

### Description

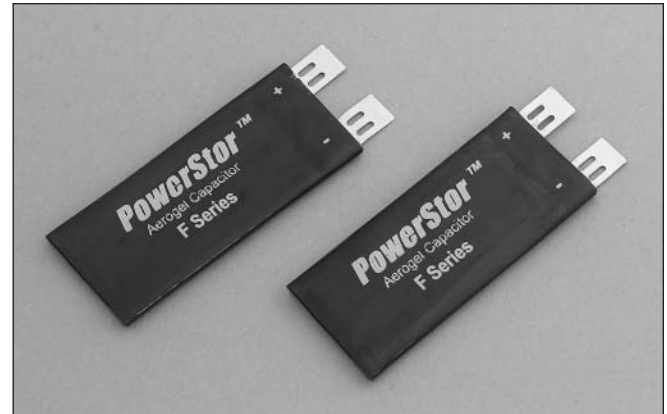
The PowerStor Aerogel Capacitor is a unique, ultra-high capacitance device based on a novel type of carbon foam, known as carbon aerogel. Aerogel capacitors are similar to supercapacitors, ultracapacitors and electrochemical double layer capacitors (EDLCs) with the added benefit of low ESR (Equivalent Series Resistance).

### Features & Benefits

- Ultra-low ESR
- Long cycle life
- Low leakage current
- Thin design
- High capacitance

### Applications – Low ESR

- High rate pulse applications
- GSM / GPRS applications
- PDA / Data Terminals
- Hybrid Battery-Capacitor packs



### SPECIFICATIONS

Voltage	Working (nominal)	3.6 volts
	Working (maximum)	4.2 volts
	Surge	5.0 volts
Temperature Range	Operating @ 3.6 volts	-20°C to 60°C
	Storage	-30°C to 75°C
Capacitance	Nominal	0.33 F
	Tolerance	-20% to +80% (25°C)
Pulse Current (maximum)		2A

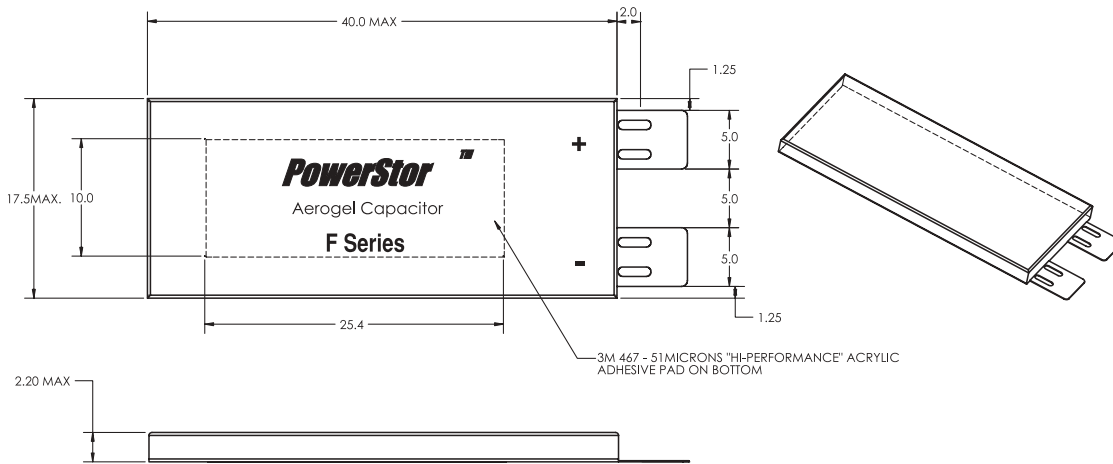
### CUSTOM PRODUCT

Nominal Capacitance (F)	Voltage (V)	Part Number	ESR (nominal @ 25°C) Measured @ 1kHz (Ω)	Nominal Dimensions	Typical Mass (grams/1 piece)
0.33	3.6	FC-3R6334	0.250	2 x 17 x 40 mm	1.916

### PERFORMANCE

Parameter	Capacitance Change (% of initial specified value)	ESR Change (% of initial specified value)
Life (1000 hrs @ 60°C @ 3.6 volts)	≤ 30 %	TBD
Storage - low and high temperature (1000 hrs @ -30°C and 75°C)	≤ 30 %	TBD

**DRAWINGS (MM)**



**ASSEMBLY INSTRUCTIONS**

This device should not be put through a solder reflow process. Do not expose the body of the aerogel supercapacitor to either the soldering iron or melted solder. Minimize the time that the soldering iron is in direct contact with the leads of the aerogel supercapacitor. Use appropriate heat sinking to minimize heat transfer to the aerogel supercapacitor.

**PART NUMBERING SYSTEM**

<b>F</b>	<b>C</b>	<b>-</b>	<b>3</b>	<b>R</b>	<b>6</b>	<b>3</b>	<b>3</b>	<b>4</b>
Series Code	Model		Voltage (V) R is decimal			Capacitance ( $\mu$ F)		
F = Flat Pack Series			3R6 = 3.6V			Value	Multiplier	
						334 = 33 x 10 <sup>4</sup> $\mu$ F or 0.33 F		

**PACKAGING INFORMATION**

Packaging: 200 pieces per tray  
5 trays (1000 pieces) per box

**PART MARKING**

Manufacturer Name  
Series Code (or Part Number)  
Polarity Marking