

Electrolytic Product Brief



Screw Terminal



Snap-In



Press-Fit



Key Applications

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| <ul style="list-style-type: none"> Advanced energy storage Power supplies Motor control Traction converter Alternative energy | <ul style="list-style-type: none"> On-board chargers Inverters Wall boxes | <ul style="list-style-type: none"> Frequency converters Solar inverters Advanced energy storage Switch mode power supplies |
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Features

Capacitance Range		
100µF - 1,300,000µF	47µF - 1,200,000µF	120µF - 120,000µF
Voltage Range		
25V - 550V	25V - 600V	25V - 600V
Operating Temperatures		
-55°C – 125°C	-40°C – 125°C	-40°C – 105°C
Terminals		
M5, M6, Offset - 77mm dia	2 - 5 pins	4 - 5 pins
Dimension (Dia Len)		
35 - 90mm 50 - 220mm	22 - 50mm 30 - 105mm	35 - 50mm 30 - 105mm
Life (Max. Dia.)*		
18,000h	18,000h	18,000h

*Max diameter size, when applied rated Ripple Current, Voltage and Temp

Design Considerations

Capacitance	
Operating Voltage	
Ripple Current Spectrum (RC and associated freq)	
ESR	
Max Ambient Temperature @ Full Power conditions	
Cooling system (heatsink °C/W, airflow m/s)	
Operating Life Time - Lop	
Capacitor Type (Screw Terminal, Snap-in, Press-Fit)	
Max Dimensions (dia x len)	
Terminal type	
Plain or Studded can	
Special Sleeving Requirements other than PVC	
Vibration Requirements	
Sleeve (PVC, PET, Polyolefin)	

Electrolytic Focus Series



Screw Terminal

Series	Temp	Diameter Range	Max Voltage	Max Cap	Life (Max. Dia.)*	Benefits
ALS70	85°C	36 - 90mm	600V	1,300,000µF	up to 18,000h	- High ripple current capability - Long life
ALS80	105°C	36 - 90mm	500V	1,200,000µF	up to 9,000h	- Can operate at higher temperatures. - Maximum capacitance capability in a smaller size



Snap-In

Series	Temp	Diameter Range	Max Voltage	Max Cap	Life (Max. Dia.)*	Benefits
ALA7D	85°C	25 - 35mm	400V - 500V	820µF	up to 15,000h	- AEC-Q200 qualified - Vibration up to 20 g - Long Life - High ripple current
ALA8D	105°C	25 - 35mm	400V - 500V	620µF	up to 8,000h	
ALC70	85°C	25 - 50mm	600V	150,000 µF	up to 18,000h	- Long life - High ripple current - High voltage
ALC80	105°C	25 - 50mm	500V	240,000 µF	up to 9,000h	- Excellent surge voltage capability
PEH526	125°C	22 - 30mm	63V	6,800 µF	up to 3,000h	- AEC-Q200 qualified - Low ESR - Very high ripple current capability - Resistance to vibrations



Press-Fit

Series	Temp	Diameter Range	Max Voltage	Max Cap	Life (Max. Dia.)*	Benefits
ALF20	85°C	35 - 50mm	600V	100,000 µF	up to 18,000h	- Reliable electrical connection without solder - High reliability - Long life
ALF40	105°C	35 - 50mm	500V	120,000 µF	up to 9,000h	- High ripple current - Excellent surge voltage capability



*Max diameter size, when applied rated Ripple Current, Voltage and Temp

All series are design flexible

Try out our online Aluminum Electrolytic Capacitor Life Expectancy Calculator:

<https://elc.kemet.com/>