



Press Release

Nippon Chemi-Con Corporation
October 2, 2019

SMD Type Conductive Polymer Aluminum Solid Capacitors PXQ Series Best suited for 5G base stations

Nippon Chemi-Con has developed SMD type conductive polymer aluminum solid capacitors PXQ Series which realizes high heat resistance, high moisture resistance and long life.

From 2019 to 2020, the full-scale operation of 5th generation mobile communications system (5G) services will commence in each country, and significant growth is expected in the telecommunications market. The newly developed PXQ Series offers high heat resistance, high moisture resistance and long life, contributing to improved weather resistance and maintenance-free communication base stations.

We optimized the sealing material and conductive polymer for commercialization. As a result, the product life has been extended from 15,000 hours at 105°C (PXF Series) and 2,000 hours at 125°C (PXD Series) to 23,000 hours at 105°C and 6,000 hours at 125°C. The moisture resistance of conventional products was 1,000 hours at 60°C 95% RH (PXF, PXD), but has been improved to 1,000 hours at 85°C 85% RH.

[Technical Features]

By optimizing the sealing material and the conductive polymer, the Series guarantees use at a high temperature of 125°C and long life at 105°C. In addition, moisture resistance is guaranteed at 85°C 85% RH.

[Samples and Mass Production]

Samples: January 2020

Mass production: March 2020

[Production Sites]

Chemi-Con Miyagi Corp. (a wholly owned subsidiary of Nippon Chemi-Con)

[Main Specifications]

- Category temperature range: -55°C to +125°C
- Endurance: guarantees 23,000 hours at 105°C, 6,000 hours at 125°C
- Moisture resistance: guarantees 1,000 hours at 85°C 85% RH

Size	Rated voltage [Vdc]	Capacitance [μ F]	Equivalent series resistance (ESR) [$m\Omega_{max}/20^{\circ}C, 100k$ to $300kHz$]
$\phi 6.3 \times L6.7mm$	2.5	560	25
	6.3	330	25
	16	100	25
$\phi 6.3 \times L9.7mm$	2.5	680	24
	6.3	560	24
	16	220	25
$\phi 8.0 \times L9.7mm$	2.5	1,200	22
	6.3	820	22
	16	330	25

[Product Appearance]

