规 格 書

SPECIFICATION

Customer： 深圳市立創電子商務有限公司

Part Name: E-CAP

SPEC： LF Series

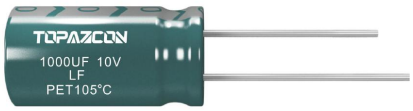
Part NO.： ALL

Date： 2021-7-24

CUSTOMER SIGN		

TOPAZCON	
DRAWING	RATIFY
李梦如	Cocp

LF Series



- Low impedance for high frequency.
- Endurance: +105℃ 2000-4000 hours.
- Suitable for switching power, UPS, power sources etc.
- RoHS Compliant

◆ SPECIFICATIONS

Item	Performance Characteristics
Temperature Range	-40 to +105℃
Working Voltage Range	6.3 to 100Vdc
Capacitance Range	15 to 4700 μ F
Capacitance Tolerance	±20% (at 20℃ and 120Hz)

Dissipation Factor (tan δ) (at20℃, 120Hz)

Rated Voltage (V)	6.3	10	16	25	35	50	63	100
Tan δ (Max)	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08

Low Temperature Characteristics (Max. Impedance Ratio) (at 120Hz)

Rate voltage (V)	6.3	10	16	25	35	50	63	100
Z(-25℃)/Z(+20℃)	4	3	2					
Z(-40℃)/Z(+20℃)	8	6	4	3				

Leakage Current

I≦0.01CV or 3uA Whichever is greater (at 20℃ after 2 minutes)

Where, I: Max. Leakage current (u A); C: Nominal capacitance (u F); V: Rated voltage (V).

Endurance

The following specification shall be satisfied when the capacitor are restored to 20℃ after subjected to DC voltage with the rated ripple current is applied for the specified period of time at 105℃.

Capacitance change	≤±25% of the initial value
Dissipation	≤200% of the specified value
Leakage current	≤specified value

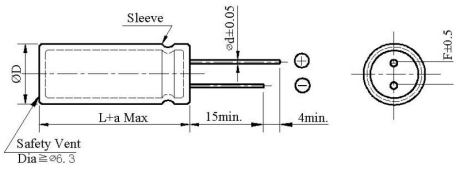
Case Dia	Life time (hours)
	6.3-100v
=Φ6.3	2000
Φ8-10	3000
>Φ10	4000

Shelf Life

The following requirements shall be satisfied when the capacitor are restored to 20℃ after exposing them for 1000 hours at 105℃ without voltage applied.

Capacitance change	≤±25% of the initial value
Dissipation	≤ 200% of the specified value
Leakage current	≤ 200% of the specified value

◆ DIMENSIONS (mm)



ΦD	6.3	8		10	12.5	16	18
Φ d	0.5	0.5	0.6	0.6	0.6	0.8	0.8
F	2.5	3.5	3.5	5.0	5.0	7.5	7.5
a	+2max						

◆ RIPPLE CURRENT MULTIPLIERS

Frequency correction factor for ripple current (Hz)

Hz / u F	120	1K	10K	100K
Cap＜220	0.40	0.75	0.90	1.00
220≦Cap＜680	0.60	0.85	0.94	1.00
680≦Cap＜2200	0.60	0.87	0.95	1.00
2200≦Cap＜4700	0.75	0.90	0.95	1.00
Cap≧4700	0.85	0.95	0.98	1.00

LF Series

◆ STANDARD RATINGS

(Impedance. at 20℃ 100KHz/Ωmax. Ripple current; mAms/105℃ 100KHz)

