

# **HOT** Products at **CDE!**

### DC Link

#### **FEATURES:**

- » The most advanced metallized film technology for long life and high reliability
- » High capacitance density and high ripple current capability
- » Low Inductance
- » Industry standard packages and custom designs with performance modeling
- » For inverter/converter applications: wind, solar, fuel cells, UPS systems, motor drives, EV Charging, and more



# Aluminum Electrolytic

#### **FEATURES:**

- » Screw Terminal, Snap-in, SMT, and Flatpack
- » High capacitance density
- » High ripple current
- » Standard package styles for industrial, medical applications: UPS, Solar, Wind, Motor Drive, SMPS, MRI, Lasers
- » Flatpack for weight and space-saving applications in military and aerospace power supplies and radar systems



# Capacitors for Harsh Environments

#### **FEATURES:**

- » Tested up to 1,500 hours @ 85 °C, 85% R.H., Rated Voltage (THB)
- » AEC-Q200 Qualified
- » THB products for all stages of power conversion:
  - X2 and Y2 EMI Suppression
  - DC Link
  - AC Harmonic Output Filtering



### **Supercapacitors**

#### **FEATURES:**

- » Bridge the gap between batteries and capacitor
- » Super high capacitance and high power delivery
- » Fast charge times
- Radial, coin cell packages
- » Standard modules up to 30 Vdc
- » Custom modules with balancing circuitry



# AC Harmonic Filter Capacitors

### **FEATURES:**

- » Single phase and 3-phase
- » Standard packages and custom designs
- » Fluid impregnated for corona-free performance
- » Designed for filtering harmonics at the input or output stages of power conversion



## **IGBT Snubbers**

#### **FEATURES:**

- » Protect IGBT modules from overvoltage
- » Low inductance
- » High dV/dt capability to meet peak current demands of inverter switching
- » Board-mount or direct-mount
- » Standard and custom modules



Visit cde.com for more information and additional products!





# **HOT** Products at **KNOWLES!**

## Safety Certified Capacitors

#### **FEATURES:**

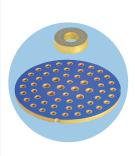
- » Case sizes 1808, 1812, 2211, 2215 & 2220 • FlexiCap™ option available on all sizes
- » Meet class Y2, X1 & X2 requirements
- » Approved for mains voltages up to 250Vac 50/60Hz (class Y2) & 305Vac 50/60Hz (classes X1, X2)
- » Options with DWV to 4kVdc / 3kVac
- » SYS range with reduced creepage class Y2 (250Vac) / X1 (305Vac)
- CTI > 600
- » Approved by TÜV and ULF



### Discodial & Planar Arrays

#### **FEATURES:**

- » Optimum EMI filtering when soldered around signal carrying pin(s)
- » Available in stable X7R(2R1) and ultra-stable COG/NPO (1B) dielectrics
- » Capacitance values from pF to  $\mu$ F
- » High voltage capability DWV to 10kV
- » Mixed capacitance lines / no cap feed-through lines / grounded earth lines available within single planar
- All parts are customized to individual requirements



### **SLC Capacitors**

#### **FEATURES:**

- » High Q/Low DF Capacitors with ranges from 0.04 pF to 100nF
- » Over 40+ dielectric materials available ranging from 9 to 45000
- » Highest cap density in the industry
- » Higher voltage rating than competitor offerings
- » Wire-bondable Bypass Capacitors
- Reliability tested to MIL-PRF-49464 Group B criteria



## Radial Leaded Capacitors

#### **FEATURES:**

- » Class I COG/NPO (1B) and Class II X7R (2R1) dielectrics
- » High working voltage up to 12kVdc
- » 0805 to 8040 case sizes with radial lead pitch of 2.54mm to 20.7mm
- » Operation Temperatures from -55°C to 200°C
- » RoHS compliant versions
- Tin-lead plated wire option available to reduce tin whiskers



# Capacitor Assemblies

### **FEATURES:**

- » Low ESR to handle high ripple
- » ST and SM X7R(2R1) and NPO/COG(1B) versions available in 1812 thru 7565 package sizes, voltage ratings from 50Vdc to 500Vdc and capacitance values up to 68µF
- » High reliability versions available with capacitance values up to 47µF
- » SV capacitances of up to  $200\mu F$ while reducing board space
- » High reliability screening available



### Panel Mount EMI Filters

#### **FEATURES:**

- » Made with high quality multi-layer ceramic discoidals or planar arrays
- Threaded and solder mount parts
- » 4-40unc to 1/4-28UNEF and M8 threads
- » Use of Stable X7R (2B1) and Ultra Stable COG/NPO (1B) ceramics
- » High capacitance values 10pF to 6.6µF and high voltage 50V to 3kV
- » High frequency performance to greater than 10GHz
- Customized designs and testing available
- » X2Y balanced pair filters available



#### **CONTACT KNOWLES TODAY!**