

# DCP

# Prismatic Super Capacitors



## APPLICATIONS

- Battery backup
- Battery alternative
- Audio systems
- Pulse power
- DC-DC converters
- Mechanical actuators

## FEATURES

- High Capacitance
- Long Life
- Low ESR
- High power density
- Very fast charge/discharge cycling
- Circuit board mountable
- Compact size
- RoHS compliant

Operating Temperature Range		<b>-40°C to +65°C</b>				
Storage Temperature		<b>-40°C to +70°C</b>				
Capacitance Tolerance		<b>+20%/-0% @ 20°C</b>				
Surge voltage	<b>WVDC</b>	<b>2.7</b>				
	<b>SVDC</b>	<b>2.85</b>				
Leakage Current (72hrs, 25°C)	F	600	1700	3500	5000	
	mA	1.7	2.4	5.5	8.1	
<b>Life time</b>	10 years					
	Capacitance change	<30% of initially measured values				
	ESR change	<200% of initially measured values				
	Leakage current change	< specified maximum value				
<b>Life cycles</b> ( 25°C) 1 cycle= Charge to WVDC for 20s, constant voltage charging for 10s, discharge to ½ WVDC for 20s, rest for 10 s	500,000 cycles					
	Capacitance change	<30% of initially measured values				
	ESR change	<200% of initially measured values				
	Leakage current change	< specified maximum value				

Cap (F)	VDC	IC PART NUMBER	Max current (A)	ESR AC mΩ 100Hz	ESR DC (Ω)	Max stored energy (L Y h)	Specific Energy Gravimetric DENSITY (Wh/kg)	Specific Energy Volumetric Density (Wh/l)	Specific power gravi Metric (kW/kg)	Specific Power volu Metric (kW/l)	Weight (grams)	Volume (mL)	Dims LxHxT (mm)
600	2.7	607DCP2R7R	541	<.64	<.83	.608	2.9	4.02	10.46	14.52	210	151.2	90x60x28
1700	2.7	178DCP2R7R	1090	<.5	<.65	1.721	4.47	6.21	7.28	10.12	385	277.2	165x60x28
3500	2.7	358DCP2R7R	2091	<.28	<.36	3.544	5.17	6.88	7.39	9.83	685	514.8	165x60x52
5000	2.7	508DCP2R7R	2547	<.25	<.33	5.063	5.44	7.1	5.94	7.75	930	712.8	165x60x72

	IC PART NUMBER	L (+2.0)	W (+2.0)	T (+2.0)	H (+0.5)	A (+0.1)
	607DCP2R7R	90	60	28	8	30
	178DCP2R7R	165	60	28	8	30
	358DCP2R7R	165	60	52	8	30
	508DCP2R7R	165	60	72	8	30