WV (Vdc)	Cap (uF)	CaSe size Ø D×L (mm)	Tan δ	Impedance (Ωmax)	Ripple current (mArms)
6.3 (0J)	180	6.3×11	0.22	0.25	340
		8×9	0.22	0.33	300
	220	6.3×11	0.22	0.25	340
		8×9	0.22	0.33	300
	270	6.3×11	0.22	0.25	340
		8×9	0.22	0.33	300
	330	8×11	0.22	0.13	650
		10×9	0.22	0.17	580
	470	8×11	0.22	0.13	650
		10×9	0.22	0.17	580
	560	8×11	0.22	0.13	650
		10×9	0.22	0.17	580
	680	8×11	0.22	0.13	650
		10×9	0.22	0.17	580
	820	10×12	0.22	0.08	870
	1000	10×9	0.22	0.17	580
		10×12	0.22	0.08	870
	1200	10×12	0.22	0.08	870
	1500	8×20	0.22	0.068	1050
		10×16	0.22	0.06	1210
	1800	10×20	0.22	0.045	1400
	2200	10×20	0.24	0.045	1400
	2700	10×25	0.24	0.042	1650
		12.5×20	0.24	0.035	1900
	3300	10×25	0.26	0.042	1860
		12.5×20	0.26	0.036	1900
	3900	12.5×20	0.26	0.035	1900
	4700	12.5×25	0.28	0.030	2130
10 (1A)	150	6.3×11	0.19	0.25	340
		8×9	0.19	0.33	300
	180	6.3×11	0.19	0.25	340
		8×9	0.19	0.33	300
	220	6.3×11	0.19	0.25	340
		8×9	0.19	0.33	300
	270	8×9	0.19	0.33	300
		10×9	0.19	0.17	580
	330	10×9	0.19	0.17	580
	470	10×9	0.19	0.17	580
	560	10×9	0.19	0.17	580
	680	10×9	0.19	0.17	580
	820	10×12	0.19	0.08	870
	1000	8×16	0.19	0.087	850
		10×16	0.19	0.06	1210
	1200	10×20	0.19	0.045	1400
	1500	10×20	0.19	0.045	1400
	1800	10×20	0.19	0.045	1400
	2200	10×20	0.21	0.045	1400
	2700	10×25	0.21	0.042	1650
		12.5×20	0.21	0.035	1900
	3300	12.5×25	0.23	0.030	2130
16 (1C)	100	8×9	0.16	0.33	300
	120	8×9	0.16	0.33	300
	150	8×9	0.16	0.33	300
		10×9	0.16	0.33	580
	180	8×9	0.16	0.33	300
		10×9	0.16	0.33	580
	220	8×9	0.16	0.33	300
		10×9	0.16	0.33	580
	270	10×9	0.16	0.17	580
	330	10×9	0.16	0.17	580
	470	10×9	0.16	0.17	580
		10×12	0.16	0.18	870
	560	10×12	0.16	0.08	870
	680	8×16	0.16	0.087	850
		10×12	0.16	0.08	870

WV (Vdc)	Cap (uF)	CaSe size Ø D×L (mm)	Tan δ	Impedance (Ωmax)	Ripple current (mArms)
16 (1C)	820	10×16	0.16	0.06	1210
	1000	10×16	0.16	0.06	1210
	1200	10×20	0.16	0.045	1400
	1500	10×20	0.16	0.045	1400
	1800	10×25	0.16	0.042	1650
		12.5×20	0.16	0.035	1800
	2200	12.5×20	0.18	0.035	1900
	2700	12.5×20	0.18	0.030	2130
25 (1E)	82	6.3×11	0.14	0.25	340
		8×9	0.14	0.33	300
	100	6.3×11	0.14	0.25	340
		8×9	0.14	0.33	300
	120	8×11	0.14	0.13	650
		10×9	0.14	0.17	580
	150	8×11	0.14	0.13	650
		10×9	0.14	0.17	580
	180	8×11	0.14	0.13	650
		10×9	0.14	0.17	580
	220	8×11	0.14	0.17	650
		10×9	0.14	0.08	580
	270	10×9	0.14	0.17	580
		10×12	0.14	0.08	870
	330	10×9	0.14	0.087	580
		10×12	0.14	0.080	870
	470	8×16	0.14	0.060	840
		10×12	0.14	0.060	870
	560	10×16	0.14	0.045	1210
	680	10×16	0.14	0.045	1210
	820	10×20	0.14	0.045	1400
	1000	10×20	0.14	0.042	1400
	1200	10×20	0.14	0.035	1400
	1500	10×25	0.14	0.030	1650
		12.5×20	0.14	0.030	1900
	1800	12.5×25	0.14	0.25	2130
	2200	12.5×25	0.16	0.33	2130
35 (1V)	47	6.3×11	0.12	0.25	340
		8×9	0.12	0.33	300
	56	6.3×11	0.12	0.25	340
		8×9	0.12	0.33	300
	68	6.3×11	0.12	0.13	340
		8×9	0.12	0.17	300
	82	8×11	0.12	0.13	650
		10×9	0.12	0.17	580
	100	8×11	0.12	0.13	650
		10×9	0.12	0.17	580
	120	8×11	0.12	0.13	650
		10×9	0.12	0.17	580
	150	8×11	0.12	0.13	650
		10×9	0.12	0.17	580
	180	10×12	0.12	0.08	870
	220	8×11	0.12	0.13	650
		10×9	0.12	0.17	580
		8×16	0.12	0.087	840
		10×12	0.12	0.080	870
	270	10×15	0.12	0.060	1210
	330	8×20	0.12	0.069	1000
		10×12	0.12	0.080	870
		10×16	0.12	0.060	1210
	470	10×16	0.12	0.060	1210
	560	10×20	0.12	0.045	1400
	680	10×20	0.12	0.045	1400
	820	10×25	0.12	0.042	1650
		12.5×20	0.12	0.035	1900
	1000	12.5×20	0.12	0.035	1900
		12.5×25	0.12	0.030	2130

