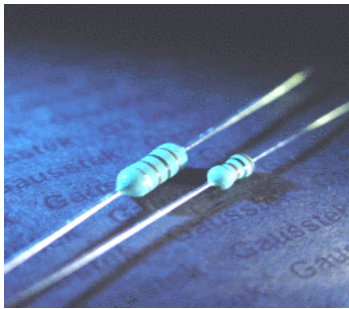


Series **CL**

**OUTLINE**



**FEATURE**

Design to be compact, small and light-weight.  
Coating epoxy resin that ensures the humidity resistance to long life.

**PRODUCT IDENTIFICATION**

**CL 03 X 07 5 K 10U**

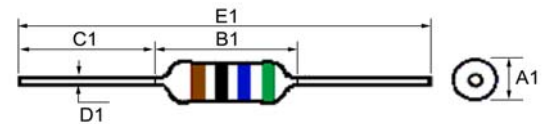
- a b c d e f g
- a:Type of products - Color Code Inductors
  - b:Diameter (mm) - 02 : 2.8 03 : 3.0 04 : 4.0 05 : 5.0
  - c:Forming Type - X = TAPING 52 TYPE Y : TAPING 26 TYPE U : U FORMING P : PANASERT FORMING V : V FORMING  
B : BULKS 52 TYPE C = BULKS 26 TYPE
  - d:Length (mm) - 04 : 5.0 07 : 7.0 10 : 10.0
  - e:Packing - PCS / REEL - 1 : 1000 2 : 2000 3 : 3000 5 : 5000
  - f:Tolerance - K : ±10% M : ±20%
  - g:Inductance - 100N = 0.1uH, 10U = 10.0 uH, 1M2 = 1200uH

The Part number of Lead-Free Products will be added "X" after original one as identification. EX: WS03X314G1N8X

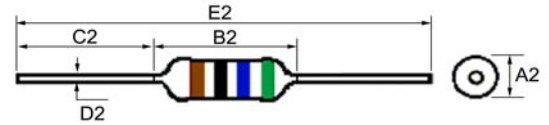
**SHAPES AND DIMENSIONS**

Unit in mm

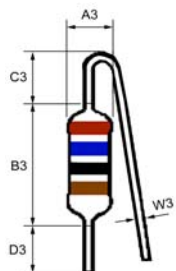
Forming Type	Parts		CL02X04	CLX03X07	CL04X10	CL05X10
	Mark	Mark				
Bulks 52	A1 (max)		2.80	3.00	4.00	5.00
	B1 (max)		5.00	7.00	10.00	10.00
	C1 (±3.0)		29.50	28.00	26.00	26.00
	D1 (±0.05)		0.50	0.50	0.65	0.65
	E1 (±1.5)		62.50	62.50	62.50	62.50
Bulks 26	A2 (max)		2.80	3.00	4.00	5.00
	B2 (max)		5.00	7.00	10.00	10.00
	C2 (±3.0)		16.00	15.00	14.00	14.00
	D2 (±0.05)		0.50	0.50	0.65	0.65
	E2 (±1.5)		36.50	36.50	36.50	36.50
V	A3 (max)		2.80	3.00	4.00	5.00
	B3 (max)		5.00	7.00	6.00	6.00
	C3 (max)		6.00	6.00	4.00	4.00
	D3 (min)		3.60	3.60	4.00	4.00
	W3 (±0.05)		0.50	0.50	0.65	0.65
H	A4 (max)		2.80	3.00	4.00	5.00
	B4 (max)		5.00	7.00	10.00	10.00
	C4 (min)		3.60	3.60	3.60	3.60
	D4		6~15	10~20	12.5~20	12.5~20
	W4 (±0.05)		0.50	0.50	0.65	0.65



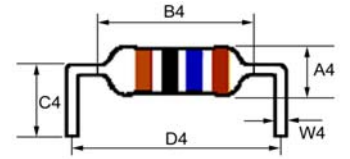
**BULKS 52 TYPE**



**BULKS 26 TYPE**

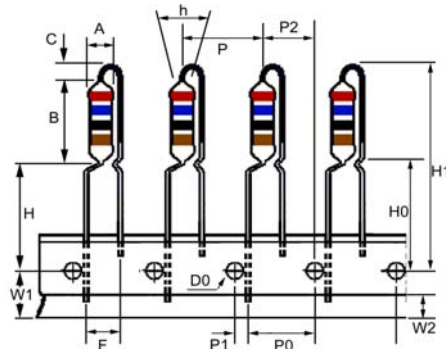


**V FORMING**



**H FORMING**

**Panasert Forming**



Forming Type	A	B	C	D0	F	H1	H0	H1
Panasert	3.0 (max)	7.0 (max)	3.0 +0 -1	4 ± 0.3	5.0 +0.8 -0.20	19.0 +1.0 -0.30	16.0 ± 0.5	28.50(max)
	h 0±2.0 (±5°)	P 12.7± 1.0	P0 12.7± 0.3	P1 3.85± 0.7	P2 6.35 ± 1.3	W1 9.0 +0.75 -0.50	W2 4.0 (max)	

