

NRGB Series

Radial Leaded Aluminum Electrolytic Capacitors



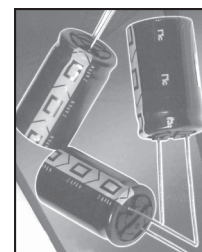
HIGH TEMPERATURE, EXTENDED LOAD LIFE, RADIAL LEADS, POLARIZED

FEATURES

- IMPROVED ENDURANCE AT HIGH TEMPERATURE (up to 10,000HRS @ 105°C)
- IDEAL FOR LOW VOLTAGE LIGHTING BALLAST
- [AEC-Q200 SUPPORT AVAILABLE](#)

CHARACTERISTICS

Rated Voltage Range		10 ~ 100VDC						
Capacitance Range		1.0 ~ 330μF						
Operating Temperature Range		-40°C ~ +105°C						
Capacitance Tolerance		±20% (M)						
Maximum Leakage Current @ 20°C	After 2 min.	0.01CV or 3μA whichever is greater						
Max. Tan δ	W.V. (Vdc)	10	16	25	35	50	63	100
	S.V. (Vdc)	13	20	32	44	63	79	125
	@120Hz/20°C	0.45	0.35	0.30	0.22	0.19	0.17	0.15
Low Temperature Stability Impedance Ratio @ 120Hz	Z-25°C/Z+20°C	8	6	4	4	3	3	3
Load Life Test at Rated Voltage @ 105°C	Duration	10,000 hours						
	Δ Capacitance	Within ±25% of initial measured value						
	Δ Tan δ	Less than 300% of specified value						
	Δ LC	Less than specified value						



STANDARD PRODUCT AND CASE SIZE TABLE DφxL (mm)

Cap. (μF)	Code	Working Voltage (Vdc)						
		10	16	25	35	50	63	100
1.0	1R0	-	-	-	-	5x11	-	5x11
2.2	2R2	-	-	-	-	5x11	-	5x11
3.3	3R3	-	-	-	-	5x11	-	5x11
4.7	4R7	-	-	-	-	5x11	-	5x11
10	100	-	-	-	-	5x11	5x11	6.3x11
22	220	-	-	-	-	5x11	6.3x11	8x11.5
33	330	-	-	5x11	5x11	6.3x11	6.3x11	-
47	470	-	5x11	5x11	6.3x11	6.3x11	8x11.5	-
100	101	5x11	6.3x11	6.3x11	8x11.5	8x11.5	-	-
220	221	6.3x11	8x11.5	-	-	-	-	-
330	331	8x11.5	-	-	-	-	-	-

PART NUMBER SYSTEM

NRGB **331** **M** **10V** **8X11.5** **TB** **Y** **F**
 Series Capacitance Code in μF Tolerance Code M=20% Working Voltage Case Size (mm) TB = Tape & Box*
 RoHS Compliant

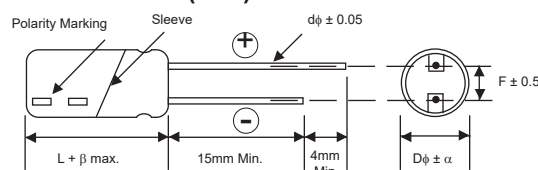
*see tape specification for details

Optional: AEC-Q200 support for automotive equipment, availability subject to application review. Sourced to special production and inspection at IATF-16949 certified production site.

LEAD SPACING AND DIAMETER (mm)

Case Dia. (Dφ)	5	6.3	8
Lead Dia. (dφ)	0.5	0.5	0.6
Lead Spacing (F)	2.0	2.5	3.5
Dim. α	0.5		
Dim. β	1.5		

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.

PRECAUTIONS

Please review the notes on correct use, safety and precautions found at <https://www.niccomp.com/wp-content/uploads/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

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STANDARD VALUES, SPECIFICATIONS AND CASE SIZES (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/120Hz	Load Life Hours @+105°C
NRGB101M10V5x11F	100	10	0.45	130	7.46	10,000
NRGB221M10V6.3x11F	220		0.45	210	3.39	10,000
NRGB331M10V8x11.5F	330		0.45	330	2.26	10,000
NRGB470M16V5x11F	47	16	0.35	130	12.4	10,000
NRGB101M16V6.3x11F	100		0.35	210	5.81	10,000
NRGB221M16V8x11.5F	220		0.35	330	2.64	10,000
NRGB330M25V5x11F	33	25	0.30	130	15.1	10,000
NRGB470M25V5x11F	47		0.30	130	10.6	10,000
NRGB101M25V6.3x11F	100		0.30	210	4.98	10,000
NRGB330M35V5x11F	33	35	0.22	130	11.1	10,000
NRGB470M35V6.3x11F	47		0.22	210	7.76	10,000
NRGB101M35V8x11.5F	100		0.22	330	3.65	10,000
NRGB1R0M50V5x11F	1.0	50	0.19	25	315.2	10,000
NRGB2R2M50V5x11F	2.2		0.19	35	143.3	10,000
NRGB3R3M50V5x11F	3.3		0.19	70	95.5	10,000
NRGB4R7M50V5x11F	4.7		0.19	80	67.1	10,000
NRGB100M50V5x11F	10		0.19	90	31.5	10,000
NRGB220M50V5x11F	22		0.19	135	14.3	10,000
NRGB330M50V6.3x11F	33		0.19	190	9.55	10,000
NRGB470M50V6.3x11F	47		0.19	190	6.71	10,000
NRGB101M50V8x11.5F	100		0.19	270	3.15	10,000
NRGB100M63V5x11F	10	63	0.17	80	28.2	10,000
NRGB220M63V6.3x11F	22		0.17	170	12.8	10,000
NRGB330M63V6.3x11F	33		0.17	170	8.54	10,000
NRGB470M63V8x11.5F	47		0.17	240	6.00	10,000
NRGB1R0M100V5x11F	1.0	100	0.15	40	248.8	10,000
NRGB2R2M100V5x11F	2.2		0.15	50	113.1	10,000
NRGB3R3M100V5x11F	3.3		0.15	60	75.4	10,000
NRGB4R7M100V5x11F	4.7		0.15	70	52.9	10,000
NRGB100M100V6.3x11F	10		0.15	150	24.9	10,000
NRGB220M100V8x11.5F	22		0.15	230	11.3	10,000

RIPPLE CURRENT FREQUENCY CORRECTION FACTOR

Frequency (Hz)	Cap. (μF)	120	1K	10K	100K
Multiplier	1.0 ~ 10	0.42	0.60	0.80	1.00
	22 ~ 33	0.55	0.75	0.90	1.00
	47 ~ 330	0.70	0.85	0.95	1.00