LF Series

◆ STANDARD RATINGS

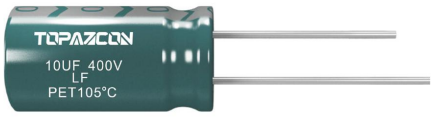
(Impedance. at 20°C 100KHz/Ωmax. Ripple current; mAms/105°C 100KHz)

WV (Vdc)	Cap (uF)	CaSe size ∅ D×L (mm)	Tan δ	Impedance (Ωmax)	Ripple current (mArms)
50 (1H)	33	6.3×11	0.10	0.30	295
		8×9	0.10	0.40	260
	39	6.3×11	0.10	0.30	295
		8×9	0.10	0.40	260
	47	6.3×11	0.10	0.30	295
		8×9	0.10	0.40	260
	56	8×11	0.10	0.17	560
		10×9	0.10	0.23	500
	68	8×11	0.10	0.17	560
		10×9	0.10	0.23	500
	82	8×11	0.10	0.17	560
		10×9	0.10	0.23	500
	100	10×12	0.10	0.12	760
	120	8×16	0.10	0.12	730
		10×12	0.10	0.12	760
	150	10×16	0.10	0.084	1050
	180	8×20	0.10	0.090	1050
		10×16	0.10	0.084	1050
	220	10×16	0.10	0.084	1050
	270	10×25	0.10	0.055	1440
	330	12.5×20	0.10	0.045	1660
	470	12.5×25	0.10	0.034	1950
	560	12.5×25	0.10	0.034	1950

WV (Vdc)	Cap (uF)	CaSe size ∅ D×L (mm)	Tan δ	Impedance (Ωmax)	Ripple current (mArms)
63 (1J)	22	6.3×11	0.09	0.95	120
		8×9	0.09	1.24	100
	27	6.3×11	0.09	0.95	120
		8×9	0.09	1.24	100
	33	6.3×11	0.09	0.95	120
		8×9	0.09	1.24	100
	39	8×11	0.09	0.51	235
		10×9	0.09	0.67	210
	47	8×11	0.09	0.51	235
		10×9	0.09	0.67	210
	56	8×11	0.09	0.51	235
		10×9	0.09	0.67	210
	68	8×11	0.09	0.51	235
		10×9	0.09	0.67	210
	82	10×12	0.09	0.340	315
	100	8×16	0.09	0.350	300
		10×12	0.09	0.340	315
	120	10×16	0.09	0.245	360
	150	8×20	0.09	0.265	360
	180	10×20	0.09	0.165	470
	220	10×20	0.09	0.165	470
	270	12.5×20	0.09	0.125	700
	330	12.5×20	0.09	0.125	700
	390	12.5×25	0.09	0.095	930
100(2A)	15	6.3×11	0.08	0.95	120
		8×9	0.08	1.24	100
	27	8×11	0.08	0.51	235
		10×9	0.08	0.67	210
	39	8×16	0.08	0.36	300
	47	10×12	0.08	0.34	315
	56	8×20	0.08	0.265	360
	68	10×16	0.08	0.245	360
	82	10×20	0.08	0.165	470
	100	10×20	0.08	0.165	470
	120	12.5×20	0.08	0.125	700
	180	12.5×25	0.08	0.095	930
	220	12.5×25	0.08	0.095	930

