

HIGH TEMPERATURE, EXTENDED LOAD LIFE, RADIAL LEADS, POLARIZED FEATURES

- HIGH RIPPLE CURRENT
- LONG LIFE AT HIGH TEMPERATURE

RoHS

Compliant

includes all homogeneous materials

CHARACTERISTICS

*See Part Number System for Details



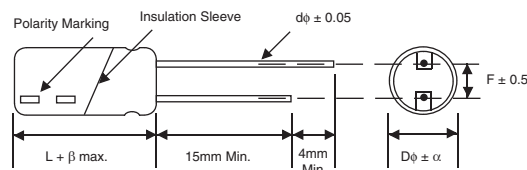
Rated Voltage Range		200 ~ 450VDC					
Capacitance Range		33 ~ 560μF					
Operating Temperature Range		-25°C ~ +105°C					
Capacitance Tolerance		±20% (M)					
Maximum Leakage Current @ +20°C		3 x $\sqrt{CV}$ after 5 minute at rated voltage					
Max. Tan δ at 120Hz/20°C	W.V. (Vdc)	200	220	250	400	420	450
	S.V. (Vdc)	250	270	300	450	470	500
	Tan δ	0.20	0.20	0.20	0.20	0.25	0.25
Low Temperature Stability Impedance Ratio @ 120Hz	Z-25°C/Z+20°C	3	3	3	8	8	8
Load Life at W.V. & 105°C All Sizes: 10,000 Hours	Δ Capacitance	Within ±20% of initial measured value					
	Δ Tan δ	Less than 200% of specified value					
	Δ LC	Less than specified value					

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

Cap. (μ F)	Code	Working Voltage (Vdc)					
		200	220	250	400	420	450
33	330	-	-	-	-	-	12.5x30
39	390	-	-	-	-	12.5x30	12.5x35
47	470	-	-	-	12.5x30	12.5x35	2.5x40 16x25
56	560	-	-	-	12.5x35	12.5x40 16x25	16x30
68	680	-	-	-	12.5x40 16x25	16x30	16x35 18x25
82	820	-	-	-	16x30 18x25	16x35 18x25	16x40 18x30
100	101	-	-	12.5x30	16x35 18x30	16x40 18x30	18x35
120	121	-	12.5x30	12.5x35 16x25	16x40 18x35	18x35	18x40
150	151	12.5x30	12.5x35 16x25	12.5x40 16x30	18x40	18x40	18x45
180	181	12.5x35 16x25	16x30	16x30 18x25	18x45	-	-
220	221	16x30 18x25	16x30 18x25	16x35 18x30	-	-	-
270	271	16x35 18x30	16x35 18x30	16x40 18x35	-	-	-
330	331	16x40 18x30	18x35	18x40	-	-	-
390	391	18x35	18x40	18x45	-	-	-
470	471	18x40	18x45	-	-	-	-
560	561	18x45	-	-	-	-	-

LEAD SPACING AND DIAMETER (mm)

Case Dia. (D ϕ)	12.5	16	18
Lead Dia. (D ϕ)	0.6	0.8	0.8
Lead Spacing (F)	5.0	7.5	7.5
Dim. α	0.5	0.5	0.5
Dim. β	2.5	2.5	2.5



