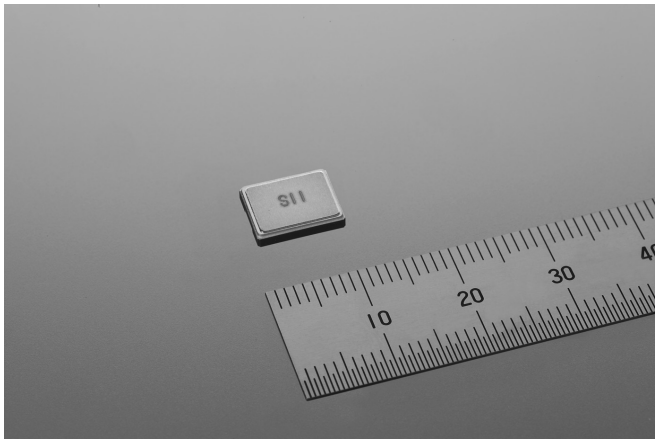
CPX10080C (Under Development) / CPZ10080C (Under Development) / CPX3225A



CPX Capacitors are chip-type Electric Double Layer Capacitor (EDLC) that offer lower internal impedance and reducing the amount of leak current.
CPX Capacitors allow discharge current up to several hundreds of mAs and super rapid charging by weak electromotive force.

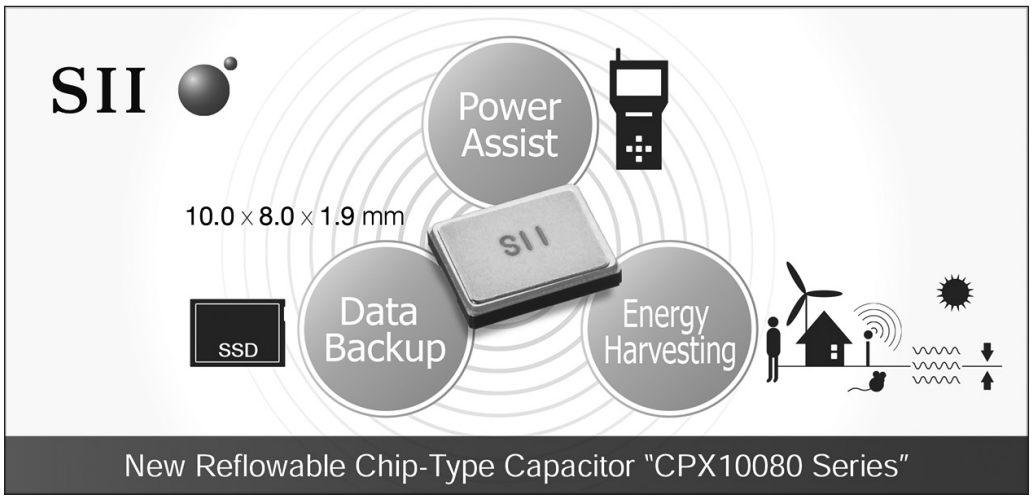
Features

1. Large discharge current and super rapid charging achieved by low internal resistance
   By reducing the internal impedance to 0.5 Ω / 1.5 Ω, the new chip-type EDLCs allow discharge current of up to several hundreds of mAs. The super rapid charging type CPX10080C402F is able to charge within a few seconds.

2. 10 nA level of leak current (CPX10080C104F)
   Reduced leak current to about 10 nA level, CPX10080C104F allows sufficient charging with several micro watts of energy harvesting power source.

3. Long life span, high reliability
   Superior air-tight ceramic package reduces storage deterioration in high temperature / high humidity environments, assuring long term reliability.

4. Reflowable, small and thin
   The chip-type design makes it possible to reflow when it is applied in the mass production. The size is 10.0mm x 8.0 mm x 1.9 mm.



APPLICATIONS

- Power backup of instantaneous battery detachment
- Power assist for main battery
- Electric storage device for energy harvesting
- Peak load leveling of primary battery

Suggested Applications

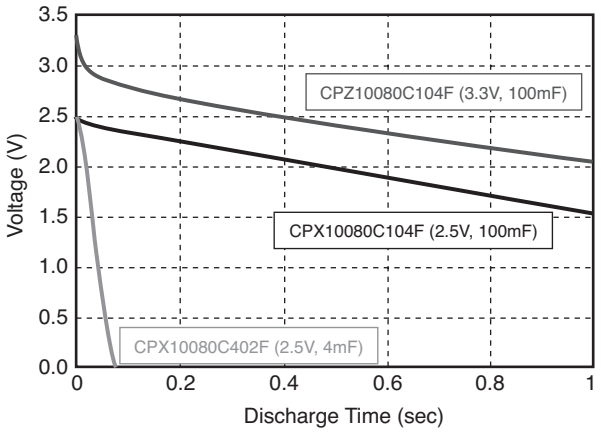
- Handy terminals, Payment terminals
- Wireless sensor network devices
- NFC-enabled mobile devices
- Battery powered medical devices etc.

SPECIFICATIONS

Par number	Maximum Use Voltage (V)	Capacitance (mF)	Internal Impedance (ESR) (Ω)	Size (LxWxH) (mm)	Operating Temperature Range	Weight (g)
CPX10080C104F (Under Development)	2.5	100	0.5	10.0×8.0×1.9	-40°C to +70°C	0.45
CPZ10080C104F (Under Development)	3.3	100	1.5	10.0×8.0×1.9	-30°C to +60°C	0.45
CPX10080C402F (Under Development)	2.5	4	0.5	10.0×8.0×1.9	-40°C to +70°C	0.45
CPX3225A752D	2.6	7.5	25	3.2×2.5×0.9	-30°C to +70°C	0.024

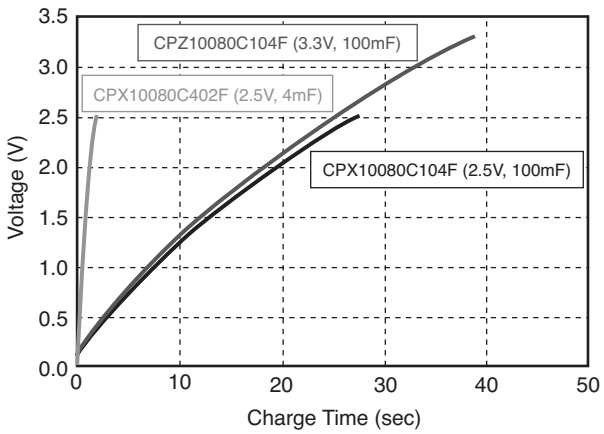
CHARACTERISTICS

Discharge characteristics (100mA)



Both CPX10080C104F and CPZ10080C104F can keep those voltages above 1.5V with 100mA discharge for one second from their fully charged state.

Charge characteristics (10mA)



The super rapid charging type CPX10080C402F reaches 2.5V in approx. 2 seconds when it is charged by 10 mA.