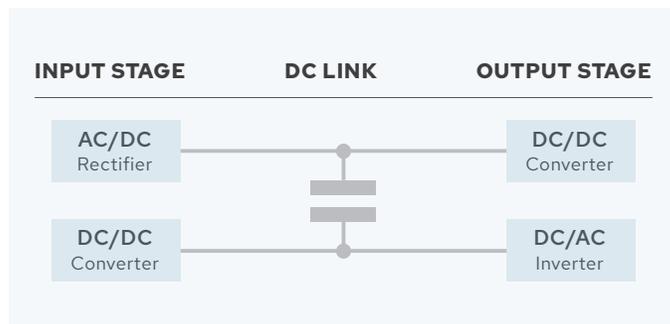


FILM SOLUTIONS FOR POWER CONVERSION APPLICATIONS

POWER CONVERSION BLOCK DIAGRAM

KEMET's film capacitors are an ideal choice for demanding applications. Four types of capacitor technologies are used in Power Conversion Systems: Pulse & Snubbers, DC Link, EMI Suppression and AC Filters Capacitors.

- Harsh environment capabilities
- Long operational life with high reliability
- High current and low losses
- High capacitance density = small size
- Self-Healing



PRODUCTS AND BENEFITS

PULSE & SNUBBER CAPACITORS

Where: Input & Output Stages



R75H

Single Metallized PP VDC: 160 – 2,000 V
C: 1 nF – 33 μ F Max T: +125 °C AEC-Q200
Harsh Environment (85°C/85%R.H., 1000 h, Vr)
Best endurance performance at 125 °C (2,000 h)



R76H

Double Metallized PP VDC: 250 – 2,000 V
C: 470 pF – 12 μ F Max. T: +125 °C AEC-Q200
Harsh Environment (85°C/85%R.H., 1000 h, Vr)
Highest current capability and dV/dt per volume

DC-LINK CAPACITORS

Where: Input & Output Stage as DC Filter



C4AQ

VDC: 500 – 1,500 V, C: 1 – 210 μ F, AEC-Q200
High ripple current, 7 nH \leq Low ESL \leq 28 nH
Harsh Environment (60°C/95% R.H., 1000 h, Vr)
Low profile boxes available; Life > 2,000 h

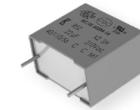


C44U-M

VDC: 600 – 1,800 V, C: 90 – 2,100 μ F, Diam \leq 116 mm
High Ripple Current, Life up to 2,000 h
Low ESR, UL-810 construction qualified

EMI SUPPRESSION CAPACITORS

Where: Input Stage, & with DC-Link (Automotive)



R52

X2 PP – 110 °C - VAC: 310 V, C: 0.15 – 22 μ F, AEC-Q200
Grade IIB under THB test (85°C/85%R.H., 500 h, Vr)
Smallest sizes & highest C value in the market



R41

X1/Y2 PP 125 °C, VAC: 300 V, VDC: 1,500 V
C: 0.0047 – 1.0 μ F AEC-Q200
Grade IIIB under THB test (85°C/85% R.H., 1000 h, Vr)



SMP253

Y2, SMD Paper, VAC: 250 V, VDC: 1,500 V
C: 1 – 4.7 nF, High dV/dt, Harsh Environment
Only Y2 SMD Paper in the market

AC FILTER CAPACITORS

Where: Input & Output Stages



C4AF-T

VAC: 250 – 500 V, C: 1 – 210 μ F
AEC-Q200, High Ripple Current
Life: 60,000 h at Vr rated and Ths: 85 °C
Harsh Environment (85°C/85% R.H., 1,000 h)



C44P-R

VAC: 330 – 1,000 V, C: 10 – 600 μ F, UL 810 Certified
Soft impregnation, with overpressure disconnection device
High ripple current, 100,000 h at Vr rated and Ths \leq 75 °C



Research Parts

Search for parts, view availability, RoHS documentation, or order a sample with [ComponentEdge](#).



Design It

Test and analyze the performance of passive electronic components with KEMET's simulation tool, [K-SIM](#).



Learn More

Learn how to use and design with our products on our [Engineering Center](#).