PRODUCTS

Power Film Capacitors

C4E Rectangular Brick Type DC Link Series

Electronic Components KEMET CHARGED.®

Why Choose KEMET

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

- Metallized self-healing polypropylene
- Soft end-of-life by capacitance decrease
- Capable of withstanding transients up to 675 V
- Plastic case filled with resin for long-term humidity protection
- Meets IEC 61071:2007 & VDE 0560 Part 120/121 Standards

Product Checklist

- What is the ambient temperature profile?
- What is the requirement for the expected lifetime?
- Is there cooling? What kind?
- What is the nominal and maximum DC voltage?
- What is the ripple current and frequency?
- Is the ripple current steady-state or intermittent?

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

Applications

DC Link capacitors for the following applications:

- Energy conversion
- AC motor drives
- Hybrid/electric vehicles
- Inverter modules
- Radar filtering (28 V/microwave burst)

KEMET Part Number	C4EEGMX6500AAUK
Electrical Characteristics	
Rated capacitance	500 μF (±10)%
Rated DC voltage	450 VDC
Peak voltage	675 VDC
Nominal RMS current (at Tamb = max. 80°C)	85 Arms
Maximum RMS current (at Tamb = max. 70°C)	120 Arms
Maximum peak current	2500 Apk
Equivalent series resistance at 1 KHz	< 1 mΩ
Equivalent series inductance	15 nH
Maximum pulse rise time	5 V/μs
Thermal Characteristics	
Minimum operating temperature	-40°C
Maximum operating temperature	+110°C
Storage temperature	-40°C to +85°C
Maximum altitude without derating	2,200 m
Test Methods & Performances	
Voltage test between terminals at 25°C	675 V/10 seconds
Voltage test terminals to case at 50Hz	2,500 V/1 minute
Life Expectancy	
Life expectancy at Un	15,000 hours (Hotspot max. temperature 90°C)
Reliability	300 FIT
Construction	
Dielectric	Metallized polypropylene, self-healing
Winding	Non-inductive
Filling	Resin
Case construction	Metallic for prototype, plastic for mass production
Dimensions	
Width	72 (±1) mm
Height	50 (±1) mm
Length	237 (±1) mm
Approximate weight	1.2 Kg
Mounting & Terminations	As per drawing (on Page 2)

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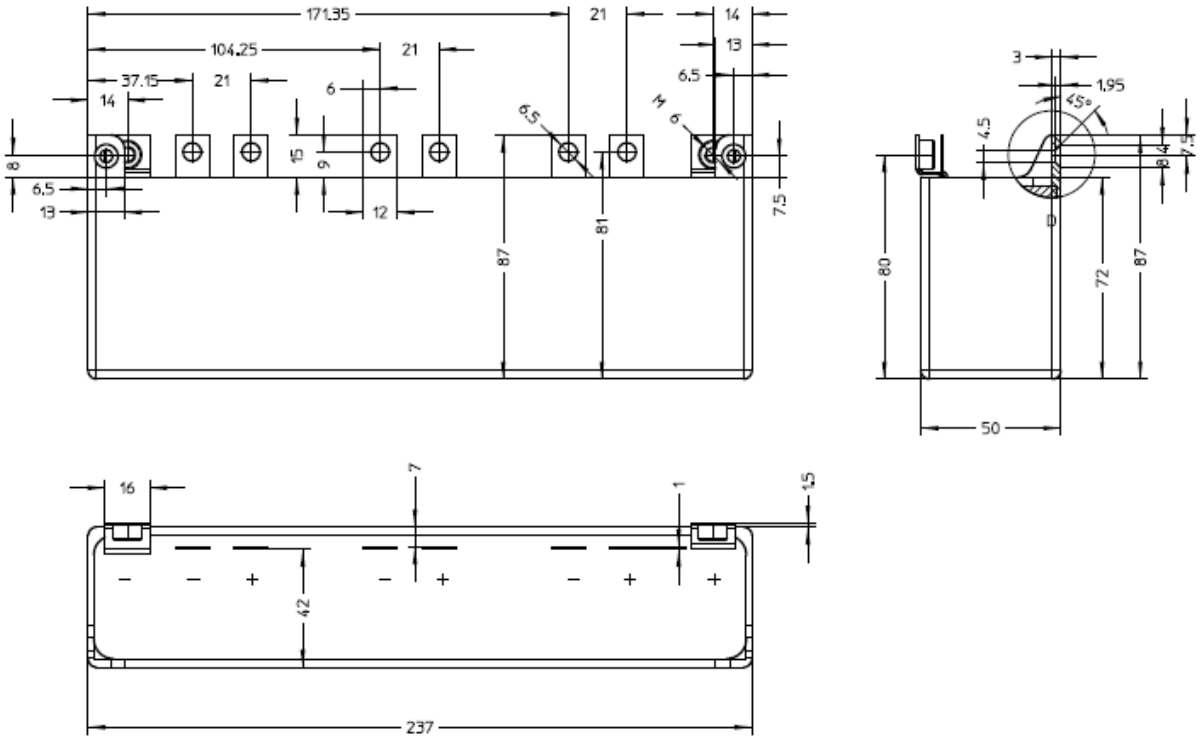

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