

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

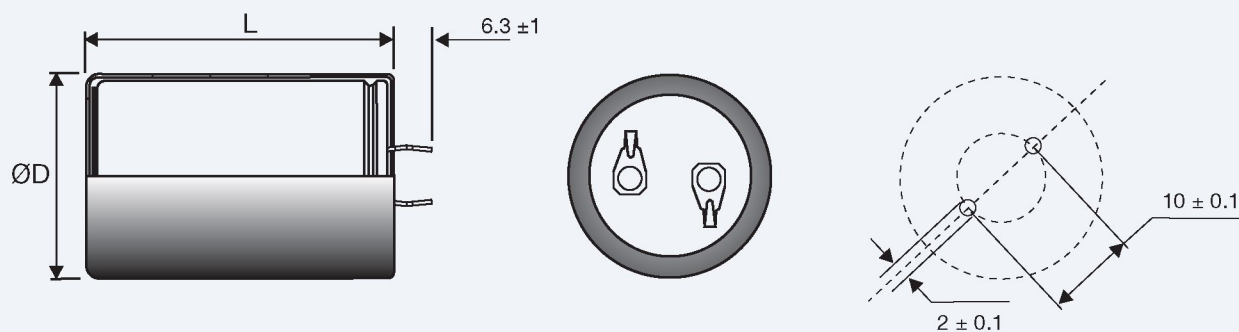
Slit foil capacitor research has also indicated that improvements in the general construction of the capacitors give better results in audio where the fidelity of the waveshape is very important. Great attention has been paid to the construction details which can affect the performance, i.e. foil type,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

Standards	IEC 60384-4							
Capacitance range	10000 µF							
Capacitance tolerance	±20%							
Rated voltage U_R	50 - 100 VDC							
Surge voltage U_S	1.15 x U _R	Test Condition: ≤ 30s surge, 1000 cycles @ 85°C						
Leakage current I_L	= 0.006 x C _R x U _R (µA) or 6mA whichever is the smaller. Note, C _R is in µF.	Test Condition: U _R , 5mins., 20°C						
Operational life time +85°C, U_R, I_R	<table border="0"> <tr> <td>Can Diameter</td> <td></td> </tr> <tr> <td>35</td> <td>15000 hrs</td> </tr> <tr> <td>40</td> <td>18000 hrs</td> </tr> </table>	Can Diameter		35	15000 hrs	40	18000 hrs	End of Life requirement: ΔC/C ≤ ±10% ESR ≤ 2 x initial ESR value I _L ≤ initial specified limit
Can Diameter								
35	15000 hrs							
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+85°C, U_R	<table border="0"> <tr> <td>Can Diameter</td> <td></td> </tr> <tr> <td>35</td> <td>24000 hrs</td> </tr> <tr> <td>40</td> <td>29000 hrs</td> </tr> </table>	Can Diameter		35	24000 hrs	40	29000 hrs	
Can Diameter								
35	24000 hrs							
40	29000 hrs							
Shelf Life	2000 hrs at 0V +85°C, or 30000 hrs at 0V +40°C							
Temperature range	-40 to +85°C (Operating) -55°C to +85°C (Storage)							

SPECIFICATION



Dimensions (sleeved) mm

Part Number	Capacitance μF	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