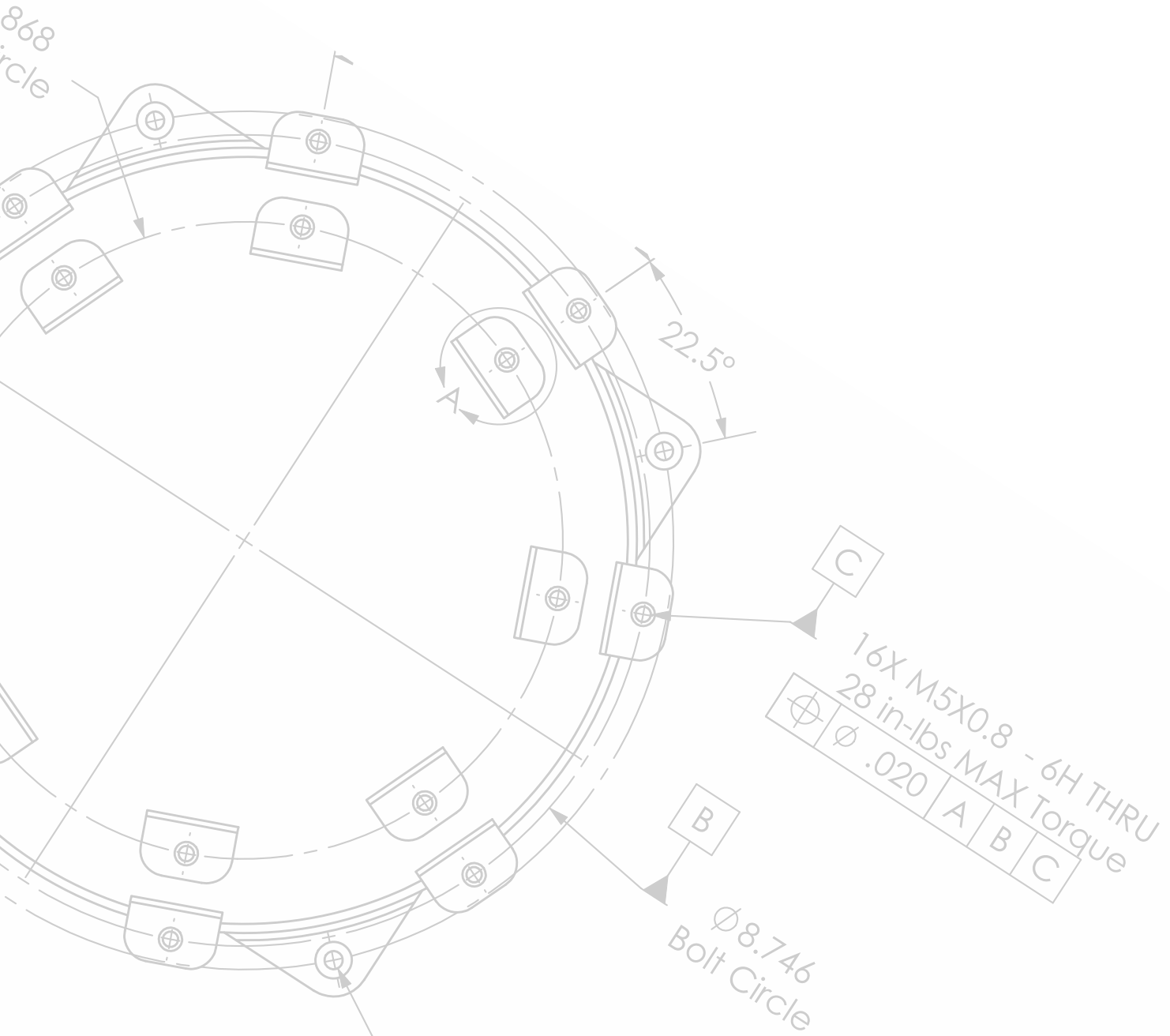


AT THE LEADING EDGE OF FILM CAPACITOR TECHNOLOGY®



SBE

POWER RING FILM CAPACITOR™ - DC LINK CAPACITORS

DC Volt. (Vdc)	Cap. (μF)	Standard Part #	UL Part #	Max Diameter	Max Height	RMS Current at 85°C
450	500	700D529		4.57" (116.1 mm)	2.04" (51.8 mm)	115
450	800	700D600		6.27" (159.3 mm)	2.16" (54.9 mm)	225
450	1,600	700D601		8.47" (215.2 mm)	2.16" (54.9 mm)	400
600	500	700D349	777D100	6.27" (159.3 mm)	2.16" (54.9 mm)	210
600	1,000	700D348	777D108	8.47" (215.2 mm)	2.16" (55.5 mm)	400
600	1,500	700D523	777D101	10.52" (267.2 mm)	2.19" (54.9 mm)	460
700	500	700D599	777D109	6.27" (159.3 mm)	2.16" (54.9 mm)	175
700	1,000	700D547	777D110	8.47" (215.2 mm)	2.16" (54.9 mm)	300
900	215	700D406		6.27" (159.3 mm)	2.16" (54.9 mm)	175
900	425	700D407		8.47" (215.2 mm)	2.16" (54.9 mm)	285
900	1,000	700D525	777D113	10.0" (254 mm)	2.80" (71.0 mm)	300
900	1,500	700D509	777D114	12.33" (313.2 mm)	2.82" (71.7 mm)	380
1,100	1,000	700D628	777D115	10.0" (254 mm)	2.80" (71.0 mm)	235
1,100	1,500	700D590	777D103	12.33" (313.2 mm)	2.82" (71.7 mm)	300
1,200	115	700D408		6.27" (159.3 mm)	2.16" (54.9 mm)	155
1,200	225	700D409		8.47" (215.2 mm)	2.16" (54.9 mm)	265
1,300	1,000	700D643		12.33" (313.2 mm)	2.82" (71.7 mm)	300
1,500	75	700D410		6.27" (159.3 mm)	2.16" (54.9 mm)	140
1,500	140	700D411		8.47" (215.2 mm)	2.16" (54.9 mm)	250



UL Recognition: UL 810
 UL File #: E364956

Design/Application Notes:

