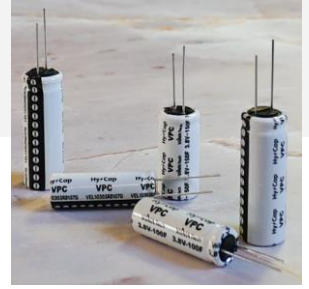


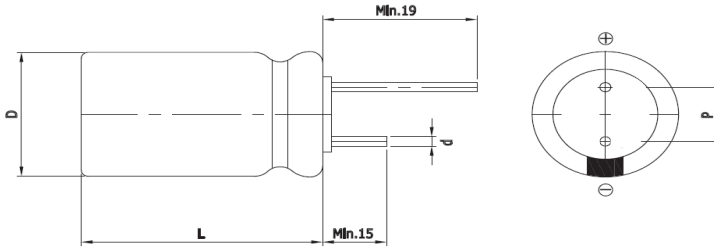
## Features

### VPC (Vina Pulse Capacitor)

- Low Self Discharge
- High Operating Voltage
- Wide Operating Temperature Range
- High Capacitance



## Drawing



Size	0820
D (Φ)	8.0 +1.0 Max
L (mm)	20.0 ±1.5
d (Φ)	0.8 ±0.1
P (mm)	3.5 ±0.5

## Specification

Item	Spec. value	Test methods					
Operating Voltage Range	2.5V to 3.8V (2.5V to 3.5V @ 85°C)						
Operating Temp. Range	-25 ~ 85°C (-40 ~ 85°C @ in Li/SOCL2 battery system)						
Capacitance Tolerance	-10% ~ +30%						
Load Life @ 70°C, 3.8V	Capacitance : ≤ 30% of initial value ESR : Less than 200% of spec. Appearance : No abnormality	Temperature: 70±2°C, 85±2°C Time : 1,000 hours Voltage : 3.8V, 3.5V and measure the floating charge characteristics after returning to normal temperature and humidity.					
Load Life @ 85°C, 3.5V							
Temperature Cycle			Temperature: 85±2°C, -40±2°C Duration: 30 min / Numbers: 100 times				
Cycle Life			<table border="1"> <tr> <td>100% DOD</td> <td>50% DOD</td> <td>1% DOD</td> </tr> <tr> <td>20,000Cycle</td> <td>100,000Cycle</td> <td>500,000Cycle</td> </tr> </table> Temperature : 25±2°C Cut-off Voltage : 2.5V	100% DOD	50% DOD	1% DOD	20,000Cycle
100% DOD	50% DOD	1% DOD					
20,000Cycle	100,000Cycle	500,000Cycle					
Shelf life	Capacitance : ≤ 10% of initial value ESR : Less than 100% of spec.	Temp. : below 25°C, No Electrical Charge, Time : 3 years *VPC recommends charging at rated voltage every six months					

Part Number	Rated Voltage (V)	Rated Capacitance (F) #1	ESR <sub>DC</sub> (mΩ)	ESR <sub>AC</sub> (mΩ)	Leakage Current (μA)	Self Discharge (V) #1	Rated Current (A)	Pulse Current (A) #2	Weight (g)
VEL08203R8306G	3.8 Surge Voltage (4.0V)	30 @ 25°C	700 @ 25°C 100msec	350 @ 25°C 1kHz	1 @ 25°C 72hr	Over 97% @ 25°C	0.1 @ 25°C	0.5 @ 25°C	1.9±0.2

#1 Reference IEC62813 4.2  
#2 1sec. Discharge to 3.2V

※ **WARNING** : precautions must be taken to ensure that device leads are not shorted