



NIC COMPONENTS CORP.

<http://www.niccomp.com> / Technical Inquiries: tpmg@niccomp.com

12 June 2008

END OF LIFE NOTICE

PRODUCTS: Radial Aluminum Electrolytic Capacitors

NIC PRODUCT SERIES: NRE-WB Series

THE FOLLOWING IS NOTICE THAT THE **NRE-WB SERIES IS BEING DISCONTINUED.**

LAST ORDER DATE: **July 31, 2008**

REASON FOR TERMINATION: **Low Usage**

THE FOLLOWING PART NUMBERS ARE AFFECTED:

DISCONTINUED PART NUMBERS

Discontinued Part Numbers	ESR (Ω)	RCR (mA)	Load Life (Hrs @ 105°C)	Alternative Part Numbers	ESR (Ω)	RCR (mA)	Load Life (Hrs @ 105°C)
NRE-WB220M200V10x20F	11.31	600	8,000	NRBX220M200V10X20F	11.31	500	10,000
NRE-WB330M200V10x20F	7.54	650	8,000	NRB-XS330M200V10X20F	7.54	650	8,000
NRE-WB221M200V18x31.5F	1.13	2000	10,000	NRBX221M200V18X31.5F	1.13	1700	12,000
NRE-WB220M250V10x20F	11.31	560	8,000	NRB-XS220M250V10X20F	11.31	500	8,000
NRE-WB470M250V12.5x20F	5.29	710	10,000	NRBX470M250V12.5X25F	5.29	720	12,000
NRE-WB680M250V16x20F	3.66	1000	10,000	NRBX680M250V16X25F	1.33	920	12,000
NRE-WB820M350V18x25F	4.05	1100	10,000	NRB-XS820M350V18X25F	4.05	1530	10,000
NRE-WB100M400V10x20F	39.9	300	10,000	NRBX100M400V10X20F	33.17	280	10,000
NRE-WB330M400V16x20F	12.1	900	10,000	NRBX330M400V16X25F	10.05	430	12,000
NRE-WB100M450V12.5x20F	39.9	350	10,000	NRBX100M450V12.5X20F	33.17	320	12,000
NRE-WB220M450V16x20F	18.1	680	10,000	NRB-XS220M450V16X20F	15.1	730	10,000
NRE-WB330M450V18x25F	12.1	850	10,000	NRBX330M450V18X25F	10.05	700	12,000

PREPARED BY: Paul Harris, Technical Sales Manager, NIC TPMG

NRE-WB SERIES HIGH VOLTAGE, RADIAL LEADS, EXTENDED TEMPERATURE

FEATURES

- HIGH VOLTAGE (UP THROUGH 450VDC)
- NEW REDUCED SIZES
- +105°C EXTENDED TEMPERATURE AND LOAD LIFE

RoHS Compliant
includes all homogeneous materials



*See Part Number System for Details

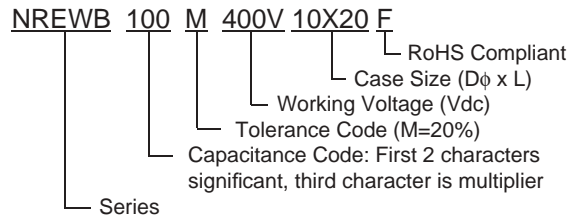
CHARACTERISTICS

Rated Voltage Range	200 ~ 450VDC					
Capacitance Range	10 ~ 220 μ F					
Operating Temperature Range	-25°C ~ +105°C					
Capacitance Tolerance	\pm 20% (M)					
Maximum Leakage Current @ 20°C	0.03CV +10 μ A after 2 minutes					
Max. Tan δ @ 120Hz/20°C	W.V.	200	250	350	400	450
	S.V.	250	300	400	450	500
	Tan δ	0.15	0.15	0.20	0.24	0.24
Low Temperature Stability Impedance Ratio @ 120Hz	Z-25°C/Z+20°C	3	3	4	6	6
Load Life Test at Rated W.V. +105°C 8,000 Hours: 10 ϕ +105°C 10,000 Hours: 12.5 ϕ & up	Capacitance Change	Within \pm 20% of initial measured value				
	Tan δ	Less than 200% of specified maximum value				
	Leakage Current	Less than specified maximum value				
Shelf Life Test +105°C 1,000 Hours with no load	Shall meet same requirements as in load life test					

STANDARD PRODUCT AND CASE SIZE D ϕ x L (mm)

Cap. (μ F)	Code	Working Voltage (Vdc)				
		200	250	350	400	450
10	100	-	-	-	10x20	12.5x20
22	220	10x20	10x20	-	-	16x20
33	330	10x20	12.5x20	-	16x20	18x25
68	680	-	16x20	-	-	-
82	820	-	-	18x25	-	-
220	221	18x31.5	-	-	-	-

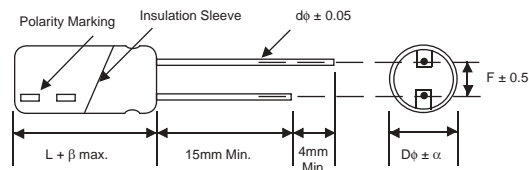
PART NUMBERING SYSTEM



LEAD SPACING AND DIAMETER (mm)

Case Dia. (D ϕ)	10	12.5	16	18
Lead Dia. (d ϕ)	0.6	0.6	0.8	0.8
Lead Spacing (F)	5.0	5.0	7.5	7.5
Dim α	0.5	0.5	0.5	0.5

$$\beta = L < 20\text{mm} = 1.5\text{mm}, L > 20\text{mm} = 2.0\text{mm}$$



STANDARD VALUES, SPECIFICATIONS AND CASE SIZES (mm)

Part Number	Cap. (μ F)	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
NRE-WB220M200V10x20F	22	200	0.15	600	11.31	8,000
NRE-WB330M200V10x20F	33		0.15	650	7.54	8,000
NRE-WB221M200V18x31.5F	220		0.15	2000	1.13	10,000
NRE-WB220M250V10x20F	22	250	0.15	560	10x20	8,000
NRE-WB470M250V12.5x20F	33		0.15	710	12.5x20	10,000
NRE-WB680M250V16x20F	68		0.15	1000	16x20	10,000
NRE-WB820M350V18x25F	82	350	0.20	1100	18x25	10,000
NRE-WB100M400V10x20F	10		0.24	300	10x20	10,000
NRE-WB330M400V16x20F	33		0.24	900	16x20	10,000
NRE-WB100M450V12.5x20F	10	450	0.24	350	12.5x20	10,000
NRE-WB220M450V16x20F	22		0.24	680	16x20	10,000
NRE-WB330M450V18x25F	33		0.24	850	18x25	10,000

RIPPLE CURRENT FREQUENCY CORRECTION FACTOR

Cap. Value	Frequency (Hz)				
	50	120	1K	10K	100K
<100 μ F	0.30	0.40	0.70	0.90	1.0
\geq 100 μ F	0.35	0.45	0.75	0.90	1.0

PRECAUTIONS

Please review the notes on correct use, safety and precautions found on pages T10 & T11 of NIC's Electrolytic Capacitor catalog.
Also found at www.niccomp.com/precautions
If in doubt or uncertainty, please review your specific application - process details with NIC's technical support personnel: tpmg@niccomp.com

