FIXED INDUCTORS

FEATURES

- Extremely reliable inductors that are ideal for automatic insertion.
- Highly efficient automated production processes can provide high quality inductors in large volumes.
- Wide selection of configurations including axial leaded, formed radial leads and bulk products to meet most manufacturing needs.

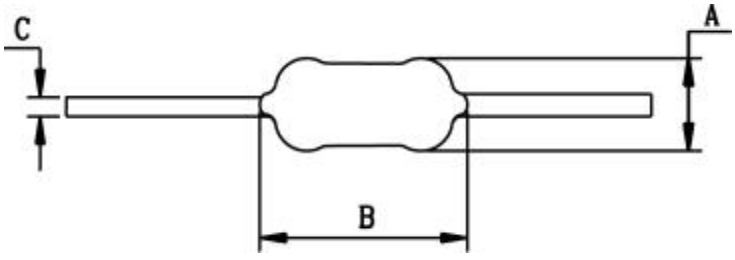
APPLICATIONS

- Consumer electronics such as VCRs,TVs,audio equipment, mobile communications, and general electronic appliances.

ORDERING CODE

C□CS – 101 K A B C	A : Type CECS = 63mm Length, CNCS = 38mm Length B : Inductance For details please refer to the specification table. C : Tolerance M : ± 20% K : ± 10% J : ± 5%

DIMENSIONS (mm)



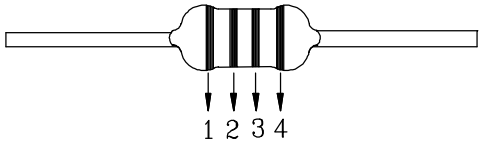
MODEL	A max.	B max.	C±0.05	LENGTH	Table
CESS	2.5	3.4	0.5	63±3	P.85
CNSS				38±2	
CECS	2.5	4.0	0.5	63±3	P.86
CNCS				38±2	
CEC	3.2	7.0	0.5	63±3	P.87
CNC				38±2	
CECL	4.0	9.8	0.6	63±3	P.88
CNCL				38±2	
CECD	4.0	11.0	0.6	63±3	-
CNCD				38±2	
CECR	4.0	12.0	0.6	63±3	-
CNCR				38±2	

※ Specifications other than the above will be furnished upon request.

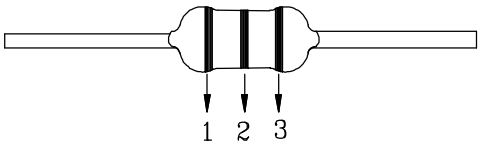
FIXED INDUCTORS

COLOUR CODE

(1) CECR, CECD, CEC, CECL, CNCL, CNCD, CNCR

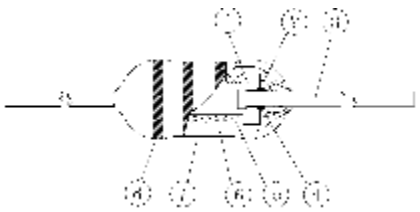


(2) CECS, CESS, CNCS, CNSS



COLOUR	1 FIRST FIGURE	2 SECOND FIGURE	3 MULTIPLIER	4 TOLERANCE
Black	0	0	1	± 20%
Brown	1	1	10	-
Red	2	2	100	-
Orange	3	3	1000	-
Yellow	4	4	-	-
Green	5	5	-	-
Blue	6	6	-	-
Purple	7	7	-	-
Gray	8	8	-	-
White	9	9	-	-
Gold	-	-	0.1	± 5%
Silver	-	-	0.01	± 10%

STRUCTURAL DIAGRAM

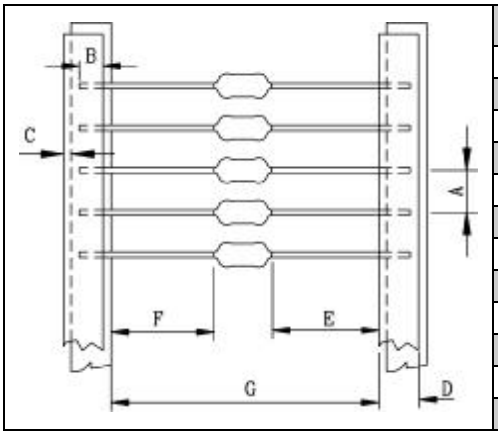


Component	Model	Inductance Range
1. Ferrite core	CECR, CNCR	Material : 0.10μH~47μH
	CECL, CECD, CNCL, CNCD	Material A : 1.0μH~10μH Material B : 12μH~100μH Material C : 120μH~3900μH
	CNC, CEC	Material B :1.2μH~100μH Material C : 120μH~1mH Material A: 0.10μH~1.0μH
	CECS, CESS, CNCS, CNSS	Material B: 1.2μH ~100μH Material C: 120μH ~330μH Material A: 0.10μH~1.0μH
2. Adhesive	Epoxy resin	
3. Lead wire	Processed lead wire (Solder plated copper wire)	
4. Solder accumulation	Solder	
5. Wire material	Polyurethane-copper wire	
6. Under-coating resin	Butadiene resin	
7. Over-coating resin	Epoxy resin	
8. Colour code	Melamine resin	

※Specifications other than the above will be furnished upon request.

