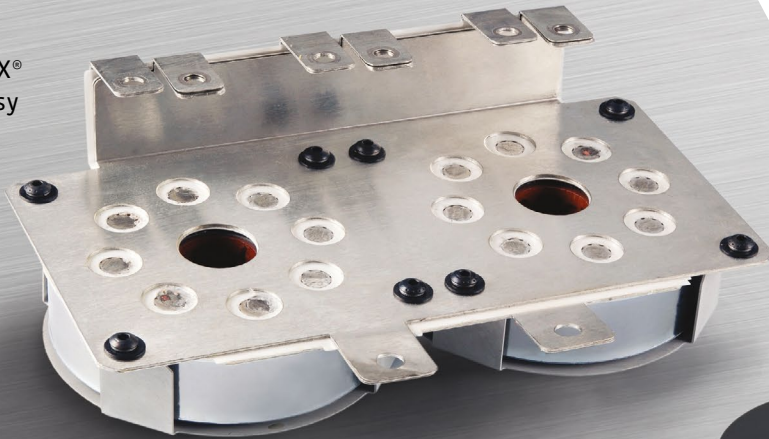


ROLINX[®]
CapEasy



ROLINX[®]
CapPerformance



ROLINX[®] CapEasy ROLINX[®] CapPerformance

Product Information

ROLINX[®] CapEasy and **ROLINX[®] CapPerformance** are the latest additions to the ROLINX product family. These new products combine the unique capacitor technology developed by SBE Inc. with the best-in-class laminated busbars from Rogers Corporation.

The new capacitor-busbar assemblies provide **reduced total system cost, improved reliability and increased power density** compared to currently available solutions.

SBE Power Ring Film Capacitors™ have very low equivalent series resistance (ESR) in addition to high aspect ratio form factors. The result is higher reliability due to less heat generation and improved heat transfer from the capacitors.

When SBE **Power Ring Film** Capacitors are integrated with **ROLINX laminated busbars**, a significant reduction in equivalent series inductance (ESL) can be achieved compared with traditional designs.

The result is lower total system cost and increased power density, due to lower overshoot voltages and less $\mu\text{F}/\text{kW}$ of required total capacitance.

The unique design and assembly process of **ROLINX[®] CapEasy** and **ROLINX[®] CapPerformance** allows capacitors to be mounted back-to-back on opposite sides of the same bus assembly, resulting in compact designs with improved cooling compared to traditional “soda can” type film capacitors.

ROLINX[®] CapEasy and **ROLINX[®] CapPerformance** integrated capacitor-busbar assemblies were developed for critical DC link applications in traction drive inverters for HEV/EV and inverter systems for solar and wind power. Rogers engineers are ready to work closely with you to design a cost-effective, reliable and power-dense capacitor-busbar assembly for your application.

Advantages

- // Lower total system cost
- // Improved reliability and lifetime
- // Increased power density

Typical Applications

- // Traction drive inverters for HEV/EV
- // Inverters for solar & wind power

Features

- // Low ESL // High aspect ratio
- // Low ESR // Back to back mounting

Typical Capacitors Technical Characteristics

DC Voltage Rating	450 – 1500 VDC
Capacitance/Tolerance	75 – 1600 µF ±10%
Dielectric/Construction	Metallized polypropylene film / design integrated with a laminated bus bar
Operating Temperature	-40°C to +85°C at full DC voltage rating
Encapsulation	Molded polymeric case, potted with RTV silicone

Detailed specifications of SBE Power Ring Film Capacitors™ are available as separate documents.

Typical Busbar Technical Characteristics

Busbar type	ROLINX® Easy	ROLINX® Performance
DC Voltage Rating	1.5kV	up to 12kV
Power	Up to 1MW	Up to several MW
Operating Temperature	-40°C to +105°C	-40°C to +105°C
Relative humidity	55°C/95% RH	55°C/95% RH
Conductor material	Tin plated copper	Tin plated copper
Insulation material	Polyester dielectric film, rigid insulation board	Polyester dielectric film, rigid insulation board

The Power Ring Film Capacitor™ is a patented technology of SBE Inc.

The information contained in this document is intended to assist you in designing with Rogers' Power Electronics Solutions Materials. It is not intended to and does not create any warranties, express or implied, including any warranty of merchantability or fitness for a particular purpose or that the results shown in this document will be achieved by a user for a particular purpose. The user should determine the suitability of Rogers ROLINX Busbars for each application. The Rogers logo, the ROLINX logo and ROLINX are trademarks of Rogers Corporation.



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