LF Series

- High frequency, low impedance.
- Life time: +105℃ 2000-3000 hours
- RoHS Compliant



◆ SPECIFICATIONS

Item	Performance Characteristics
Temperature Range	-25 to +105℃(160 to 450Vdc)
Working Voltage Range	160 to 450Vdc
Capacitance Range	0.47 to 220 μ F
Capacitance	±20% (at 20℃ and 120Hz)

Dissipation Factor (tan δ) (at20℃, 120Hz)

Rated Voltage (V)	160	200	250	350	400	450
Tan δ (Max)	0.15	0.15	0.15	0.20	0.20	0.20

Low Temperature Characteristics (Max. Impedance Ratio) (at 120Hz)

Rate voltage (V)	160	200	250	350	400	450
Z(-25℃)/Z(+20℃)	3	5				6
Z(-40℃)/Z(+20℃)	4	7				-

Leakage Current

160 to 450Vdc	(at 20℃ after 2 minutes)
I≤0.02CV or 10uA whichever is greater	

Where, I: Max. Leakage current (u A); C: Nominal capacitance (u F); V: Rated voltage (V).

Endurance

The following specification shall be satisfied when the capacitor are restored to 20℃ after subjected to DC voltage with the rated ripple current is applied for the specified period of time at 105℃.

Capacitance change	≤±20% of the initial value
Dissipation factor(tan	≤200% of the specified value
Leakage current	≤specified value

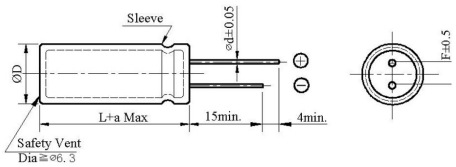
Case Dia	Life time (hours)
≤Φ8	2000
≥Φ10	3000

Shelf Life

The following specifications shall be satisfied when the capacitor are restored to 20℃ after exposing them for1000 hours at 105℃ without voltage applied.

Capacitance change	≤ ±20% of the initial value
Dissipation factor(tan	≤ 200% of the specified value
Leakage current	≤ 200% of the specified value

◆ DIMENSIONS (mm)



ΦD	6.3	8		10	12.5	16	18
Φ d	0.5	0.5	0.6	0.6	0.6	0.8	0.8
F	2.5	3.5	3.5	5.0	5.0	7.5	7.5
a	+2max						

◆ RIPPLE CURRENT MULTIPLIERS

Frequency correction factor for ripple current (Hz)

Freq. (Hz) / CAP(uF)	120	1K	10K	100K
<18	0.59	0.85	0.97	1.00
18≤CAP<100	0.62	0.89	0.97	1.00
≥100	0.72	0.90	0.98	1.00

LF Series

◆ STANDARD RATINGS

WV (Vdc)	Cap (uF)	CaSe size Ø D×L (mm)	Tan δ	Ripple current (mArms/105°C, 100KHz)
160 (2C)	2.2	6.3×11	0.12	54
	3.3	6.3×11	0.12	70
	4.7	8×12	0.12	82
	10	10×12	0.12	142
	22	10×16	0.12	206
	33	10×20	0.12	265
	47	12.5×20	0.12	332
	100	12.5×25	0.12	546
	220	16×30	0.12	822
200 (2D)	1	5×11	0.12	34
	2.2	6.3×11	0.12	52
	3.3	6.3×11	0.12	70
	4.7	8×12	0.12	82
	10	10×12	0.12	144
	22	10×16	0.12	206
		10×20	0.12	215
	33	10×20	0.12	288
		12.5×20	0.12	330
	47	12.5×20	0.12	366
	56	12.5×25	0.12	430
	68	12.5×25	0.12	488
	82	10×30	0.12	518
	100	16×25	0.12	720
	120	16×25	0.12	745
	150	18×25	0.12	845
	180	12.5×35	0.12	882
	220	18×30	0.12	960
250 (2E)	0.47	6.3×11	0.12	35
	1	6.3×11	0.12	40
	2.2	6.3×11	0.12	52
	3.3	8×12	0.12	72
	4.7	8×12	0.12	84
	10	10×12	0.12	144
	22	10×20	0.12	220
	33	12.5×20	0.12	335
	47	12.5×25	0.12	382
	56	12.5×25	0.12	426
	82	16×25	0.12	575
	100	16×30	0.12	740
	220	18×35	0.12	1010
350 (2V)	0.47	6.3×11	0.15	35
	1	6.3×11	0.15	40
	2.2	8×12	0.15	54
	3.3	8×12	0.15	74
	3.3	10×12	0.15	80
	4.7	10×16	0.15	104
	10	10×16	0.15	170
	22	12.5×25	0.15	285
	33	16×25	0.15	330
	47	16×30	0.15	480