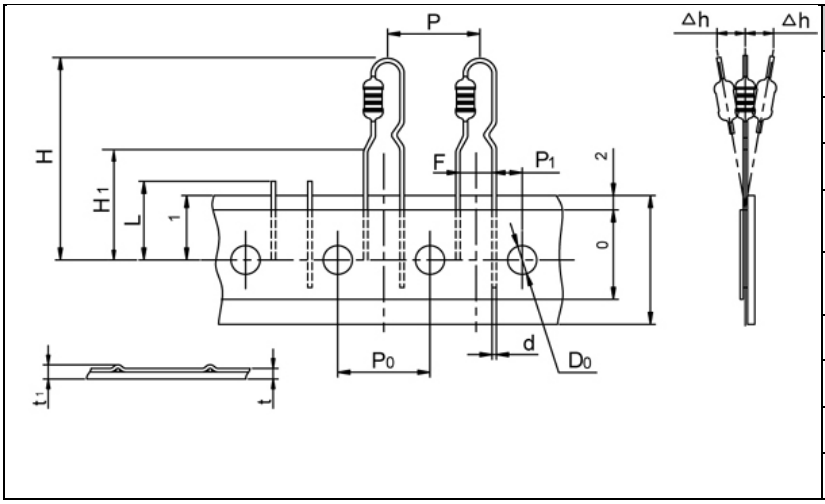
FIXED INDUCTORS

TAPING DIMENSIONS (mm)



MODEL	A	B	C	D	| E - F |	G
CESS	5.0±0.5	3.2min.	0.8max.	6.0±1.0	1.0max.	52±2
CECS						
CEC-		3.0min.				
CECL						
CECD						
CECR						
CNSS		3.2min.				26±2
CNCS						
CNC-		3.0min.				
CNCL						
CNCD						
CNCR						

FDF

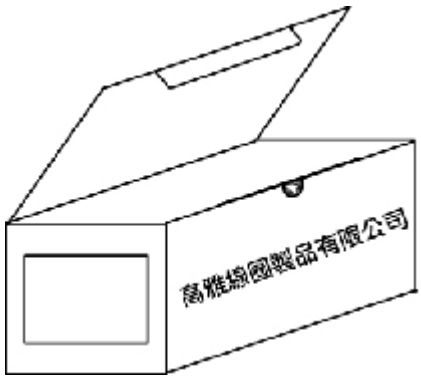


SYMBOL	DIMENSION	SYMBOL	DIMENSION
P	12.7±1.0	D_0	Ø 4.0±0.2
P_0	12.7±0.3	t	0.6±0.3
P_1	3.85±0.7	t_1	1.5 max.
F	5.0 +0.8 -0.2	Δh	0±2
W	18.0 +1.0 -0.5	L	11.0 max.
W_0	12.5 min.	d	Ref.
W_1	9.0±0.5	H	28.5 max.
W_2	3.0 max.	H_1	16.0±0.5
L	11.0 max.		

PACKING

Ammunition packing:
A = Standard size

Ammunition packing:
B = Smallest size



	H	L	J	CECL,CECD ,CECR	CEC,CECS,CESS	CNCL,CNCD,CNCR	CNC,CNCS,CNSS
A	70±5	255±5	70±5	1000pcs / Box	2000pcs / Box	-	-
B	100±5	255±5	55±5	-	-	2500pcs/Box	4000pcs/Box

※Specifications other than the above will be furnished upon request.

