

Miniature Aluminum Electrolytic Capacitors

NRSJ Series

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

FEATURES

- VERY LOW IMPEDANCE
- LONG LIFE AT 105°C (2000 hrs.)
- HIGH STABILITY AT LOW TEMPERATURE
- IDEAL FOR SWITCHING POWER SUPPLIES & CONVERTORS

CHARACTERISTICS

Rated Voltage Range	6.3 ~ 50Vdc						
Capacitance Range	100 ~ 2,700 μ F						
Operating Temperature Range	-25 ~ +105°C						
Capacitance Tolerance	$\pm 20\%$ (M)						
Maximum Leakage Current After 2 minutes At 20°C	0.01CV, or 3 μ A, whichever is greater						
Maximum Tan δ At 20°C & 120Hz	W.V. (Vdc)	6.3	10	16	25	35	50
	S. V. (Vdc)	8	13	20	32	44	63
	$C \leq 1,500\mu F$	0.22	0.19	0.16	0.14	0.12	0.10
Low Temperature Stability (Impedance Ratio@120Hz)	$C = 2,200\mu F \sim 2,700\mu F$	0.24	0.21	0.18	0.16	-	-
	Z-25°C/Z+20°C	6.3	10	16	25	35	50
		3	3	3	3	3	3
Load Life Test at Rated W.V. 105°C 2,000 Hrs.	Capacitance Change	Within $\pm 25\%$ of initial measured value					
	Tan δ	Less than 200% of specified maximum value					
	Leakage Current	Less than specified value					



MAXIMUM IMPEDANCE (Ω @ 100KHz/20°C)

Cap. (μ F)	Code	Working Voltage (Vdc)					
		6.3	10	16	25	35	50
100	101	-	-	-	-	-	0.046
120	121	-	-	-	-	-	0.049
150	151	-	-	-	-	0.030	0.036
180	181	-	-	-	-	-	0.039
220	221	-	-	-	0.030	0.032	0.023
						0.025	0.026
270	271	-	-	-	-	-	0.025
						-	0.029
						-	0.021
330	331	-	-	0.030	0.032	0.018	0.023
					0.025	0.027	
					-	0.020	
390	391	-	-	-	-	0.020	-
						0.022	
470	471	-	0.030	0.032	0.018	0.016	-
				0.025	0.027		
				-	0.020		
560	561	0.030	-	-	-	0.018	-
680	681	-	0.032	0.016	0.020	-	-
			0.025	0.025	0.022		
			-	0.018	0.016		
1000	102	0.030	0.016	0.016	0.018	-	-
		0.025	0.025	0.018			
		-	0.018	0.013			
1500	152	0.016	0.016	0.013	-	-	-
		0.025	0.018				
		0.018	0.013				
2200	222	0.016	0.013	-	-	-	-
		0.018					
		0.013					
2700	272	0.013	-	-	-	-	-

MAXIMUM RIPPLE CURRENT (mA@ 100KHz/105°C)

Cap. (μ F)	Code	Working Voltage (Vdc)					
		6.3	10	16	25	35	50
100	101	-	-	-	-	-	920
120	121	-	-	-	-	-	890
150	151	-	-	-	-	1110	1230
180	181	-	-	-	-	-	1180
220	221	-	-	-	1110	1080	1680
						1440	1720
270	271	-	-	-	-	-	1610
						-	1630
						-	1980
330	331	-	-	1140	1080	1820	1800
					1440	1390	
					-	1920	
390	391	-	-	-	-	1720	-
						1830	
470	471	-	1140	1140	1820	2180	-
				1540	1390		
				-	1920		
560	561	1140	-	-	-	2060	-
680	681	-	1140	1870	1720	-	-
			1540	1540	1830		
			-	2000	2180		
1000	102	1140	1870	1870	2060	-	-
		1540	1540	2000			
		-	2000	2550			
1500	152	1870	1870	2550	-	-	-
		1540	2000				
		2000	2550				
2200	222	1870	2550	-	-	-	-
		2000					
		2550					
2700	272	2550	-	-	-	-	-



STANDARD PRODUCTS AND CASE SIZES (mm)

Cap. (μF)	Code	Working Voltage (Vdc)					
		6.3	10	16	25	35	50
100	101	-	-	-	-	-	8x11.5
120	121	-	-	-	-	-	8x11.5
150	151	-	-	-	-	8x11.5	10x12.5
180	181	-	-	-	-	-	10x12.5
220	221	-	-	-	8x11.5	8x11.5	8x20
						10x12.5	10x16
270	271	-	-	-	-	-	8x20
							10x16
							10x20
330	331	-	-	8x11.5	8x11.5	8x20	10x20
					10x12.5	10x12.5	
					-	10x16	
390	391	-	-	-	-	8x20	-
						10x16	
470	471	-	8x11.5	8x11.5	8x20	10x20	-
				10x12.5	10x12.5		
				-	10x16		
560	561	8x11.5	-	-	-	10x20	-
680	681	-	8x11.5	8x20	8x20	-	-
			10x12.5	10x12.5	10x16		
			-	10x16	10x20		
1000	102	8x11.5	8x20	8x20	10x20	-	-
		10x12.5	10x12.5	10x16			
		-	10x16	10x20			
1500	152	8x20	8x20	10x20	-	-	-
		10x12.5	10x16				
		10x16	10x20				
2200	222	8x20	10x20	-	-	-	-
		10x16					
		10x20					
2700	272	10x20	-	-	-	-	-

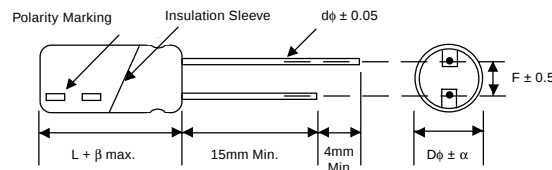
DIAMETER AND LEADSPACE (mm)

Case Dia. (DØ)	8	10
Lead Spacing (F)	3.5	5.0
Leads Dia. (dØ)	0.6	0.6

$L \leq 16\text{mm}$ $\beta = 1.5\text{mm}$

$L \geq 20\text{mm}$ $\beta = 2.0\text{mm}$

$\alpha = 0.5\text{mm}$



PART NUMBERING SYSTEM

