

Solder Pin & Tag Capacitors

ALP/T 10/20/22 series

Listed here are only samples of the range of Solder Pin and Tag Capacitors we can produce.

It should be pointed out that the ALP, solder pin, ranges are an older design and as such should not be considered for any new applications. Details are incorporated here, primarily, for maintenance/replacement purposes.



ALP/T 10, 20 and 22 Series

A range of 85°C capacitors designed to meet the demands of inverters, switch mode power supplies and energy storage circuits. It should be noted that for any new applications requiring board mounting terminations, ALP, the ALC ranges of snap-in capacitors produced by BHC should be considered. The ALP/T10 is the older “General Purpose” range whereas the ALP/T20 is the “Long Life” equivalent. ALP/T22 is a higher CV version of ALP/T20 with the same long life characteristics.

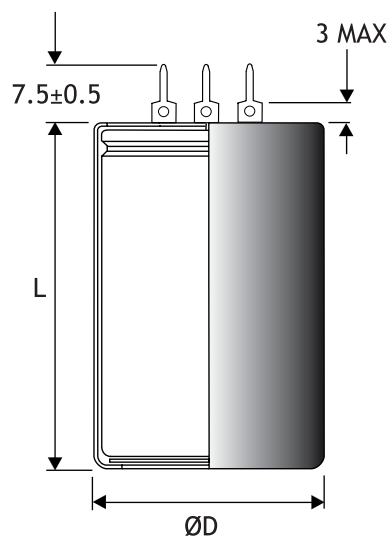
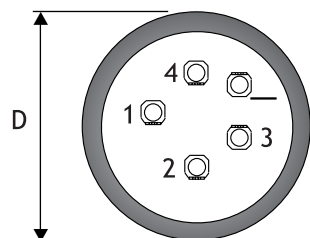
	ALP/T10	ALP/T20	ALP/T22
Capacitance Range	100µF to 68,000µF	22µF to 68,000µF	47µF to 150,000µF
Capacitance Tolerance	-10% +30%	-10% +30% (200V ±20%)	±20%
Voltage Range	10V to 385V d.c.	10V to 450V d.c.	10V to 450V d.c.
Temperature range	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
Case sizes mm	22 x 35 to 40 x 105	22 x 35 to 40 x 105	22 x 35 to 40 x 105

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ALP/T 10/20/22 case sizes

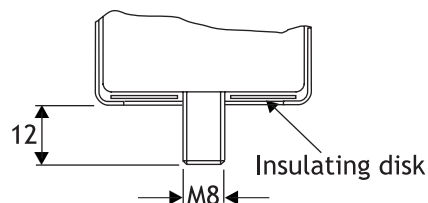
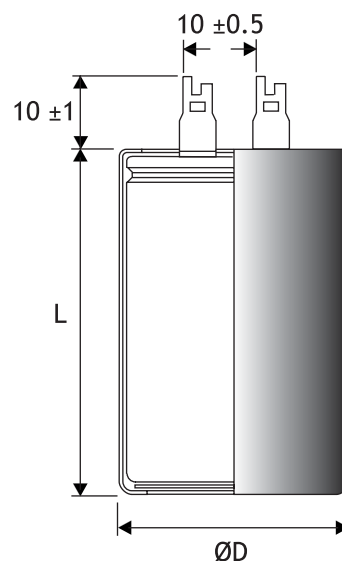
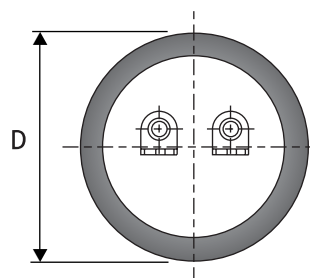
ALP Pin style

Designed for PCB mounting to DIN 41238.



ALT Tag style

Designed for flying lead connection.



DIMENSIONS (sleeved) mm

CASE CODE	D ±1	L ±2	MOUNTING CLIP FOR ALT STYLE	WEIGHT grams nom.
AA	25	35	V2/H1	30
AB	25	45	V2/H1	39
BB	30	45	-	50
CB	35	45	V3/H2	65
CD	35	55	V3/H2	75
DB	40	45	V9	80
DD	40	55	V9	95
DE	40	75	V9	125
DF	40	105	V9	170

For details of mounting clips and stud mounting kits see pages 52 & 53.

