NIC Components Corp.

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November 22, 2011

SUB: EOL – End of Life Notification

Products Impacted by this notice:
NRSJ & **NRSK** series of Radial LDD Low ESR & Z Aluminum Electrolytic Capacitors

EOL Part Numbers: See below part number tables (2)

EOL EFFECTIVE: November 23rd 2011
LAST ORDER DATE: Nov 30th 2012 (for established business; from existing customers)
REASON FOR CHANGE: Reduction in market demand

Suggested Alternate and Replacement Components:
NRSG, NRSH, NRZJ, NRE-HL and **NRE-JL** series of Radial LDD Low ESR & Z Aluminum Electrolytic Capacitors

➔Use QuickBuilder to select & compare components; www.niccomp.com/quickbuilder/qb_aluminum.php

NRSJ Series – EOL Part Numbers

EOL Part Number	Capacitance Value	Voltage Rating
NRSJ102M6.3V10X12.5F	1000uF	6.3VDC
NRSJ152M6.3V10X16F	1500uF	6.3VDC
NRSJ222M6.3V10X20F	2200uF	6.3VDC
NRSJ681M10V10X12.5F	680uF	10VDC
NRSJ102M10V10X16F	1000uF	10VDC
NRSJ152M10V10X20F	1500uF	10VDC
NRSJ471M16V10X12.5F	470uF	16VDC
NRSJ681M16V10X16F	680uF	16VDC
NRSJ102M16V10X16F	1000uF	16VDC
NRSJ102M16V10X20F	1000uF	16VDC
NRSJ152M16V10X20F	1500uF	16VDC
NRSJ331M25V10X12.5F	330uF	25VDC
NRSJ471M25V10X16F	470uF	25VDC
NRSJ681M25V10X20F	680uF	25VDC
NRSJ102M25V10X20F	1000uF	25VDC
NRSJ221M35V10X12.5F	220uF	35VDC
NRSJ331M35V10X16F	330uF	35VDC
NRSJ391M35V8X20F	390uF	35VDC
NRSJ471M35V10X20F	470uF	35VDC

NRSK Series – EOL Part Numbers

EOL PN	Capacitance Value	Voltage Rating
NRSK821M6.3V8X11.5F	820uF	6.3VDC
NRSK102M6.3V8X11.5F	1000uF	6.3VDC
NRSK122M6.3V8X16F	1200uF	6.3VDC
NRSK152M6.3V8X20F	1500uF	6.3VDC
NRSK152M6.3V10X12.5F	1500uF	6.3VDC
NRSK152M6.3V10X16F	1500uF	6.3VDC
NRSK182M6.3V8X20F	1800uF	6.3VDC
NRSK182M6.3V10X16F	1800uF	6.3VDC
NRSK222M6.3V10X20F	2200uF	6.3VDC
NRSK332M6.3V10X23F	3300uF	6.3VDC
NRSK471M10V8X11.5F	470uF	10VDC
NRSK681M10V8X11.5F	680uF	10VDC
NRSK102M10V8X16F	1000uF	10VDC
NRSK102M10V10X12.5F	1000uF	10VDC
NRSK122M10V8X20F	1200uF	10VDC
NRSK152M10V8X20F	1500uF	10VDC
NRSK152M10V10X16F	1500uF	10VDC
NRSK182M10V10X20V	1800uF	10VDC
NRSK222M10V10X23	2200uF	10VDC
NRSK331M16V8X11.5F	330uF	16VDC
NRSK471M16V8X11.5F	470uF	16VDC
NRSK681M16V8X16F	680uF	16VDC
NRSK681M16V10X12.5F	680uF	16VDC
NRSK102M16V8X20F	1000uF	16VDC
NRSK102M16V10X16F	1000uF	16VDC
NRSK152M16V10X20F	1500uF	16VDC
NRSK182M16V10X23F	1800uF	16VDC
NRSK221M25V8X11.5F	220uF	25VDC
NRSK331M25V8X11.5F	330uF	25VDC
NRSK331M25V10X12.5F	330uF	25VDC
NRSK471M25V8X20F	470uF	25VDC
NRSK471M25V10X12.5F	470uF	25VDC
NRSK471M25V10X16F	470uF	25VDC
NRSK681M25V10X16F	680uF	25VDC
NRSK681M25V10X20F	680uF	25VDC
NRSK102M25V10X23F	1000uF	25VDC