WV (Vdc)	Cap (uF)	CaSe size Ø D×L (mm)	Tan δ	Ripple current (mArms/105°C, 100KHz)
400 (2G)	1	8×12	0.15	40
	2.2	8×12	0.15	62
	3.3	8×12	0.15	85
		10×12	0.15	90
	4.7	10×12	0.15	106
	10	10×16	0.15	175
		10×20	0.15	200
	22	12.5×20	0.15	300
	27	10×30	0.15	385
	33	10×35	0.15	450
		16×20	0.15	440
	39	10×40	0.15	490
	47	12.5×30	0.15	595
		16×25	0.15	584
	56	10×45	0.15	655
		12.5×35	0.15	650
	68	12.5×40	0.15	815
		16×30	0.15	780
	82	12.5×40	0.15	850
		18×30	0.15	835
	100	12.5×50	0.15	890
		18×30	0.15	870
450 (2W)	1	8×12	0.20	40
	2.2	10×12	0.20	65
	3.3	10×16	0.20	92
	4.7	10×20	0.20	108
	10	12.5×20	0.20	160
	18	10×30	0.20	200
	22	16×20	0.20	305
	27	10×30	0.20	385
	33	10×35	0.20	460
		16×25	0.20	455
	39	10×40	0.20	500
	47	10×45	0.20	635
		12.5×30	0.20	630
		18×25	0.20	620
	56	12.5×35	0.20	705
		18×25	0.20	695
	68	12.5×40	0.20	750
		18×30	0.20	730
	82	12.5×45	0.20	800
		18×30	0.20	770
	100	18×35	0.20	860
	120	18×40	0.20	1050

PART NUMBER SYSTEM

♦ Aluminum Electrolytic Capacitors for Scerw-Mount Terminal TYPE

Category	Series	Rated Voltage	Capacitance	Tolerance	Size	Terminal Forming	Colour	Other or Special Request
①	②	③	④	⑤	⑥	⑦	⑧	⑨
□	□□	□□	□□□	□	□□□□	□□	□	□□□□□□

①Category

Type	Code
Aluminum Electrolytic Capaction	1
	E

②Series

Series name	Code	
	2	3
CS	C	S
CR	C	R
CX	C	X
CE	C	E
CK	C	K

③Rated Voltage

WV (Vdc)	Code	
	4	5
6.3	0	J
10	1	A
16	1	C
25	1	E
35	1	V
40	1	G
50	1	H
63	1	J
70	1	L
80	1	K
100	2	A
160	2	C
180	2	Q
200	2	D
250	2	E
300	2	S
350	2	V
400	2	G
420	2	T
450	2	W
500	2	H

④Capacitance

Cap （uF）	Code		
	6	7	8
47	4	7	0
56	5	6	0
68	6	8	0
82	8	2	0
100	1	0	1
220	2	2	1
330	3	3	1
470	4	7	1
1000	1	0	2
2200	2	2	2
4700	4	7	2
6800	6	8	2
8200	8	2	2
10000	1	0	3
12000	1	2	3
22000	2	2	3

⑤Capacitance Tolerance

Tol. (%)	Code
	9
-5~+5	J
-10~+10	K
-20~+20	M
-5~+20	F
-10~+20	V
-10~+30	Q
-20~+0	S
-0~+20	A

⑥Size

ΦD*L (mm)	Code			
	10	11	12	13
51×80	5	1	8	0
51×100	5	1	A	0
51×105	5	1	A	5
51×110	5	1	B	0
51×120	5	1	C	0
64×100	6	4	A	0
64×120	6	4	B	0
76×143	7	6	E	3
76×215	7	6	L	5
90×150	9	0	F	0
90×170	9	0	H	0
90×190	9	0	J	0
90×205	9	0	K	5
90×230	9	0	N	0