ALT11\21\23

Stud Mounting

Max torque: stud M8:4NM

Capacitor marking

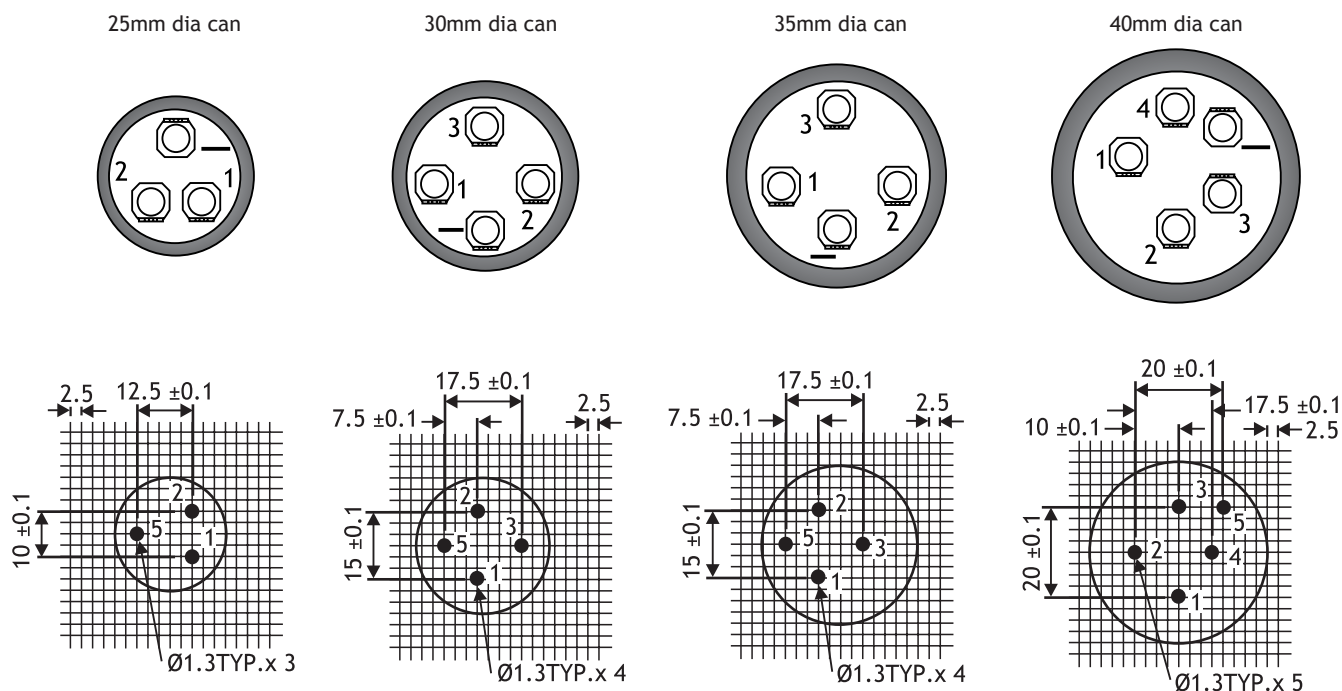
The capacitors are marked with items 1 to 6 from the following list as a minimum, and as much of the remaining information as is practical.

1. Rated capacitance in μF
2. Rated voltage d.c.
3. Polarity of terminations
4. Tolerance on rated capacitance
5. Date code/Batch number
6. BHC part number
7. Environmental classification

Ordering information

For details of ordering see pages 54 & 55.

ALP Pin and mounting configurations



Printed circuit board hole positions, viewed from component side.

Connections: Hole 1 represents +ve, Hole 5 represents -ve. Terminals 2,3 and 4 may be at negative terminal potential due to the presence of electrolyte. They are intended for mechanical connections only. It is recommended that they are soldered to the printed circuit board. Additional dummy pins are provided for stability. Note that the case and dummy pins may be at negative terminal potential.

