

## FEATURES

- Wide temperature (-40°C ~ +105°C).
- Long life (1000 hours @ 105°C).
- Solvent resistant.

## PART NUMBERING

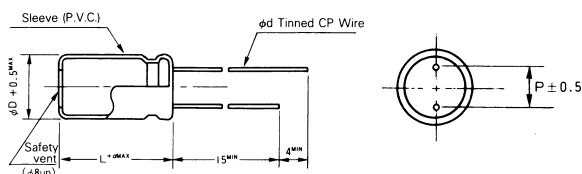
Part Number Example: RNBE-050/100M6X11F							
RNBE	-	050	/	100	M	6X11	F
Type		Rated DC Voltage		Capacitance Code (μF)*	Tolerance Code	Size	RoHs Compliant

\* Capacitance Code: First two digits represent significant figures, third digit represents multiplier (number of zeros).

## SPECIFICATIONS

Performance Characteristics									
Operating Temperature Range	-40°C ~ +105°C.								
Temperature Characteristics (120Hz)	Impedance Ratio								
	Rated Voltage (WVDC)	6.3	10	16	25	35	50	63	100
	Z (-25°C) / Z (+20°C)	4	3	2	2	2	2	2	2
	Z (-40°C) / Z (+20°C)	8	6	4	4	3	3	3	3
Voltage Range	6.3VDC ~ 100VDC.								
Capacitance Range	0.1μF ~ 1000μF.								
Capacitance Tolerance (20°C, 120Hz)	±20%.								
Maximum Dissipation Factor (20°C, 120Hz)	Rated Voltage (WVDC)	6.3	10	16	25	35	50	63	100
	DF %	24	20	16	16	14	12	10	9
	For capacitance of more than 1000μF add 0.02μF for every increase of 1000μF.								
Maximum Leakage Current (after 5 minutes)	0.01CV or 3μA, whichever is greater.								
Applicable Standards	Characteristics of JIS C-5141.								
Load Life Test (105°C)	After 1000 hours' application of rated voltage, reversing polarity at every 250 hours, capacitors meet the characteristics requirements mentioned below.								
	Capacitance Change	Within ±20% of initial value.							
	DF	200% or less of initial specified value.							
	Leakage Current	Initial specified value or less.							
Shelf Life (105°C)	After leaving capacitors under no load for 1000 hours and applying voltage according to JIS C-5102 4-3, they meet the specified value for load life characteristics listed above.								

## DIMENSIONS



## DIMENSIONS (UNIT: mm)

D	5	6.3	8	10	12.5	16
P	2.0	2.5	3.5	5.0	5.0	7.5
dØ	0.5		0.6		0.8	
α	1.0	1.0	1.0	1.5	1.5	1.5

**CASE SIZE OF STANDARD PRODUCTS (DØXL (mm))**

Cap. (µF)		WVDC							
		6.3	10	16	25	35	50	63	100
0.10	0R1						5 x 11		5 x 11
0.22	R22						5 x 11		5 x 11
0.33	R33						5 x 11		5 x 11
0.47	R47						5 x 11		5 x 11
1.0	010						5 x 11		5 x 11
2.2	2R2						5 x 11	5 x 11	6.3 x 11
3.3	3R3						5 x 11	6.3 x 11	8 x 11.5
4.7	4R7				5 x 11	5 x 11	6.3 x 11	6.3 x 11	8 x 11.5
10	100			5 x 11	5 x 11	6.3 x 11	8 x 11.5	8 x 11.5	10 x 13
22	220		5 x 11	6.3 x 11	6.3 x 11	8 x 11.5	10 x 13	10 x 16	10 x 20
33	330	5 x 11	6.3 x 11	6.3 x 11	8 x 11.5	10 x 13	10 x 16	10 x 20	13 x 20
47	470	6.3 x 11	6.3 x 11	8 x 11.5	10 x 13	10 x 13	10 x 20	10 x 20	13 x 25
100	101	8 x 11.5	10 x 13	10 x 13	10 x 16	10 x 20	13 x 25	13 x 25	16 x 25
220	221	10 x 13	10 x 16	10 x 20	13 x 25	13 x 25	16 x 25	16 x 31.5	
330	331	10 x 16	10 x 20	13 x 20	13 x 25	16 x 25	16 x 31.5		
470	471	10 x 20	13 x 20	13 x 25	16 x 25	16 x 25			
1000	102	13 x 25	16 x 25	16 x 25	16 x 31.5				

For -55°C ~ 105°C operation and for capacitance values or sizes not listed above, consult Factory or Area Representative.

**MAXIMUM RIPPLE ((mA) 105°C, 120Hz)**

Cap. (µF)		WVDC							
		6.3	10	16	25	35	50	63	100
0.10	0R1						1.0		2.0
0.22	R22						2.0		4.0
0.33	R33						3.0		7.0
0.47	R47						5.0		9.0
1.0	010						10		13
2.2	2R2						17	19	22
3.3	3R3						21	26	32
4.7	4R7				22	24	28	31	38
10	100			32	32	38	49	53	63
22	220		43	53	53	67	82	96	110
33	330	48	59	65	77	93	105	125	145
47	470	64	70	92	100	110	140	150	195
100	101	105	135	150	160	190	245	270	310
220	221	180	215	260	315	335	400	485	
330	331	240	285	350	385	450	540		
470	471	315	375	460	505	540			
1000	102	550	660	735	815				

For -55°C ~ 105°C operation and for capacitance values or sizes not listed above, consult Factory or Area Representative.