⑦Terminal Forming

Terminal Forming	Code
	14~15
M5×10	LS
M5×13	LA
M6×17	LB

⑧Colour

Colour	Code
	16
Black	B
Yellow	Y

⑨Other or Special Request

Special Request	Code
	17~22
ON/OFF& Over Voltage	A
Low Dissipation Factor	D
Low Impedance&ESR	E
Endurance	F
High Temperature	H
Material Limit	M
High Ripple Current	R
Convex Rubber Cover	U
CP wire	W
Special Foot Distance	X
Two pin snap ring	K1
Three pin snap ring	K2
Bottom with screws	N

Lead Forming

Taping Specifications

Fig.1 Code:T1

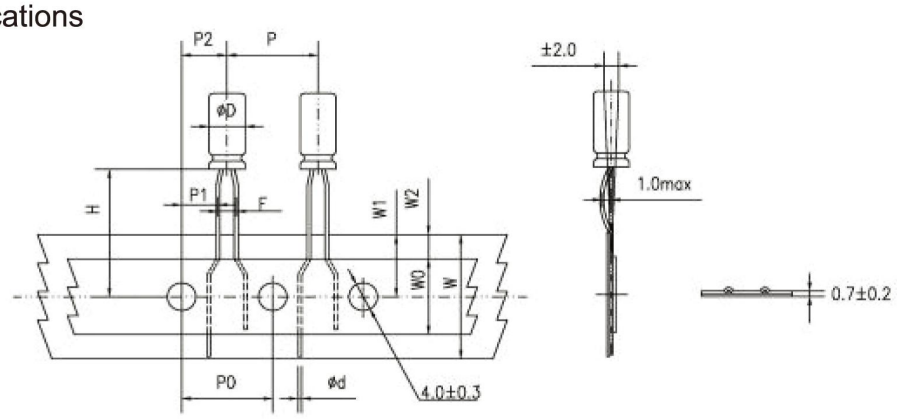


Fig.2Code:T2

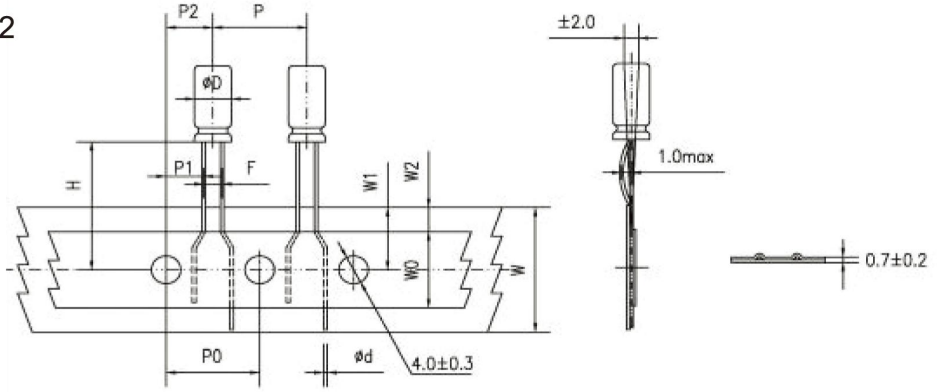


Fig.3 Code:T2

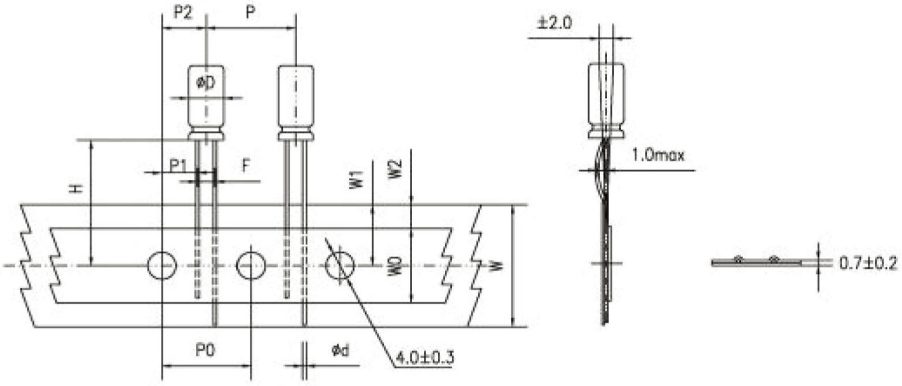
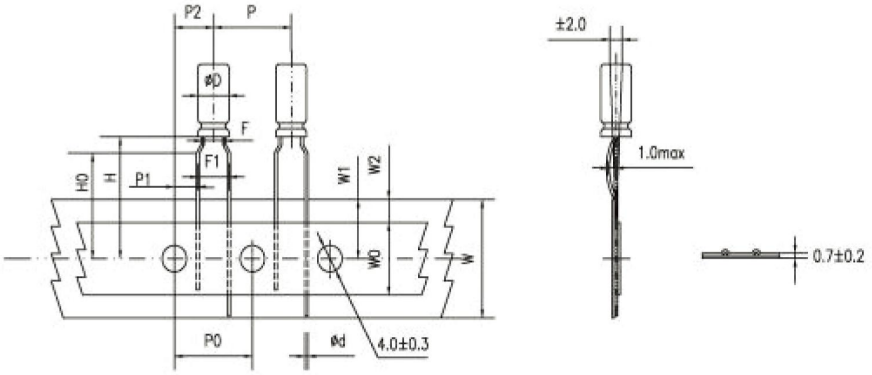


Fig.4 Code:T3



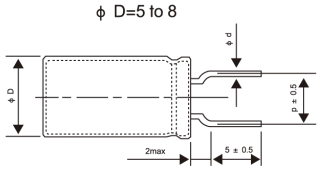
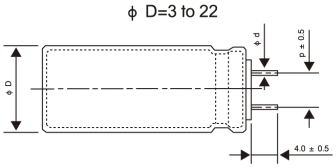
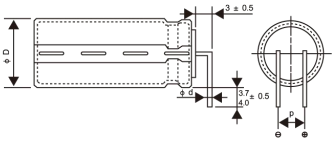
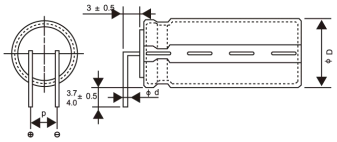
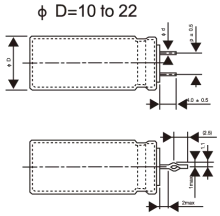
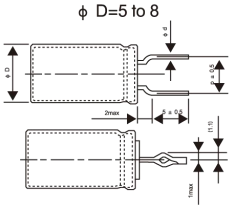
Specification Fig.1 & Fig.2 & Fig.3

Iterms	Symbol	CASE SIZE												Tolerance
