Press-Fit Snap-In Aluminum Electrolytic Capacitors



Why Choose KEMET

PRODUCTS

KEMET Electronics Corporation is a leading global supplier of electronic components. We offer our customers the broadest selection of capacitor technologies in the industry, along with an expanding range of electromechanical devices, electromagnetic compatibility solutions and supercapacitors. Our vision is to be the preferred supplier of electronic component solutions for customers demanding the highest standards of quality, delivery and service.

Features & Benefits

- · Eliminates soldering process problems
- Meets BS EN 60352-5:2012
- Compact size
- Reliable electrical contacts
- High ripple current
- Excellent surge voltage capability
- Customized spacing of press-fit connections
- Quick exchange of components

Product Checklist

- What is the pin configuration required?
- What are the operational conditions of your application? Do you have a specification available?
 - What is the applied voltage VDC?
 - What is the operational temperature?
 - What is the applied ripple current spectrum?
 - What life expectancy is required?
 - What are the end of life criteria?
- Does the application have size constraints? If so, what are they?
- Does the application require UL recognized sleeving?

For more information, samples and engineering kits, please visit us at www.kemet.com or call 1.877.myKEMET.

Applications

- Uninterruptible power supply (UPS)
- Switch mode power supplies (SMPS)
- Smoothing
- Energy storage
- Demanding power supplies
- Frequency inverters

Electrical/Physical Characteristics

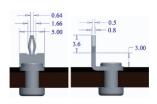
| Case Sizes | Tolerances | Dielectric | Temperature Range | Voltage Options | Capacitance Values |
|--|-------------------------|--------------------------|-------------------------------------|-----------------|--------------------|
| 40, 45 and 50 mm diameter, 30 to 120 mm lengths | ±20% at 100 Hz +20°C | Aluminum Electrolytic | -40° C to $+105^{\circ}$ C | 16 – 550 VDC | 47 – 120,000 μF |

Printed Circuit Board (PCB) Requirements

PCB Thickness: 1.57 mm Minimum

| Drill | Ø 1.613 \pm 0.025 | (Final Plated Through-Hole) | | | |
|------------------------------------|------------------------|-----------------------------|--|--|--|
| Copper Thickness | 0.025 minimum | 0.30 | | | |
| Final Plated Through-Hole Diameter | Ø 1.486 ± 0.076 | | | | |
| Pin Insertion Force | 125 N (28 lbf) maximum | | | | |
| Pin Retention Force | 62 N (14 lbf) minimum | (Drill Hole) | | | |

| Material Specification (mm) | | | |
|-----------------------------|--------------------|--|--|
| Pin Length | 6.6 | | |
| Pin Width | 1.66 | | |
| Base Material | Copper Alloy C7025 | | |
| Plating Material | Ni and Sn | | |





SA0716

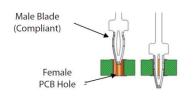
PRODUCTS

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ALC Series

Press-Fit Male/Female Interconnects







Applied by Male

Insertion/Retention Forces

Tests performed on 4 and 5 pin press-fit decks show a consistent insertion force of 100 N per pin.

- 4 pin press-fit deck requires 400 N insertion force
- 5 pin press-fit deck requires 500 N insertion force

A force > 500 N has been repeatedly applied to the finished product (4 pin version).