Series **CL****ELECTRICAL CHARACTERISTICS****0204**

Part Number	Inductance (μH)	Q (min)	Frequency (MHz)	SRF(MHz) (min)	RDC (Ω) (max)	IDC (mA) (max)
CL02□04□K100N	0.10	35	25.2	300.00	0.180	700
CL02□04□K120N	0.12	35	25.2	300.00	0.200	660
CL02□04□K150N	0.15	35	25.2	300.00	0.220	620
CL02□04□K180N	0.18	35	25.2	300.00	0.240	600
CL02□04□K220N	0.22	35	25.2	150.00	0.400	400
CL02□04□K270N	0.27	35	25.2	150.00	0.430	380
CL02□04□K330N	0.33	35	25.2	150.00	0.480	370
CL02□04□K390N	0.39	35	25.2	150.00	0.510	350
CL02□04□K470N	0.47	35	25.2	150.00	0.560	330
CL02□04□K560N	0.56	35	25.2	150.00	0.610	320
CL02□04□K680N	0.68	35	25.2	150.00	0.670	310
CL02□04□K820N	0.82	35	25.2	150.00	0.740	290
CL02□04□K1U	1.00	35	25.2	150.00	0.800	270
CL02□04□K1U2	1.20	40	7.96	110.00	0.900	260
CL02□04□K1U5	1.50	40	7.96	70.00	1.000	250
CL02□04□K1U8	1.80	40	7.96	60.00	1.100	240
CL02□04□K2U2	2.20	40	7.96	45.00	1.200	230
CL02□04□K2U7	2.70	40	7.96	40.00	1.300	220
CL02□04□K3U3	3.30	40	7.96	38.00	1.400	210
CL02□04□K3U9	3.90	40	7.96	36.00	1.500	200
CL02□04□K4U7	4.70	40	7.96	32.00	1.700	190
CL02□04□K5U6	5.60	40	7.96	30.00	1.900	180
CL02□04□K6U8	6.80	40	7.96	28.00	2.000	175
CL02□04□K8U2	8.20	40	7.96	26.00	2.200	165
CL02□04□K10U	10.00	40	7.96	24.00	2.500	160
CL02□04□K12U	12.00	40	2.52	22.00	2.500	150
CL02□04□K15U	15.00	40	2.52	20.00	2.800	145
CL02□04□K18U	18.00	40	2.52	18.00	3.100	140
CL02□04□K22U	22.00	40	2.52	17.00	3.400	100
CL02□04□K27U	27.00	40	2.52	16.00	4.300	80
CL02□04□K33U	33.00	40	2.52	14.00	4.700	75
CL02□04□K39U	39.00	40	2.52	13.00	5.200	74
CL02□04□K47U	47.00	40	2.52	12.00	5.800	70
CL02□04□K56U	56.00	40	2.52	11.00	6.400	68
CL02□04□K68U	68.00	40	2.52	10.00	7.200	64
CL02□04□K82U	82.00	40	2.52	9.50	11.000	46
CL02□04□K100U	100.00	40	2.52	9.00	12.000	44
CL02□04□K120U	120.00	40	0.796	8.00	13.000	42
CL02□04□K150U	150.00	40	0.796	6.00	16.000	39
CL02□04□K180U	180.00	40	0.796	5.00	18.000	37
CL02□04□K220U	220.00	40	0.796	5.00	20.000	35
CL02□04□K270U	270.00	40	0.796	4.60	25.000	25
CL02□04□K330U	330.00	40	0.796	4.20	30.000	25
CL02□04□K390U	390.00	40	0.796	3.80	34.000	25
CL02□04□K470U	470.00	40	0.796	3.50	38.000	24
CL02□04□K560U	560.00	40	0.796	3.20	42.000	24
CL02□04□K680U	680.00	40	0.796	2.00	46.000	24
CL02□04□K820U	820.00	40	0.796	2.00	48.000	22
CL02□04□K1M	1000.00	40	0.796	1.50	50.000	22

