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## **NICHICON Develops and Launches the RKS Series of Chip-Type Conductive Polymer Aluminum Solid Electrolytic Capacitors**

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NICHICON CORPORATION has developed and scheduled to start the mass production of the RKS Series of the chip-type conductive polymer aluminum solid electrolytic capacitors for use in telecommunications, industrial equipment, and automotive market categories requiring the high reliability. With our RKS Series, we have improved upon our existing RPS and RSS Series where the maximum operating temperature is 105°C, achieving both an industry-leading endurance rating of 3,000 hours at 125°C and high moisture resistance.

### **Overview and Development Background**

NICHICON CORPORATION continues to promote the chip-type conductive polymer aluminum solid electrolytic capacitors in sectors associated with the high demand for the reliability, including telecommunications, industrial equipment, and automotive market categories. We have observed a growing demand for improved reliability and extended life in these market categories and responded by launching RKS Series, which will fulfill these needs while setting new industry standards.

### **Features**

Optimized processes in conductive polymer technology and use of sophisticated components such as high-performance sealing rubber. This product series improves upon standards set by our existing the RPS and the RSS series while fulfilling market demand with its higher operating temperature, longer life, and reliable moisture resistance.

### Comparison with Current Products

	RKS Series (new products)	RSS Series (current products)
Life (guaranteed)	<b>3000 hours at 125°C</b> guaranteed DC	2000 hours at 105°C guaranteed DC
Moisture resistance	<b>85°C 85%RH</b> <b>1000h rated voltage</b> <b>applied</b>	60°C 90%RH No load
Rating	25V — 100μF	25V — 100μF
Case Size (mm)	φ6.3×7.7L	φ6.3×7.7L
ESR (at 20°C, 100kHz)	30mΩ	22mΩ
Ripple Current (at 105°C, 100kHz)	2900mArms	3100mArms

### Main Specifications

- Rated voltage range : 20 to 63V
- Rated capacitance range : 8.2 to 390μF
- Category temperature range : -55 to 125°C
- Product dimensions : φ6.3×5.8L to φ8×8.7L(mm)  
(5 Sizes, Sequential expansion)
- Life : 3,000 hours guaranteed at 125°C
- moisture resistance : 1,000 hours guaranteed at 85°C and 85%RH
- Terminal shape : Chip type
- Sample : Currently available
- Mass production launch /  
• production capacity : From November 2022  
[Planned production volume: 3 million / month]
- Production plant : NICHICON ELECTRONICS (SUQIAN) CO., LTD.  
NO.18, Yangmingshan Avenue, Suzhou Suqian  
Industrial Park, Suqian, China 223800  
(ISO9001, IATF16949, and ISO14001 certified)



**RKS Series of Chip-Type Conductive Polymer  
Aluminum Solid Electrolytic Capacitors**

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