		4 × 5 4 × 7		5 × 5 5 × 7		5x11		6.3x5	6.3x7 6.3x9	6.3x11 6.3x12	8x5/7 8x9/11 8x11.5 8x12	8x16 8x20	10x9/12 10x12.5 10x13/16 10x20/25	
Pin Code		T_1	T_2	T_1	T_2	T_1		T_2	T_2	T_2	T_2	T_2	T_2	
Lead wire diameter	ϕd	0.45		0.45		0.5		0.45	0.5	0.5	0.45/0.5	0.6	0.6	± 0.05
Pitch of body	P	12.7		12.7		12.7		12.7	12.7	12.7	12.7	12.7	12.7	± 1.0
Feed hole pitch	PO	12.7		12.7		12.7		12.7	12.7	12.7	12.7	12.7	12.7	± 0.2
Hole center to lead distance	P1	5.1	5.6	5.1	5.35	5.1	5.35	5.1	5.1	5.1	4.6	4.6	3.85	± 0.7
Feed hole center to body center distance	P2	6.35		6.35		6.35		6.35	6.35	6.35	6.35	6.35	6.35	± 1.0
Lead to lead distance	F	2.5	1.5	2.5	2.0	2.5	2.0	2.5	2.5	2.5	3.5	3.5	5.0	± 0.5
Height of body from tape center	H	18.5		18.5		18.5		18.5	18.5	18.5	18.5	18.5	18.5	± 0.75
Base tape width	W	18.0		18.0		18.0		18.0	18.0	18.0	18.0	18.0	18.0	± 0.5
Adhesive tape width	WO	11.0		11.0		11.0		11.0	11.0	11.0	11.0	11.0	11.0	min
Hole positron	W1	9.0		9.0		9.0		9.0	9.0	9.0	9.0	9.0	9.0	+0.75 −0.5
Hole down tape position	W2	3.0		3.0		3.0		3.0	3.0	3.0	3.0	3.0	3.0	max