Series **CL****ELECTRICAL CHARACTERISTICS****0307**

Part number	Inductance (μH)	Q (min)	Frequency (MHz)	SRF(MHz) (min)	RDC (Ω) (max)	IDC (mA) (max)
CL03□07□K100N	0.10	40	25.2	480.00	0.060	1400
CL03□07□K120N	0.12	40	25.2	450.00	0.060	1350
CL03□07□K150N	0.15	40	25.2	420.00	0.070	1270
CL03□07□K180N	0.18	40	25.2	400.00	0.070	1200
CL03□07□K220N	0.22	40	25.2	380.00	0.080	1150
CL03□07□K270N	0.27	40	25.2	360.00	0.085	1110
CL03□07□K330N	0.33	40	25.2	350.00	0.095	1110
CL03□07□K390N	0.39	40	25.2	320.00	0.100	1000
CL03□07□K470N	0.47	40	25.2	300.00	0.110	1000
CL03□07□K560N	0.56	40	25.2	280.00	0.120	950
CL03□07□K680N	0.68	40	25.2	250.00	0.130	900
CL03□07□K820N	0.82	40	25.2	200.00	0.140	900
CL03□07□K1U	1.00	40	25.2	180.00	0.150	815
CL03□07□K1U2	1.20	40	7.96	165.00	0.180	740
CL03□07□K1U5	1.50	40	7.96	150.00	0.200	700
CL03□07□K1U8	1.80	50	7.96	125.00	0.230	655
CL03□07□K2U2	2.20	50	7.96	110.00	0.250	630
CL03□07□K2U7	2.70	50	7.96	95.00	0.280	595
CL03□07□K3U3	3.30	50	7.96	70.00	0.300	575
CL03□07□K3U9	3.90	50	7.96	65.00	0.320	555
CL03□07□K4U7	4.70	50	7.96	50.00	0.350	530
CL03□07□K5U6	5.60	50	7.96	40.00	0.400	500
CL03□07□K6U8	6.80	50	7.96	30.00	0.450	470
CL03□07□K8U2	8.20	50	7.96	28.00	0.560	425
CL03□07□K10U	10.00	50	7.96	22.00	0.750	370
CL03□07□K12U	12.00	50	2.52	20.00	0.800	350
CL03□07□K15U	15.00	50	2.52	16.00	0.930	335
CL03□07□K18U	18.00	50	2.52	15.00	1.000	315
CL03□07□K22U	22.00	50	2.52	13.00	1.200	285
CL03□07□K27U	27.00	50	2.52	11.00	1.800	270
CL03□07□K33U	33.00	50	2.52	10.00	2.100	255
CL03□07□K39U	39.00	50	2.52	9.50	2.300	240
CL03□07□K47U	47.00	50	2.52	8.50	2.600	205
CL03□07□K56U	56.00	50	2.52	7.50	2.900	195
CL03□07□K68U	68.00	50	2.52	6.50	3.300	185
CL03□07□K82U	82.00	50	2.52	6.00	3.800	175
CL03□07□K100U	100.00	50	2.52	5.50	4.200	165
CL03□07□K120U	120.00	60	0.796	5.40	4.700	160
CL03□07□K150U	150.00	60	0.796	4.70	5.400	150
CL03□07□K180U	180.00	60	0.796	4.30	6.000	140
CL03□07□K220U	220.00	60	0.796	4.00	7.000	130
CL03□07□K270U	270.00	60	0.796	3.70	7.700	120
CL03□07□K330U	330.00	60	0.796	3.40	11.100	100
CL03□07□K390U	390.00	60	0.796	2.80	12.600	95
CL03□07□K470U	470.00	60	0.796	2.50	14.000	90
CL03□07□K560U	560.00	60	0.796	2.30	15.500	85
CL03□07□K680U	680.00	60	0.796	2.00	25.300	75
CL03□07□K820U	820.00	60	0.796	1.50	27.500	65
CL03□07□K1M	1000.00	50	0.796	1.20	31.400	60