TECHNICAL DATA

Related documents

IEC 384-4

DIN 41238

BS CECC 30301-033 (ALP/T20 Only)

Temperature range

Storage -55°C to +85°C

Operating -40°C to +85°C

Environmental classification 40/085/56

Surge voltage

1000 surges (30 seconds) at 85°C with surge voltage applied. See electrical characteristics for more details.

Charge/discharge

10⁶ cycles at 25°C and rated voltage. One cycle per second with a time constant of 0.1.

D.C. leakage current

After application of rated d.c. voltage for 5 minutes at 20°C, the d.c. leakage current shall not exceed (0.006 C_r U_r) μA. Where C_r is the rated capacitance in μF and U_r is the rated d.c. voltage.

Vibration

10Hz to 500Hz at 0.75mm or 10g for 3x2hrs duration.

Insulation resistance

≥ 100MΩ at 100V d.c., across insulating sleeve.

Voltage proof

≥ 2500V d.c., across insulating sleeve.

Life expectancy

At rated temperature with rated voltage and ripple current applied.

CAN DIAMETER (mm)	RANGE	LIFE EXPECTANCY (hours)
25	ALP/T10	5000
	ALP/T20 & 22	12000
30	ALP/T10	5000
	ALP/T20 & 22	15000
35	ALP/T10	5000
	ALP/T20 & 22	18000
40	ALP/T10	5000
	ALP/T20 & 22	26000

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ALP/T 10/20/22

ALP/T CAP AND VOLTAGE MATRIX

Cap μF	Rated Voltage D.C. (Surge Voltage in Brackets)											
	10 (11.5)	16 (18.5)	25 (28.5)	40 (46)	63 (72.5)	100 (115)	160 (184)	200 (230)	250 (287)	385 (425)	400 (440)	450 (495)
22												ALP/T20
33												ALP/T20
47											ALP/T20	ALP/T20 ALP/T22
68										ALP/T22	ALP/T20	ALP/T20 ALP/T22
100									ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T10	ALP/T20	ALP/T20 ALP/T22
150							ALP/T10		ALP/T20 ALP/T22	ALP/T10 ALP/T10	ALP/T20	ALP/T20 ALP/T22
220							ALP/T10		ALP/T20 ALP/T22	ALP/T10 ALP/T10	ALP/T20	ALP/T20 ALP/T22
330							ALP/T10		ALP/T20 ALP/T22	ALP/T10 ALP/T10	ALP/T20	ALP/T20 ALP/T22
470						ALP/T10 ALP/T20	ALP/T10		ALP/T20 ALP/T22	ALP/T10 ALP/T10	ALP/T20	ALP/T20 ALP/T22
680						ALP/T10 ALP/T20 ALP/T22	ALP/T10		ALP/T20 ALP/T22	ALP/T10 ALP/T10	ALP/T20	ALP/T20 ALP/T22
1000					ALP/T10 ALP/T20	ALP/T10 ALP/T20	ALP/T10		ALP/T20 ALP/T22	ALP/T10 ALP/T10	ALP/T22	
1500				ALP/T10 ALP/T20	ALP/T10 ALP/T20	ALP/T10 ALP/T20	ALP/T10		ALP/T20 ALP/T22	ALP/T10 ALP/T22		
2200			ALP/T10 ALP/T20	ALP/T10 ALP/T20	ALP/T10 ALP/T20	ALP/T10 ALP/T20	ALP/T10		ALP/T20 ALP/T22			
3300		ALP/T10 ALP/T20	ALP/T10 ALP/T20	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22						
4700	ALP/T10 ALP/T20	ALP/T10 ALP/T20	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22						
6800	ALP/T10 ALP/T20	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22						
10000	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22						
15000	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22							
22000	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22							
33000	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22							
47000	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22							
68000	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22	ALP/T10 ALP/T20 ALP/T22							
100000	ALP/T22	ALP/T22										
150000	ALP/T22											

For technical data covering case size, ESR, impedance and ripple current rating, on any of the above designs, contact BHC Components technical sales.