FIXED INDUCTORS

Specification table of Fixed Inductors C□SS						
Model	**Inductance (μH)**	**Q (Min)**	**DCR Ω (Max)**	**DCI mA (Max)**	**SRF MHz (Min)**	**Measuring Frequency**
C□SS-R10□	0.10	40	0.070	1050	380	25.2MHz
C□SS-R12□	0.12	40	0.075	920	380	25.2MHz
C□SS-R15□	0.15	40	0.080	910	380	25.2MHz
C□SS-R18□	0.18	40	0.085	700	380	25.2MHz
C□SS-R22□	0.22	40	0.095	680	380	25.2MHz
C□SS-R27□	0.27	40	0.11	620	380	25.2MHz
C□SS-R33□	0.33	40	0.12	600	315	25.2MHz
C□SS-R39□	0.39	40	0.19	560	310	25.2MHz
C□SS-R47□	0.47	40	0.20	520	310	25.2MHz
C□SS-R56□	0.56	40	0.22	500	270	25.2MHz
C□SS-R68□	0.68	40	0.25	465	250	25.2MHz
C□SS-R82□	0.82	40	0.28	450	200	25.2MHz
C□SS-1R0□	1.0	40	0.29	425	180	25.2MHz
C□SS-1R2□	1.2	40	0.30	420	180	7.96MHz
C□SS-1R5□	1.5	40	0.33	390	130	7.96MHz
C□SS-1R8□	1.8	40	0.35	350	100	7.96MHz
C□SS-2R2□	2.2	40	0.39	340	75	7.96MHz
C□SS-2R7□	2.7	40	0.45	320	55	7.96MHz
C□SS-3R3□	3.3	40	0.64	280	48	7.96MHz
C□SS-3R9□	3.9	40	0.65	260	38	7.96MHz
C□SS-4R7□	4.7	45	0.94	215	38	7.96MHz
C□SS-5R6□	5.6	45	1.02	210	32	7.96MHz
C□SS-6R8□	6.8	45	1.19	190	26	7.96MHz
C□SS-8R2□	8.2	45	1.72	180	25	7.96MHz
C□SS-100□	10	45	1.88	170	22	7.96MHz
C□SS-120□	12	50	1.96	165	20	2.52MHz
C□SS-150□	15	50	2.13	160	17	2.52MHz
C□SS-180□	18	50	2.46	145	16	2.52MHz
C□SS-220□	22	50	2.97	125	15	2.52MHz
C□SS-270□	27	50	3.38	115	14	2.52MHz
C□SS-330□	33	40	3.66	110	12	2.52MHz
C□SS-390□	39	40	4.02	90	11	2.52MHz
C□SS-470□	47	40	6.16	85	9.0	2.52MHz
C□SS-560□	56	40	7.04	80	8.5	2.52MHz
C□SS-680□	68	40	7.69	75	8.0	2.52MHz
C□SS-820□	82	40	8.68	70	7.0	2.52MHz
C□SS-101□	100	40	15.44	50	6.0	2.52MHz
C□SS-121□	120	35	17.63	50	6.0	0.796MHz
C□SS-151□	150	35	19.90	50	5.0	0.796MHz
C□SS-181□	180	35	20.89	45	4.5	0.796MHz
C□SS-221□	220	35	23.19	40	4.5	0.796MHz
C□SS-271□	270	35	26.88	40	4.0	0.796MHz
C□SS-331□	330	35	32.13	40	4.0	0.796MHz

※Specifications other than the above will be furnished upon request.