Specification Fig.4

Iterms	Symbol	CASE SIZE									Tolerance
		4 × 5 4 × 7	5 × 5	5 × 7	5 × 11	6.3 × 5	6.3 × 7 6.3 × 9	6.3 × 11 6.3 × 12	8 × 5/7 8 × 9/11 8 × 11.5/12	8 × 16 8 × 20	
Pin Code		T_3	T_3	T_3	T_3	T_3	T_3	T_3	T_3	T_3	
Lead wire diameter	ϕd	0.45	0.45	0.45	0.5	0.45	0.5	0.5	0.45/0.5	0.6	± 0.05
Pitch of body	P	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	± 1.0
Feed hole pitch	PO	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	± 0.2
Hole center to lead distance	P1	3.85	3.85	3.85	3.85	3.85	3.85	3.85	3.85	3.85	± 0.7
Feed hole center to body center distance	P2	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	± 1.0
Lead to lead distance	F	1.5	2.0	2.0	2.0	2.5	2.5	2.5	3.5	3.5	± 0.5
Lead to lead distance	F1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	+0.8 −0.2
Height of body from tape center	H	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	± 0.75
Lead wire clinch height	HO	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	± 0.5
Base tape width	W	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	± 0.5
Adhesive tape width	WO	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	min
Hole position	W1	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	+0.75 −0.5
Hole down tape position	W2	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	max

Lead Forming & Cut:

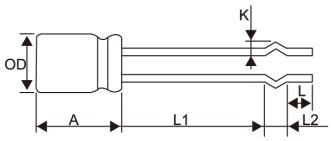
● Lead comfiguration:F	● Lead comfiguration:C
ϕ D=5 to 8	ϕ D=3 to 22
	
● Lead comfiguration:R	**● Lead comfiguration:L**
ϕ D=10 to 22	ϕ D=10 to 22
	
● Lead comfiguration:M	**● Lead comfiguration:S**
ϕ D=10 to 22	ϕ D=5 to 8
	

LEAD SPACING&RECOMMENDED PCB DIMENSIONS

(mm)

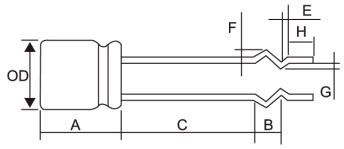
ϕD / Dimensionc	ϕd	p	PC Board		Lead Configuration
			Hole diame ter	Thickness	
5	0.5	5.0	0.8	1.6	F C S
6.3	0.5	5.0	0.8		
8	0.5/0.6	5.0	1.0		
10	0.6	5.0	1.0	1.6	C M R L
12.5	0.6	5.0	1.0		
16	0.8	7.5	1.2		
18	0.8	7.5	1.2		
20	0.8	7.5	1.2		
22	0.8	10.0	1.2		

Lead comfiguration:B



ØD	L1	L2	K	A	L
5	17.5–19.5	2.6	1.9	10.0–15.0	3.0–5.0
6.3	17.5–19.5	2.6	1.9	10.0–16.0	
8	12.0–14.0	2.5	1.3	10.0–20.0	
8	13.5–15.5	2.5	1.5		
8	13.0–15.0	3.0	1.5		
8	19.5–21.5	3.0	1.5		
8	21.0–23.0	3.0	1.5		
10	7.5–9.5	2.5	1.7	10.0–25.0	
10	17.0–19.0	2.5	1.7		
10	10.5–12.5	2.5	1.5		
10	10.0–12.0	3.0	1.5		
10	13.0–15.0	3.0	1.5		
10	18.0–20.0	3.0	1.5		
10	21.0–23.0	3.0	1.5		
	± 1.0	± 0.5	0.3	± 1.0	± 1.0

Lead comfiguration:K



ØD	C	B	E	F	G	A	H
8	13.5–15.5	3	1.2	1.8	0.8	10–20	3.0–5.0
10	18.5–20.5	3	1.2	1.8	1	10–25	
10	19.0–21.0	3	1.5	1.4	0.5		
	± 1.0	± 0.5	± 0.3	± 0.3	± 0.3	± 1.0	± 1.0