Nippon Chemi-Con Corporation
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Radial Lead Type Aluminum Electrolytic Capacitors GXM Series
Capacitors for communications infrastructure with high temperature resistance and high capacitance developed

Nippon Chemi-Con has developed radial lead type aluminum electrolytic capacitors for power supplies used in high temperature environments such as communications infrastructure.

Capacitors used in next-generation communications infrastructure (5G base stations) require products with high temperature resistance, long life and high capacitance. This is because capacitors gain heat from use in closed environments and the need for maintenance caused by use in remote locations. As a high temperature resistant product for such applications, we commercialized the GXF Series. However, the new GXM Series has a maximum 1.7 times longer life and 61% higher capacitance compared to the GXF Series.

To cover a rated voltage range of 420 to 430V, frequently used in communication base stations, the rated voltage of the GXM Series supports up to 450V (the GXF Series supports up to 400V).

Technical Features

The GXM Series has achieved higher capacitance by adopting our newly developed electrode foil. Furthermore, the Series has achieved longer life by adopting liquid electrolyte with high endurance.

Samples and Mass Production

The GXM Series will be available as samples from January 2022 and production will begin in July 2022.

They will be produced at Chemi-Con East Japan Corp. Iwate Plant (a wholly owned subsidiary of Nippon Chemi-Con).

◆Product Overview

- Category temperature range: -40°C to +125°C
- Rated voltage range: 400V to 450V
- Capacitance range: 15μF to 220μF
  (Capacitance tolerance ±20%)
- Case size: ∅10×20L to ∅18×50Lmm
- Endurance: guarantees 5,000 hours at 125°C

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◆Product Features

List of standard products (representative rate)

WV [V_DC]	Case size øD×L [mm]	Cap. [µF]	Rated ripple current [mArms/105°C] (120Hz)
400	⌀10×50L	56	470
400	⌀12.5×50L	100	685
400	⌀18×25L	100	680
400	⌀18×50L	220	1,180
420	⌀10×50L	47	430
420	⌀12.5×50L	82	620
420	⌀18×50L	220	1,180
450	⌀10×50L	47	430
450	⌀12.5×50L	82	620
450	⌀18×35L	120	830
450	⌀18×50L	180	1,070

◆Product Appearance

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