Series **CL****ELECTRICAL CHARACTERISTICS****0401**

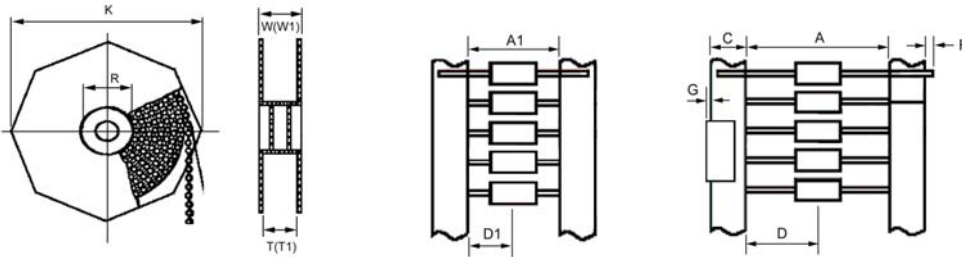
Part Number	Inductance (μH)	Q (min)	Frequency (MHz)	SRF(MHz) (min)	RDC (Ω) (max)	IDC (mA) (max)
CL04□10□K100N	0.10	25	25.2	480.00	0.060	1700
CL04□10□K120N	0.12	25	25.2	450.00	0.060	1640
CL04□10□K150N	0.15	25	25.2	420.00	0.070	1560
CL04□10□K180N	0.18	25	25.2	400.00	0.070	1480
CL04□10□K220N	0.22	25	25.2	380.00	0.080	1400
CL04□10□K270N	0.27	25	25.2	340.00	0.090	1320
CL04□10□K330N	0.33	25	25.2	300.00	0.100	1280
CL04□10□K390N	0.39	25	25.2	280.00	0.120	1200
CL04□10□K470N	0.47	25	25.2	250.00	0.130	1150
CL04□10□K560N	0.56	25	25.2	230.00	0.140	1100
CL04□10□K680N	0.68	25	25.2	210.00	0.150	1030
CL04□10□K820N	0.82	45	25.2	172.00	0.160	980
CL04□10□K1U	1.00	45	25.2	157.00	0.170	920
CL04□10□K1U2	1.20	50	7.96	144.00	0.180	880
CL04□10□K1U5	1.50	50	7.96	131.00	0.200	830
CL04□10□K1U8	1.80	55	7.96	121.00	0.220	790
CL04□10□K2U2	2.20	55	7.96	110.00	0.240	750
CL04□10□K2U7	2.70	60	7.96	100.00	0.250	720
CL04□10□K3U3	3.30	65	7.96	94.00	0.300	670
CL04□10□K3U9	3.90	65	7.96	86.00	0.350	640
CL04□10□K4U7	4.70	70	7.96	80.00	0.400	620
CL04□10□K5U6	5.60	70	7.96	74.00	0.450	590
CL04□10□K6U8	6.80	75	7.96	68.00	0.500	550
CL04□10□K8U2	8.20	80	7.96	53.00	0.600	530
CL04□10□K10U	10.00	80	7.96	45.00	0.650	500
CL04□10□K12U	12.00	75	2.52	34.00	0.700	480
CL04□10□K15U	15.00	70	2.52	20.00	0.750	460
CL04□10□K18U	18.00	65	2.52	14.00	0.800	430
CL04□10□K22U	22.00	50	2.52	9.90	0.900	410
CL04□10□K27U	27.00	55	2.52	7.60	1.000	390
CL04□10□K33U	33.00	55	2.52	6.30	1.100	370
CL04□10□K39U	39.00	50	2.52	6.30	1.200	350
CL04□10□K47U	47.00	45	2.52	6.30	1.300	340
CL04□10□K56U	56.00	40	2.52	6.20	1.500	320
CL04□10□K68U	68.00	40	2.52	5.70	1.800	305
CL04□10□K82U	82.00	35	2.52	5.30	2.000	290
CL04□10□K100U	100.00	30	2.52	4.80	2.500	275
CL04□10□K120U	120.00	70	0.796	3.80	3.000	185
CL04□10□K150U	150.00	70	0.796	3.50	4.200	175
CL04□10□K180U	180.00	70	0.796	3.30	4.600	165
CL04□10□K220U	220.00	70	0.796	3.00	5.100	155
CL04□10□K270U	270.00	65	0.796	2.80	6.000	145
CL04□10□K330U	330.00	65	0.796	2.60	6.500	137
CL04□10□K390U	390.00	65	0.796	2.40	7.500	133
CL04□10□K470U	470.00	60	0.796	2.20	8.500	126
CL04□10□K560U	560.00	60	0.796	2.10	9.500	120
CL04□10□K680U	680.00	55	0.796	1.90	12.000	113
CL04□10□K820U	820.00	55	0.796	1.80	14.000	105
CL04□10□K1M	1000.00	50	0.796	1.40	20.000	85

