resonant frequency (MHz) min.	DC resistance (Ω) max.	Idc (mA) max.
WIC1210	0.010	10N	15	100	2,500	0.13	450
	0.012	12N	17	100	2,300	0.14	450
	0.015	15N	19	100	2,100	0.16	450
	0.018	18N	21	100	1,900	0.18	450
	0.022	22N	23	100	1,700	0.20	450
	0.027	27N	23	100	1,500	0.22	450
	0.033	33N	25	100	1,400	0.24	450
	0.039	39N	25	100	1,300	0.27	450
	0.047	47N	26	100	1,200	0.30	450
	0.056	56N	26	100	1,100	0.33	450
	0.068	68N	27	100	1,000	0.36	450
	0.082	82N	27	100	900	0.40	450
WIC1210	0.10	R10	28	100	700	0.44	450
	0.12	R12	30	25.2	500	0.22	450
	0.15	R15	30	25.2	450	0.25	450
	0.18	R18	30	25.2	400	0.28	450
	0.22	R22	30	25.2	350	0.32	450
	0.27	R27	30	25.2	320	0.36	450
	0.33	R33	30	25.2	300	0.40	450
	0.39	R39	30	25.2	350	0.45	450
	0.47	R47	30	25.2	220	0.50	450
	0.56	R56	30	25.2	180	0.55	450
	0.68	R68	30	25.2	160	0.60	450
	0.82	R82	30	25.2	140	0.67	450
WIC1210	1.0	1R0	30	7.96	120	0.70	400
	1.2	1R2	30	7.96	100	0.75	390
	1.5	1R5	30	7.96	85	0.85	370
	1.8	1R8	30	7.96	80	0.90	350
	2.2	2R2	30	7.96	75	1.0	320
	2.7	2R7	30	7.96	70	1.1	290
	3.3	3R3	30	7.96	60	1.2	260
	3.9	3R9	30	7.96	55	1.3	250
	4.7	4R7	30	7.96	50	1.5	220
	5.6	5R6	30	7.96	47	1.6	200
	6.8	6R8	30	7.96	43	1.8	180
	8.2	8R2	30	7.96	40	2.0	170
WIC1210	10	100	30	2.52	36	2.1	150
	12	120	30	2.52	33	2.5	140
	15	150	30	2.52	30	2.8	130
	18	180	30	2.52	27	3.3	120
	22	220	30	2.52	25	3.7	110
	27	270	30	2.52	20	5.0	80
	33	330	30	2.52	17	5.6	70
	39	390	30	2.52	16	6.4	65
	47	470	30	2.52	15	7.0	60
	56	560	30	2.52	13	8.0	55
	68	680	30	2.52	12	9.0	50
	82	820	30	2.52	11	10.0	45
WIC1210	100	101	20	0.796	10	10.0	40
	120	121	20	0.796	10	11.0	70
	150	151	20	0.796	8	15.0	65
	180	181	20	0.796	7	17.0	60
	220	221	20	0.796	7	21.0	50

Inductance and Q are measured with a Q-meter.

WOUND INDUCTOR CHIPS — TYPE WIC

ELECTRICAL SPECIFICATIONS

Type	Inductance (µH)	Inductance Symbol	Q min.	L, Q test frequency (MHz)	Self resonant frequency (MHz) min.	DC resistance (Ω) max.	Idc (mA) max.
WIC1812	1.0	1R0	50	7.96	100	0.50	450
	1.2	1R2	50	7.96	80	0.55	430
	1.5	1R5	50	7.96	70	0.60	410
	1.8	1R8	50	7.96	60	0.65	390
	2.2	2R2	50	7.96	55	0.70	380
	2.7	2R7	50	7.96	50	0.75	370
	3.3	3R3	50	7.96	45	0.80	355
	3.9	3R9	50	7.96	40	0.90	330
	4.7	4R7	50	7.96	35	1.00	315
	5.6	5R6	50	7.96	33	1.10	300
	6.8	6R8	50	7.96	27	1.20	285
	8.2	8R2	50	7.96	25	1.40	270
WIC1812	10.0	100	50	2.52	20	1.60	250
	12.0	120	50	2.52	18	2.00	225
	15.0	150	50	2.52	17	2.50	200
	18.0	180	50	2.52	15	2.80	190
	22.0	220	50	2.52	13	3.20	180
	27.0	270	50	2.52	12	3.60	170
	33.0	330	50	2.52	11	4.00	160
	39.0	390	50	2.52	10	4.50	150
	47.0	470	50	2.52	10	5.00	140
	56.0	560	50	2.52	9.0	5.50	135
	68.0	680	50	2.52	9.0	6.00	130
	82.0	820	50	2.52	8.0	7.00	120
WIC1812	100	101	40	0.796	8.0	8.00	110
	120	121	40	0.796	6.0	8.00	110
	150	151	40	0.796	5.0	9.00	105
	180	181	40	0.796	5.0	9.50	102
	220	221	40	0.796	4.0	10.0	100
	270	271	40	0.796	4.0	12.0	92
	330	331	40	0.796	3.5	14.0	85
	390	391	40	0.796	3.0	16.0	80
	470	471	40	0.796	3.0	26.0	62
	560	561	30	0.796	3.0	30.0	50
	680	681	30	0.796	3.0	30.0	50
	820	821	30	0.796	2.5	35.0	30
	1000	102	30	0.252	2.5	40.0	30

Inductance and Q are measured with a Q-meter.