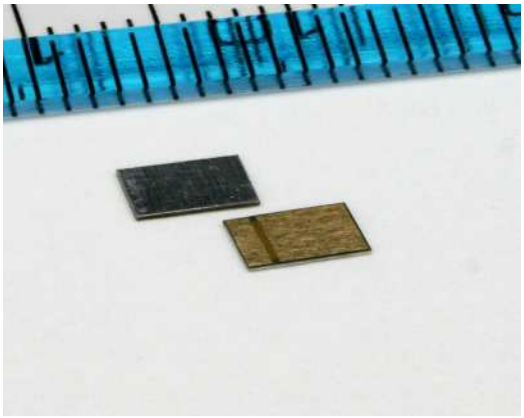
Press Release

Nippon Chemi-Con Corporation
July 2, 2012

Development of ULP Series of Ultra-Thin SMD-Type Conductive Polymer Aluminum Solid Capacitors

Compact size and ultra-low height (0.22 mm or less) achieved



Nippon Chemi-Con Corporation has developed the ULP series, a completely new category of ultra-thin surface mount type conductive polymer aluminum solid capacitors.

The ULP series is an ultra-thin chip-type capacitor that uses a conductive polymer for the cathode material, achieving extremely low ESR characteristics over a high bandwidth with a thickness of 0.15 mm (150 μm).

As the frequency of digital equipment becomes higher and the functionality more advanced, decoupling devices are required to feature not only better electrical characteristics but also be smaller in size and have a lower profile. The ULP series with a first-ever thin shape was developed in order to meet these demands.

The ULP series achieves a large capacitance of 15 μF, a low ESR of 15 mΩ, and a low ESL of 158 pH while employing a small-size, ultra-low profile package (4.5 (L) × 3.2 (W) × 0.15 (H) mm), and featuring a high reliability that guarantees 3,000 hours operation at 105°C.

<<Mass production schedule>>

Sample ULP series with a height of 0.15 mm and 0.22 mm are already being shipped to some customers.

The mass production schedule of these products has not yet been decided.

<<Specifications>>

Category temperature range	-55 – +105℃
Endurance	3000 hours at 105 ℃
Rated voltage range	2 – 16Vdc
Rated capacitance range	0.56 – 56μF
ESR	8 – 50mΩ
ESL (*reference value)	148 – 253pH
Case size	3216, 4532, 7343 (mm) : 3 size, 2 types in different height (L✕W✕H) 3.2✕1.6✕0.15mm / 0.22mm 4.5✕3.2✕0.15mm / 0.22mm 7.3✕4.3✕0.15mm / 0.22mm

Size		EIA 2917 7343 (7.3x4.3mm)			EIA 1812 4532 (4.5x3.2mm)			EIA 1206 3216 (3.2x1.6mm)		
Rated voltage [Vdc]		2	6.3	16	2	6.3	16	2	6.3	16
Capacitance [μF at120Hz]	100μm	22	8.2	2.2	10	3.3	1.0	2.2	0.82	0.27
	150μm	33	18	5.6	15	6.8	2.2	3.9	2.2	0.56
	220μm	56	33	10	22	12	3.9	5.6	3.3	1.00
ESR [mΩ at 1MHz]		8			15			50		
ESL at 40MHz (*reference value)		148pH			158pH			253pH