FIXED INDUCTORS

Specification table of Fixed Inductors C□CS

Model	Inductance (μH)	Q (Min)	DCR Ω (Max)	DCI mA (Max)	SRF MHz (Min)	Measuring Frequency
C□CS-R10□	0.10	40	0.070	1050	380	25.2MHz
C□CS-R12□	0.12	40	0.075	920	380	25.2MHz
C□CS-R15□	0.15	40	0.080	910	380	25.2MHz
C□CS-R18□	0.18	40	0.085	700	380	25.2MHz
C□CS-R22□	0.22	40	0.095	680	380	25.2MHz
C□CS-R27□	0.27	40	0.11	620	380	25.2MHz
C□CS-R33□	0.33	40	0.12	600	315	25.2MHz
C□CS-R39□	0.39	40	0.19	560	310	25.2MHz
C□CS-R47□	0.47	40	0.20	520	310	25.2MHz
C□CS-R56□	0.56	40	0.22	500	270	25.2MHz
C□CS-R68□	0.68	40	0.25	465	250	25.2MHz
C□CS-R82□	0.82	40	0.28	450	200	25.2MHz
C□CS-1R0□	1.0	40	0.29	425	180	25.2MHz
C□CS-1R2□	1.2	40	0.30	420	180	7.96MHz
C□CS-1R5□	1.5	40	0.33	390	130	7.96MHz
C□CS-1R8□	1.8	40	0.35	350	100	7.96MHz
C□CS-2R2□	2.2	40	0.39	340	75	7.96MHz
C□CS-2R7□	2.7	40	0.45	320	55	7.96MHz
C□CS-3R3□	3.3	40	0.64	280	48	7.96MHz
C□CS-3R9□	3.9	40	0.65	260	38	7.96MHz
C□CS-4R7□	4.7	45	0.94	215	38	7.96MHz
C□CS-5R6□	5.6	45	1.02	210	32	7.96MHz
C□CS-6R8□	6.8	45	1.19	190	26	7.96MHz
C□CS-8R2□	8.2	45	1.72	180	25	7.96MHz
C□CS-100□	10	45	1.88	170	22	7.96MHz
C□CS-120□	12	50	1.96	165	20	2.52MHz
C□CS-150□	15	50	2.13	160	17	2.52MHz
C□CS-180□	18	50	2.46	145	16	2.52MHz
C□CS-220□	22	50	2.97	125	15	2.52MHz
C□CS-270□	27	50	3.38	115	14	2.52MHz
C□CS-330□	33	40	3.66	110	12	2.52MHz
C□CS-390□	39	40	4.02	90	11	2.52MHz
C□CS-470□	47	40	6.16	85	9.0	2.52MHz
C□CS-560□	56	40	7.04	80	8.5	2.52MHz
C□CS-680□	68	40	7.69	75	8.0	2.52MHz
C□CS-820□	82	40	8.68	70	7.0	2.52MHz
C□CS-101□	100	40	15.44	50	6.0	2.52MHz
C□CS-121□	120	35	17.63	50	6.0	0.796MHz
C□CS-151□	150	35	19.90	50	5.0	0.796MHz
C□CS-181□	180	35	20.89	45	4.5	0.796MHz
C□CS-221□	220	35	23.19	40	4.5	0.796MHz
C□CS-271□	270	35	26.88	40	4.0	0.796MHz
C□CS-331□	330	35	32.13	40	4.0	0.796MHz

※Specifications other than the above will be furnished upon request.

FIXED INDUCTORS

Specification table of Fixed Inductors C□C

Model	Inductance (μH)	Q (Min)	DCR Ω (Max)	DCI mA (Max)	SRF MHz (Min)	Measuring Frequency
C□C-R10□	0.10	60	0.070	1180	220	25.2MHz
C□C-R12□	0.12	60	0.080	1022	200	25.2MHz
C□C-R15□	0.15	50	0.085	910	185	25.2MHz
C□C-R18□	0.18	50	0.090	780	180	25.2MHz
C□C-R22□	0.22	50	0.103	750	170	25.2MHz
C□C-R27□	0.27	50	0.11	700	165	25.2MHz
C□C-R33□	0.33	50	0.12	680	160	25.2MHz
C□C-R39□	0.39	50	0.13	650	155	25.2MHz
C□C-R47□	0.47	50	0.14	640	150	25.2MHz
C□C-R56□	0.56	50	0.15	630	150	25.2MHz
C□C-R68□	0.68	50	0.17	620	150	25.2MHz
C□C-R82□	0.82	50	0.19	610	150	25.2MHz
C□C-1R0□	1.0	50	0.22	590	150	25.2MHz
C□C-1R2□	1.2	50	0.23	570	145	7.96MHz
C□C-1R5□	1.5	50	0.25	565	140	7.96MHz
C□C-1R8□	1.8	50	0.27	555	138	7.96MHz
C□C-2R2□	2.2	50	0.30	515	110	7.96MHz
C□C-2R7□	2.7	50	0.33	505	100	7.96MHz
C□C-3R3□	3.3	50	0.50	365	100	7.96MHz
C□C-3R9□	3.9	50	0.59	350	90	7.96MHz
C□C-4R7□	4.7	60	1.12	260	84	7.96MHz
C□C-5R6□	5.6	60	1.16	235	65	7.96MHz
C□C-6R8□	6.8	60	1.29	230	60	7.96MHz
C□C-8R2□	8.2	60	1.39	215	58	7.96MHz
C□C-100□	10	60	1.56	210	28.7	7.96MHz
C□C-120□	12	50	1.64	200	18.9	2.52MHz
C□C-150□	15	50	1.85	190	16.8	2.52MHz
C□C-180□	18	50	1.94	185	12.8	2.52MHz
C□C-220□	22	50	2.24	160	10.4	2.52MHz
C□C-270□	27	50	2.39	155	10.2	2.52MHz
C□C-330□	33	50	2.71	150	8.4	2.52MHz
C□C-390□	39	50	3.00	145	7.4	2.52MHz
C□C-470□	47	50	3.19	135	6.9	2.52MHz
C□C-560□	56	50	3.72	135	6.6	2.52MHz
C□C-680□	68	50	3.92	125	6.1	2.52MHz
C□C-820□	82	45	4.39	125	5.4	2.52MHz
C□C-101□	100	45	4.72	110	5.0	2.52MHz
C□C-121□	120	45	4.94	110	4.3	0.796MHz
C□C-151□	150	45	5.51	100	4.3	0.796MHz
C□C-181□	180	45	8.28	95	3.4	0.796MHz
C□C-221□	220	45	8.94	90	3.3	0.796MHz
C□C-271□	270	45	10.3	85	2.9	0.796MHz
C□C-331□	330	45	11.3	75	2.7	0.796MHz
C□C-391□	390	45	17.2	60	2.3	0.796MHz
C□C-471□	470	45	19.2	55	2.2	0.796MHz
C□C-561□	560	45	20.9	55	2.1	0.796MHz
C□C-681□	680	45	23.7	50	1.9	0.796MHz
C□C-821□	820	45	26.6	45	1.7	0.796MHz
C□C-102□	1000	45	28.2	45	1.5	0.796MHz