Power Ring Film Capacitor™ patented technology offers industry-leading power density and ESL/ESR performance in a compact package. These products are designed and tested for long-term exposure to elevated temperatures, continuous thermal cycles and transportation vibration. Reliability data and test processes are available at www.sbelectronics.com.

AC FILTER CAPACITOR BANKS USING DRY FILM TECHNOLOGY

AC Volt. (Vac)	Cap. (μF) +/- 5%	Standard Part #	Max Total Harmonic Current	Max Case Temp.
208-600	200-5,000	705A	15-1,000 Arms	+ 70°C



Single Phase Building Blocks

The AC Filter Capacitor takes advantage of SBE's Power Ring patented technology and when implemented into your next generation systems will allow increased life and reliability. The dry film construction of the Power Ring Capacitor eliminates failures which cause collateral damage. Contact SBE today to find the drop-in solution that will fit your AC filter needs. A 3-phase system can easily be realized using the single phase unit as a building block.



3-Phase Horizontal Alignment



3-Phase Horizontal Alignment



3-Phase Vertical Alignment

TEST KITS

Power Ring Test Kits are available for different Power Ring part numbers and with high performance bus structure and adaptor plate for popular IGBT modules from Infineon, Semikron, Fuji and Danfoss. ESL at the module pin is typically 15nH (less for half-bridge). Please specify voltage, capacitance and IGBT Module when ordering. Adapters sold separately. IGBTs not supplied.

