

PRIZMACAP Release April-21

ACCELERATING INNOVATION



















PrizmaCap

KEY TECHNICAL INFORMATION

- Standard offered part numbers so far:
 - SCPB08A355SNA
 - SCPB13A855SNA
 - SCPB20A156SNA

AVX Part Number	Length (mm)	Width (mm)	Max Thickness (mm)	Rated Capacitance (F)	Capacitance Tolerance	Rated Voltage (V)	Rated Temp. (°C)	DCL Max @ 72 Hrs (µA)	ESR Max @ 1 kHz (mΩ)	ESR Max @ DC (mΩ)	Peak Current (A)	Power Density (W/kg)	Max Energy (Wh)	Energy Density (Wh/kg)
SCPB08A355SNA	48	45	8.0	3.5	+30%/-10%	2.1/1.1*	65/90*	50	110	200	2.16	1413	0.0021	1.14
SCPB13A855SNA	48	45	1.3	8.5	+30%/-10%	2.1/1.1*	65/90*	80	50	80	5.31	2380	0.0052	1.87
SCPB20A156SNA	48	45	2.0	15	+30%/-10%	2.1/1.1*	65/90*	110	30	55	8.63	2582	0.0092	2.43

*with appropriate voltage derating operating temperature can be extended to 90°C

Key selling points:

- Extremely low profile starting from 0.8mm max thickness and lightweight from <2 grams
- Widest operating temperature range of any supercapacitor technology: -55°C to +90°C
- Highest capacitance (energy density) offering in prismatic form factor in the market with no direct competition

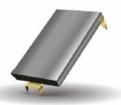
PrizmaCap

AVX SUPERCAP COMPARISON

BESTCAP®

BZ Series

- BestCap® is a very low ESR pulse SuperCapacitor based on its non-hazardous proton activated polymer system
- Capacitance Range: 4.7mF to 1000mF (1F)
- Voltage Range: 2.0V to 20V
- Operating Temp Range: -20°C to +70°C (select values offer -40°C to +75°C)
- ESR: 25mΩ to 600mΩ
- BestCap® has the most "capacitor-like" frequency response of all SuperCaps and has low ESR and low profile characteristics
- NOT RECOMMENDED FOR NEW DESIGNS



SCC SERIES

Cylindrical SuperCaps

- Acetonitrile (ACN) based electrolyte technology
- Provide extended back-up time, longer battery life, and provide instantaneous power pulses as needed
- Capacitance Range: 1F to 3000F
- 2.7V and 3.0V rated parts
- Operating Temp Range: -40°C to +85°C
- Can offer bent leads on radial leaded offerings per customer request
- SCC LE Series that offer special low ESR products
- Qualifying automotive grade series

SCM SERIES

Series-Connected Modules

- Feature very high capacitance, low ESR, and low leakage current
- · Capacitance Range: 0.33F to 500F
- Voltage Range: 5.0V to 48V+
- Operating Temp Range: -40°C to +85°C
- Offer High Reliability SCM Series parts featuring moisture ingress resistance for longer lifetime performance
- Large & custom module design capability for markets such as large industrial, automotive, wind, grid, etc.





PRIZMACAP™

SCP Series

- Propylene carbonate (PC) based electrolyte technology
- Capacitance Range: 3.5F to 15F (and more to come)
- Operating Temp Range: -55°C to +90°C
- Rated Voltage: 2.1V up to +65°C, derating to 1.1V for temp extension up to +90°C operation
- ESR as low as $30m\Omega$ at 1 kHz, $55m\Omega$ at DC
- Leakage current ratings ~50µA
- Low profile starting from 0.8mm and ultra-lightweight from <2 grams
- · Customizable form factor
- Utilize AVX Interconnect Single 2
 Piece Contacts: BTB, 70-9159 Series
 connectors instead of hand soldering

