



# CAP-XX Prismatic Supercapacitors

*Micro sized dynamic pulse power and energy harvesting*

The CAP-XX Prismatic **Supercapacitor** range provides excellent peak power performance in a wafer-thin package.

The CAP-XX Prismatic range of Supercapacitors provide a low profile, small foot print and low impedance solution to the power and performance limitations of batteries and other current-limited energy sources.

With built-in award-winning technologies, these Prismatic Supercapacitors deliver a combination of high capacitance and low equivalent series resistance (ESR). This produces very high energy density and power density, in a small, wafer-thin and lightweight package.

When used in conjunction with a low power energy source such as an energy harvester and/or low power battery, the CAP-XX Prismatic range of Supercapacitors enables extended backup time, longer battery life, and the provision of peak power as required.

#### Main features

- Very small low profile footprint
- High pulse power capability
- Very low ESR
- Low leakage current
- Operates across a wide temperature range (-40° to +70°C)
- Meets environmental standards for disposal/operation RoHs.

#### Applications

- Energy harvesting for wireless sensors & actuators
- Peak power support to GSM/GPRS transmission
- Last gasp power for remote sensor status transmission
- Peak power support for locks and actuators
- Peak power support for portable drug delivery systems
- Short term bridging power for battery hot swaps
- Extend battery run time.



Not actual size, for illustration only.

# CAP-XX: Superior Power Density in a small thin form-factor

These are some of the Supercapacitors available from CAP-XX.  
For a full listing see the Product Guide at <http://www.cap-xx.com/Products>.

Dual Cell Module (2 cells connected in series)					
Voltage & Temperature	Product Name	CAP (± 20%)	ESR (Max = + 20%)	Body Size (mm)	Thickness (max mm)
<b>5.0V</b> nominal 5.5V surge  <b>-40°C to +70°C</b> <b>T<sub>max</sub> = 70°C</b>	GZ215F	90mF	110mΩ	20.0 x 15.0	2.4
	GA209F	90mF	95mΩ	20.0 x 18.0	2.0
	GW209F	160mF	55mΩ	28.5 x 17.0	2.0
	GW201F	400mF	55mΩ	28.5 x 17.0	2.5
	GW203F	520mF	40mΩ	28.5 x 17.0	3.0
	GS206F	680mF	30mΩ	39.0 x 17.0	2.5
	GS230F	1200mF	30mΩ	39.0 x 17.1	3.5
<b>5.5V</b> nominal 5.8V surge  <b>-40°C to +70°C</b> <b>T<sub>max</sub> = 85°C</b>	HW209F	150mF	90mΩ	28.5 x 17.0	2.0
	HA230F	400mF	120mΩ	20.0 x 18.0	3.5
	HW203F	500mF	70mΩ	28.5 x 17.0	3.0
	HS206F	650mF	50mΩ	39.0 x 17.1	2.5

Single Cells						
Voltage & Temperature	Product Name	CAP (± 20%)	ESR (Max = + 20%)	Body Size (mm)	Thickness (max mm)	
<b>2.75V</b> nominal 2.9V surge  <b>-40°C to +70°C</b> <b>T<sub>max</sub> = 85°C</b>	HZ102F	170mF	75mΩ	20.0 x 15.0	1.2	
	HA102F	240mF	55mΩ	20.0 x 18.0	1.2	
	HA130F	800mF	60mΩ	20.0 x 18.2	1.7	
	HS130F	2400mF	20mΩ	39.0 x 17.1	1.7	
	Our <b>ThinLine</b> products range in thickness from 0.6mm to 0.7mm					
	HA114T	120mF	110mΩ	19.5 x 20.0	0.7	

A single or dual cell version of every part can be manufactured for high volumes, CAP-XX's flexible production technology can tailor a part to match your needs.

For more information visit [www.cap-xx.com](http://www.cap-xx.com) or email [sales@cap-xx.com](mailto:sales@cap-xx.com)