Series **CL****ELECTRICAL CHARACTERISTICS****0510**

Part Number	Inductance (μH)	Q (min)	Frequency (KHz) for L	Frequency (KHz) for Q	RDC (Ω) (max)	IDC (mA) (max)
CL05□10□K1U2	1.20	60	1.0	252.00	14.500	120
CL05□10□K1U5	1.50	60	1.0	252.00	16.500	120
CL05□10□K1U8	1.80	60	1.0	252.00	19.000	120
CL05□10□K2U2	2.20	60	1.0	252.00	27.500	120
CL05□10□K2U7	2.70	60	1.0	252.00	40.000	60
CL05□10□K3U3	3.30	50	1.0	252.00	50.000	60
CL05□10□K3U9	3.90	50	1.0	252.00	53.000	60
CL05□10□K4U7	4.70	50	1.0	252.00	60.000	60
CL05□10□K5U6	5.60	50	1.0	252.00	64.000	60
CL05□10□K6U8	6.80	50	1.0	252.00	73.000	60
CL05□10□K8U2	8.20	30	1.0	252.00	80.000	60
CL05□10□K10U	10.00	25	1.0	79.60	132.000	30
CL05□10□K12U	12.00	25	1.0	79.60	143.000	30
CL05□10□K15U	15.00	25	1.0	79.60	166.000	30
CL05□10□K18U	18.00	25	1.0	79.60	185.000	30
CL05□10□K22U	22.00	20	1.0	79.60	330.000	15
CL05□10□K27U	27.00	20	1.0	79.60	370.000	15
CL05□10□K30U	30.00	20	1.0	79.60	390.000	15
CL05□10□K33U	33.00	20	1.0	79.60	426.000	15
CL05□10□K39U	39.00	20	1.0	79.60	473.000	15

## Series **CL**

### DIMENSIONS OF PACKING AND REEL UNIT

**Panasert Forming**
**Taping 26 Type**
**Taping 52 Type**


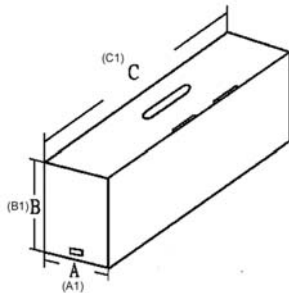
Unit : mm

Mark	Dimensions	Mark	Dimensions	Mark	Dimensions
A	52.0±1.50	E	X	T1	45.0±0.50
A1	26.0±1.50	F	1.0 (max)	W	76.0±0.50
B	5.0±0.50	G	1.0 (max)	W1	50.0±0.50
C	6.0±1.0	K	355±0.50		
D	26.0±0.5	R	15.0±0.50		
D1	13.0±0.5	T	71.0±0.50		

### PACKING UNIT FOR REEL

Item	CL02P04	CL03P07	CL04P10	CL05P10
Q'ty/Reel	5,000 PCS	5,000PCS	5,000PCS	3,000PCS
GW/Reel	1.4 Kgm	1.6 Kgm	2.0 Kgm	3.0 Kgm
Q'ty/CTN	25,000PCS	25,000PCS	25,000PCS	15,000PCS
NW/CTN	7.0 Kgm	8.0 Kgm	10.0 Kgm	15 Kgm
GW/CTN	8.0 Kgm	9.0 Kgm	11.0 Kgm	16.0 Kgm
Carton Size (mm)	397x397x479	397x397x479	397x397x479	397x397x479

### DIMENSIONS OF AMMO BOX



Unit : mm

Mark	Dimensions	Mark	Dimensions	Mark	Dimensions
A	74.0±0.30	B	108.0±0.30	C	260.0±0.30
A1	48.0±0.30	B1	105.0±0.30	C1	255.0±0.30

### PACKING UNIT FOR AMMO BOX

Item	CL02X04	CL03X07	CL04X10	CL05X10
Q'ty/Ammon Box	3,000 PCS	3,000PCS	2,000PCS	1,000PCS
GW/Box (Approx)	0.8 Kgm	0.9 Kgm	1.0 Kgm	0.7 Kgm
Q'ty/CTN	30,000PCS	30,000PCS	20,000PCS	10,000PCS
NW/CTN (Approx)	6.0 Kgm	7.0 Kgm	8.0 Kgm	5.0 Kgm
GW/CTN (Approx)	8.0 Kgm	9.0 Kgm	10.0 Kgm	7.0 Kgm
Carton Size (mm)	438x295x270	438x295x270	438x295x270	438x295x270

### PACKING UNIT FOR BULK

Item	CL02B04	CL03B07	CL04B10	CL05B10
Q'ty/Bag	1,000 PCS	1,000 PCS	1,000 PCS	500PCS
GWBag	0.1 Kgm	0.15 Kgm	0.3 Kgm	0.3 Kgm