Prepared by: Technical Product Marketing Group / tpmg@niccomp.com

➔Follow NIC PCN alerts to get email notifications of EOL and PCN announcements at www.niccomp.com/pcn

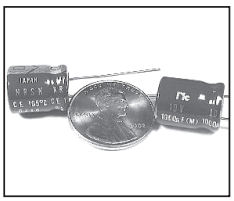
Miniature Aluminum Electrolytic Capacitors

NRSK Series

ULTRA LOW IMPEDANCE AT HIGH FREQUENCY, RADIAL LEADS, POLARIZED ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant
includes all homogeneous materials

*See Part Number System for Details



FEATURES

- VERY LOW IMPEDANCE
- LONG LIFE AT 105°C (Up to 4000 hrs)
- HIGH STABILITY AT LOW TEMPERATURE
- IDEALLY SUITED FOR USE IN SWITCHING POWER SUPPLIES & CONVERTERS

CHARACTERISTICS

Rated Voltage Range	6.3 ~ 25				
Rated Capacitance Range	220 ~ 3,300µF				
Operating Temp. Range	-40°C ~ +105°C				
Capacitance Tolerance	± 20% (M)				
Max. Leakage Current After 2 Minutes @ 20°C	0.03CV				
Surge Voltage Ratings	W.V.	6.3	10	16	25
	S.V.	8	13	20	32
Maximum Tan δ (see specifications table for values above 1,800µF)	Tan δ @ 20°C/120Hz	0.22	0.19	0.16	0.14
Low Temperature Stability (Impedance Ratio @ 120Hz)	Z -25°C/Z +20°C	2	2	2	2
	Z -40°C/Z +20°C	3	3	3	3
Load Life Test @ Rated W.V. & 105°C 2,000 hours for 8x11.5, 8x16, 10x12.5 and 10x16 3,000 hours for 8x20 4,000 hours for 10x20, 10x23	Capacitance Change	Within ± 25% of initial measured value			
	Tan δ	Less than 200% of the specified maximum value			
	Leakage Current	Less than specified maximum value			

STANDARD PRODUCT AND CASE SIZE TABLE DΦ x L (mm)

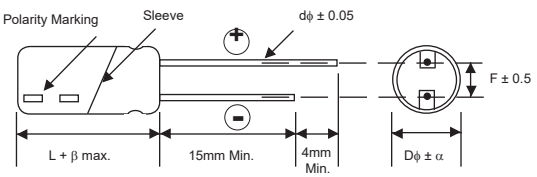
Cap (µF)	Code	Working Voltage (Vdc)			
		6.3	10	16	25
220	221	-	-	-	8x11.5
330	331	-	-	-	8x11.5
		-	-	-	10x12.5
470	471	-	-	-	8x20
		-	-	-	10x12.5
		-	-	8x11.5	10x16
680	681	-	8x11.5	8x16	10x16
				10x12.5	10x20
820	821	8x11.5	-	-	-
1000	102	8x11.5	8x16	8x20	10x23
			10x12.5	10x16	
1200	122	8x16	-	-	-
1500	152	8x20	8x20	10x20	-
		10x12.5	10x16		
1800	182	10x16	10x20	10x23	-
2200	222	10x20	10x23	-	-
3300	332	10x23	-	-	-

DIAMETER AND LEADSPACE (mm)

Case Dia. (Dϕ)	8	10
Lead Dia. (dϕ)	0.6	0.6
Lead Spacing (F)	3.5	5.0
Dim. α	0.5	0.5

β = L ≤ 16mm = 1.5mm, L ≥ 20mm = 2.0mm

DIMENSIONS (mm)



Drawing is representative of parts as supplied in bulk or straight lead format, please see taping specification for details on taped format packaging.