Horizontal Orientation			
DC Volt. (Vdc)	Cap. (μ F)	Test Kit #	Operating Temp.
450	400	700A204*	105°C
500	500	700A186*	105°C
500	500	700A293**	105°C
500	550	906A107*	125°C
600	500	700A349	105°C
600	1,000	700A348	105°C
750	260	700A245*	105°C
750	260	700A292**	105°C
750	320	906A105*	125°C
900	135	906A104*	125°C
900	1,500	700A509	105°C
1,100	1,500	700A590	105°C

Vertical Orientation			
DC Volt. (Vdc)	Cap. (μ F)	Test Kit #	Operating Temp.
450	400	700A185*	105°C
450	1,000	700A144	105°C
450	1,000	700A152	105°C
600	250	700A193*	105°C
600	600	700A155	105°C
600	600	700A160	105°C
700	600	700A180	105°C
900	375	700A181	105°C

*Test kits for the Infineon HyridPACK™ Drive IGBT Module

**Supports Dual Infineon HyridPACK™ Drive configuration



Horizontal Test Kit



Horizontal and Vertical Test Kits for HyridPACK™ Drive Shown with IGBT Adapter



Vertical Test Kit Shown with IGBT Adapter



Horizontal Test Kit for dual HyridPACK™ Drive Configuration

SBE INTEGRATED MODULES™

Ranging in voltage from 450 to 1,500V and in RMS current ratings from 100 to 1000+A, SBE Integrated Modules™ are the best way to optimize space, cost, and performance for next generation inverter and converter designs.

Application and mechanical layout assistance is available to support your design goals.



450V, 1000 μ F, 150A



600V, 850 μ F, 200A



450V, 800 μ F, 80A



2-Level Inverter: 1100V, 2400 μ F
NPC Inverter: 750V, 2256 μ F

500 kW integrated capacitor/bus assemblies

DC Volt. (Vdc)	Cap. (μ F)	Part #
900	3,000	777A107*
1,100	3,000	777A103*
1,100	3,000	777A104*
1,100	3,000	700A163*
1,100	3,000	700A242
1,800	1,000	700A212



700A163



777A104/777A107

*UL-recognized

UL Recognition: UL 810 UL File #: E364956

HIGH VOLTAGE DC LINK CAPACITORS FOR HVDC - STATCOM - TRACTION DRIVE

DC Volt. (KVdc)	Cap. (μF)	Series	Current (Arms)	ESL (nH)	ESR (mOhm)
1.5 - 3.5	2,000 - 10,000	710A	200 - 2,000	10 - 100	0.1 - 0.01



SBE's HVDC / STATCOM capacitors utilize the Power Ring's patented technology to offer a solution that will reduce dissipated heat by 50 - 75% and provide a migration platform for very low inductance - next generation switching systems.

POWER RING FILM CAPACITOR™ - EXTREME ENERGY PULSE POWER®

DC Volt. (Vdc)†	Cap. (μF)	Series	Peak Current	Height‡ x Diameter (mm)	Dielectric
up to 100kV	up to 12,000	400D	up to 100kA	≤ 150 x 360	Metallized PET
up to 100kV	up to 12,000	700D	up to 100kA	≤ 150 x 360	Metallized PP

†Voltages beyond 8kV are achieved by stacking capacitor sections in series.
The user assumes responsibility for the use of proper dielectric design practices and shielding.
‡Height of capacitor section only

Design/Application Notes:

The Power Ring's patented technology offers extreme energy storage/pulse power density in an innovative smaller package that allows for modularity and mounting flexibility.
This dry film, environmentally clean technology, is designed with terminals/interconnect systems that result in the lowest available ESL and peak discharge currents in excess of 250,000 amps.



PULSE / HIGH VOLTAGE CAPACITORS

DC Volt. (Vdc)	Cap. Range (μF)	Series	Height (mm)	Diameter Range	Peak Current Range (kA)
750	500 - 5,000	771D	80	4.9" - 13.6" (125 - 345 mm)	5.6 - 56
1,500	500 - 3,000	772D	155	6.5" - 15" (165 - 380 mm)	11 - 69
2,500	100 - 1,000	773D	125	5.1" - 15" (130 - 380 mm)	6.7 - 67
3,500	100 - 650	774D	165	5.75" - 14.5" (146 - 368 mm)	13.5 - 75
8,000	5 - 50	775D	80	4.5" - 9.8" (115 - 250 mm)	5.8 - 58



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