

# ALC10S Series 85°C

**RoHS**  
Compliant

- 2 Pin Snap-in
- Long Life 18000 hours at 85 °C (Ur, Ir applied)
- Slit Foil technology

## APPLICATION

Modern electrolytic capacitors are designed for use in power supplies so most aspects of their design have been optimised for this application. Some of the advances in design may not be beneficial in audio applications where the requirements of the capacitors are very different.

BHC, in collaboration with an audio research company, DNM Design, have produced the Slit Foil Capacitor specifically for audio applications. This is a patented design which eliminates circulating currents in the aluminium foils. This spurious current flow on the capacitor plates is known to occur, but is not apparent in most applications.

## BASIC DESIGN

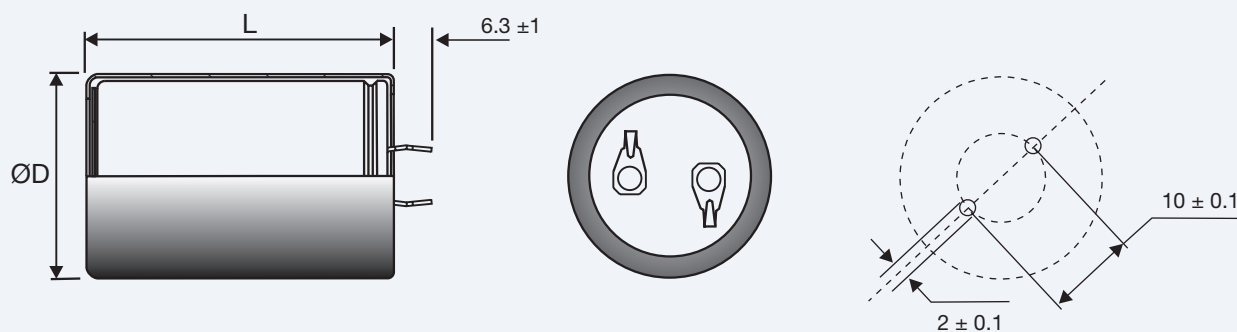
Slit foil capacitor research has also indicated that improvements in the general construction of the capacitors give better results in audio where the fidelity of the waveshape is very important. Great attention has been paid to the construction details which can affect the performance, i.e. foil type, its connections

and the mechanical construction. BHC manufacture a range of capacitors for this type of application in screw terminal, solder tag or board mounting configurations. Details of capacitance and case sizes available in the Slit Foil Capacitors range are available from our sales office.

## SPECIFICATION

<b>Standards</b>	IEC 60384-4	
<b>Capacitance range</b>	10000 $\mu$ F	
<b>Capacitance tolerance</b>	$\pm$ 20%	
<b>Rated voltage <math>U_R</math></b>	50 - 100 VDC	
<b>Surge voltage <math>U_S</math></b>	$1.15 \times U_R$	Test Condition: $\leq$ 30s surge, 1000 cycles @ 85°C
<b>Leakage current <math>I_L</math></b>	= $0.006 \times C_R \times U_R$ ( $\mu$ A) or 6mA whichever is the smaller. Note, $C_R$ is in $\mu$ F.	Test Condition: $U_R$ , 5mins., 20°C
<b>Operational life time +85°C, <math>U_R</math>, <math>I_R</math></b>	Can Diameter 35            15000 hrs 40            18000 hrs	End of Life requirement: $\Delta C/C \leq \pm 10\%$ ESR $\leq 2 \times$ initial ESR value $I_L \leq$ initial specified limit
<b>+85°C, <math>U_R</math></b>	Can Diameter 35            24000 hrs 40            29000 hrs	
<b>Shelf Life</b>	2000 hrs at 0V +85°C, or 30000 hrs at 0V +40°C	
<b>Temperature range</b>	-40 to +85°C (Operating)   -55°C to +85°C (Storage)	

## SPECIFICATION



## Dimensions (sleeved) mm

Part Number	Capacitance $\mu\text{F}$	$U_R$ V	Size ( $\varnothing D \times L$ ) mm mm
ALC10S1102DF	10,000	50	35x50
ALC10S1103DH	10,000	63	35x60
ALC10S1104DL	10,000	80	35x80
ALC10S1105EX	10,000	100	40x90