



Press Release

Nippon Chemi-con Corporation
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Development of the "HXC Series" Conductive Polymer Hybrid Aluminum Electrolytic Capacitors Guaranteed for 125°C and with Improved Moisture Resistance

Nippon Chemi-con has developed the "HXC series" which improve the moisture resistance of the "conductive polymer hybrid aluminum electrolytic capacitor HXA series" that was developed for the automobile electronic equipment market and industrial equipment market, both of which require compact sizes and high reliability.

The HXA series that is currently being mass produced is guaranteed for 4,000 hours at 125°C and 1,000 hours at 85°C and 85%RH. The new HXC series has improved moisture resistance, so that companies making products for the automobile equipment market, telecommunications market and other sectors that require more robust units for difficult ambient conditions will consider using it. The guaranteed time for use in 85°C and 85%RH has been doubled to 2,000 hours.

Conductive polymer hybrid aluminum electrolytic capacitors use both conductive polymer and liquid electrolyte as the electrolyte, so that in addition to low ESR properties from the conductive polymer and superior heat resistance, they also have oxide film repairing ability from the liquid electrolyte. As a result, we have been able to develop a high voltage product that has both low ESR and excellent heat resistance.

During the development of the HXC series we adopted a new liquid electrolyte that is a good match for conductive polymer and that has excellent moisture resistance, and this has made it possible for us to guarantee the product for 2,000 hours under severe conditions up to 85°C and 85%RH.

Main Specifications

HXC series

- Category temperature range: -55°C to +125°C
- Endurance with ripple current: 4,000 hours guarantee at 125°C
- Moisture resistance (high temperatures and high humidity): 2,000 hours guaranteed at 85°C, 85%RH DC load
- Rated voltage: 16, 25, 35WV
- Capacitance range: 150 to 470µF
- Case size: φ8.0×10.0mm, φ10.0×10.0mm

Rated Voltage	Cap. [μ F/120Hz]	Size ϕ D x L [mm]	ESR [m Ω /100kHz]	Rated ripple current [mA _{rms} /125°C, 100kHz]
16	270	8 x 10	22	1,700
	470	10 x 10	18	2,100
25	220	8 x 10	27	1,600
	330	10 x 10	20	2,000
35	150	8 x 10	27	1,600
	270	10 x 10	20	2,000

Sample Availability and Mass Production Schedule

Samples of the HXC series will be available from October 2014, and mass production is scheduled to start in January 2015.