STANDARD PRODUCT, SPECIFICATIONS AND CASE SIZES D ϕ x L (mm)

Part Number	Cap. (µF)	W.V. (Vdc)	Dissipation Factor +20°C/120Hz	Ripple Current Rating (mA) +105°C/100KHz	Max. ESR (Ω) +20°C/100KHz	Load Life Hours @+105°C
NRSK821M6.3V8X11.5F	820	6.3	0.22	1140	0.036	2,000
NRSK102M6.3V8X11.5F	1000		0.22	1140	0.030	2,000
NRSK122M6.3V8X16F	1200		0.22	1490	0.028	2,000
NRSK152M6.3V8X20F	1500		0.22	1870	0.019	3,000
NRSK152M6.3V10X12.5F	1500		0.22	1540	0.026	2,000
NRSK152M6.3V10X16F	1500		0.22	2000	0.018	2,000
NRSK182M6.3V8X20F	1800		0.22	1950	0.016	3,000
NRSK182M6.3V10X16F	1800		0.22	2000	0.019	2,000
NRSK222M6.3V10X20F	2200		0.24	2550	0.013	4,000
NRSK332M6.3V10X23F	3300		0.26	2800	0.012	4,000
NRSK471M10V8X11.5F	470	10	0.19	1140	0.030	2,000
NRSK681M10V8X11.5F	680		0.19	1140	0.036	2,000
NRSK102M10V8X16F	1000		0.19	1490	0.028	2,000
NRSK102M10V10X12.5F	1000		0.19	1540	0.026	2,000
NRSK122M10V8X20F	1200		0.19	1870	0.019	3,000
NRSK152M10V8X20F	1500		0.19	1870	0.019	3,000
NRSK152M10V10X16F	1500		0.19	2000	0.019	2,000
NRSK182M10V10X20V	1800		0.19	2550	0.013	4,000
NRSK222M10V10X23	2200		0.21	2800	0.012	4,000
NRSK331M16V8X11.5F	330	16	0.16	1140	0.030	2,000
NRSK471M16V8X11.5F	470		0.16	1140	0.036	2,000
NRSK681M16V8X16F	680		0.16	1490	0.028	2,000
NRSK681M16V10X12.5F	680		0.16	1540	0.026	2,000
NRSK102M16V8X20F	1000		0.16	1870	0.019	3,000
NRSK102M16V10X16F	1000		0.16	2000	0.019	2,000
NRSK152M16V10X20F	1500		0.16	2550	0.013	4,000
NRSK182M16V10X23F	1800		0.16	2800	0.012	4,000
NRSK221M25V8X11.5F	220	25	0.14	1110	0.030	2,000
NRSK331M25V8X11.5F	330		0.14	1080	0.032	2,000
NRSK331M25V10X12.5F	330		0.14	1440	0.025	2,000
NRSK471M25V8X20F	470		0.14	1820	0.018	3,000
NRSK471M25V10X12.5F	470		0.14	1390	0.027	2,000
NRSK471M25V10X16F	470		0.14	1920	0.020	2,000
NRSK681M25V10X16F	680		0.14	1830	0.022	2,000
NRSK681M25V10X20F	680		0.14	2180	0.016	4,000
NRSK102M25V10X23F	1000		0.14	2180	0.016	4,000

PART NUMBERING SYSTEM

NRSK 102 M 16V 10x16 TB F

- F — RoHS Compliant
- TB — Tape and Box*
- 10x16 — Size (D∅ x L)
- 16V — Rated Voltage
- M — Tolerance Code
- 102 — Capacitance Code
- NRSK — Series

*see tape specification for details

PRECAUTIONS

Please review the notes on correct use, safety and precautions found at
https://www.niccomp.com/resource/files/aluminum/AlumApplInfoCautions.pdf
If in doubt or uncertainty, please review your specific application - process details with NIC's technical support personnel: **tpmg@niccomp.com**