※Specifications other than the above will be furnished upon request.

FIXED INDUCTORS

Specification table of Fixed Inductors C□CL

Model	Inductance (μH)	Q (Min)	DCR Ω (Max)	Rated Current mA (Max)	SRF MHz (Min)	Measuring Frequency
C□CL-1R0□	1.0	45	0.18	800	93	7.96MHz
C□CL-1R2□	1.2	50	0.20	730	86	7.96MHz
C□CL-1R5□	1.5	50	0.22	700	80	7.96MHz
C□CL-1R8□	1.8	55	0.24	670	75	7.96MHz
C□CL-2R2□	2.2	55	0.27	660	70	7.96MHz
C□CL-2R7□	2.7	55	0.30	650	67	7.96MHz
C□CL-3R3□	3.3	60	0.34	600	63	7.96MHz
C□CL-3R9□	3.9	60	0.36	570	43	7.96MHz
C□CL-4R7□	4.7	60	0.38	550	37	7.96MHz
C□CL-5R6□	5.6	60	0.40	520	32	7.96MHz
C□CL-6R8□	6.8	60	0.45	500	25	7.96MHz
C□CL-8R2□	8.2	60	0.50	460	16	7.96MHz
C□CL-100□	10	60	0.60	450	14	7.96MHz
C□CL-120□	12	50	0.65	380	12	2.52MHz
C□CL-150□	15	50	0.74	340	11	2.52MHz
C□CL-180□	18	50	0.80	320	8.5	2.52MHz
C□CL-220□	22	50	0.85	310	6.5	2.52MHz
C□CL-270□	27	45	0.95	290	4.8	2.52MHz
C□CL-330□	33	45	1.10	280	4.4	2.52MHz
C□CL-390□	39	45	1.90	220	4.3	2.52MHz
C□CL-470□	47	45	2.10	210	4.2	2.52MHz
C□CL-560□	56	40	2.30	200	4.1	2.52MHz
C□CL-680□	68	40	2.50	190	3.8	2.52MHz
C□CL-820□	82	40	2.70	180	3.5	2.52MHz
C□CL-101□	100	40	3.40	160	3.2	2.52MHz
C□CL-121□	120	50	4.70	150	2.5	0.796MHz
C□CL-151□	150	50	5.00	130	2.3	0.796MHz
C□CL-181□	180	50	5.70	130	2.2	0.796MHz
C□CL-221□	220	50	6.20	120	2.0	0.796MHz
C□CL-271□	270	50	7.10	120	1.8	0.796MHz
C□CL-331□	330	50	7.70	110	1.7	0.796MHz
C□CL-391□	390	50	10.50	100	1.6	0.796MHz
C□CL-471□	470	50	11.90	90	1.5	0.796MHz
C□CL-561□	560	50	13.30	90	1.4	0.796MHz
C□CL-681□	680	45	15.00	80	1.3	0.796MHz
C□CL-821□	820	45	20.00	60	1.2	0.796MHz
C□CL-102□	1000	45	21.00	60	0.90	0.796MHz
C□CL-122□	1200	40	32.00	55	0.82	0.252MHz
C□CL-152□	1500	40	45.00	45	0.76	0.252MHz
C□CL-182□	1800	40	50.00	40	0.68	0.252MHz
C□CL-222□	2200	35	54.00	40	0.52	0.252MHz
C□CL-272□	2700	35	61.00	35	0.40	0.252MHz
C□CL-332□	3300	35	69.00	35	0.28	0.252MHz
C□CL-392□	3900	35	74.00	30	0.12	0.252MHz

※Specifications other than the above will be furnished upon request.