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: tpmq@niccomp.com

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/100KHz	Load Life Hours @+105°C
NRB-XW151M200V12.5x30F	150	200	0.20	800	2.21	10,000
NRB-XW181M200V12.5x35F	180		0.20	920	1.84	10,000
NRB-XW181M200V16x25F			0.20	850		10,000
NRB-XW221M200V16x30F	220		0.20	1010	1.51	10,000
NRB-XW221M200V18x25F			0.20	1000		10,000
NRB-XW271M200V16x35F	270		0.20	1180	1.23	10,000
NRB-XW271M200V18x30F			0.20	1160		10,000
NRB-XW331M200V16x40F	330		0.20	1310	1.01	10,000
NRB-XW331M200V18x30F			0.20	1300		10,000
NRB-XW391M200V18x35F	390		0.20	1430	0.85	10,000
NRB-XW471M200V18x40F	470		0.20	1580	0.71	10,000
NRB-XW561M200V18x45F	560		0.20	1770	0.59	10,000
NRB-XW121M220V12.5x30F	120	220	0.20	740	2.76	10,000
NRB-XW151M220V12.5x35F	150		0.20	860	2.21	10,000
NRB-XW151M220V16x25F			0.20	800		10,000
NRB-XW181M220V16x30F	180		0.20	940	1.84	10,000
NRB-XW221M220V16x30F			0.20	1010		10,000
NRB-XW221M220V18x25F	220		0.20	940	1.51	10,000
NRB-XW271M220V16x35F			0.20	1190		10,000
NRB-XW271M220V18x30F	270		0.20	1130	1.23	10,000
NRB-XW331M220V18x35F			0.20	1300		1.01
NRB-XW391M220V18x40F	390		0.20	1490	0.85	10,000
NRB-XW471M220V18x45F	470		0.20	1690	0.71	10,000
NRB-XW101M250V12.5x30F	100		250	0.20	690	3.32
NRB-XW121M250V12.5x35F	120	0.20		790	2.76	10,000
NRB-XW121M250V16x25F		0.20		740		10,000
NRB-XW151M250V12.5x40F	150	0.20		920	2.21	10,000
NRB-XW151M250V16x30F		0.20		890		10,000
NRB-XW181M250V16x30F	180	0.20		950	1.84	10,000
NRB-XW181M250V18x25F		0.20		880		10,000
NRB-XW221M250V16x35F	220	0.20		1110	1.51	10,000
NRB-XW221M250V18x30F		0.20		1100		10,000
NRB-XW271M250V16x40F	270	0.20		1270	1.23	10,000
NRB-XW271M250V18x35F		0.20		1230		10,000
NRB-XW331M250V18x40F	330	0.20		1420	1.01	10,000
NRB-XW391M250V18x45F	390	0.20	1590	0.85	10,000	
NRB-XW470M400V12.5x30F	47	400	0.20	440	7.06	10,000
NRB-XW560M400V12.5x35F	56		0.20	500	5.92	10,000
NRB-XW680M400V12.5x40F	68		0.20	580	4.99	10,000
NRB-XW680M400V16x25F			0.20	510		10,000
NRB-XW820M400V16x30F	82		0.20	610	4.05	10,000
NRB-XW820M400V18x25F			0.20	610		10,000
NRB-XW101M400V16x35F	100		0.20	740	3.32	10,000
NRB-XW101M400V18x30F			0.20	740		10,000
NRB-XW121M400V16x40F	120		0.20	800	2.76	10,000
NRB-XW121M400V18x35F			0.20	790		10,000
NRB-XW151M400V18x40F	150		0.20	910	2.21	10,000
NRB-XW181M400V18x45F	180		0.20	1040	1.84	10,000
NRB-XW390M420V12.5x30F	39	420	0.25	390	10.63	10,000
NRB-XW470M420V12.5x35F	47		0.25	450	8.82	10,000
NRB-XW560M420V12.5x40F	56		0.25	520	7.40	10,000
NRB-XW560M420V16x25F			0.25	460		10,000
NRB-XW680M420V16x30F	68		0.25	550	6.10	10,000
NRB-XW820M420V16x35F			0.25	630		10,000
NRB-XW820M420V18x25F	82		0.25	560	5.06	10,000
NRB-XW101M420V16x40F			0.25	730		10,000
NRB-XW101M420V18x30F	100		0.25	670	4.15	10,000
NRB-XW121M420V18x35F			0.25	770		3.46
NRB-XW151M420V18x40F	150		0.25	900	2.76	10,000

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/100KHz	Load Life Hours @ +105°C
NRB-XW330M450V12.5x30F	33	450	0.25	370	12.57	10,000
NRB-XW390M450V12.5x35F	39		0.25	420	10.63	10,000
NRB-XW470M450V2.5x40F	47		0.25	480	8.82	10,000
NRB-XW470M450V16x25F			0.25	440		10,000
NRB-XW560M450V16x30F	56		0.25	510	7.40	10,000
NRB-XW680M450V16x35F	68		0.25	590	6.10	10,000
NRB-XW680M450V18x25F			0.25	570		10,000
NRB-XW820M450V16x40F	82		0.25	680	5.06	10,000
NRB-XW820M450V18x30F			0.25	650		10,000
NRB-XW101M450V18x35F	100		0.25	740	4.15	10,000
NRB-XW121M450V18x40F	120		0.25	830	3.46	10,000
NRB-XW151M450V18x45F	150		0.25	950	2.76	10,000

RIPPLE CURRENT FREQUENCY CORRECTION FACTOR

Voltage Rating	60 (50)Hz	120Hz	500Hz	1KHz	10KHz ~ up
200 ~ 250Vdc	0.8	1.0	1.20	1.30	1.40
400 ~ 450Vdc	0.8	1.0	1.25	1.40	1.50

PART NUMBER SYSTEM

