

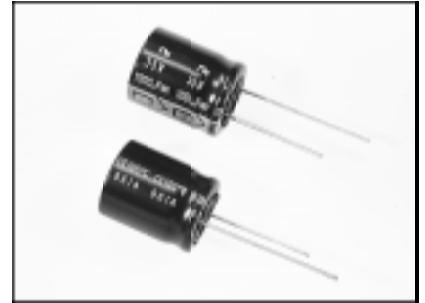
LOW PROFILE, WIDE TEMPERATURE, RADIAL LEAD, POLARIZED

### FEATURES

- LOW PROFILE APPLICATIONS
- WIDE TEMPERATURE 105°C
- HIGH STABILITY AND PERFORMANCE

### CHARACTERISTICS

Rated Voltage Range		10 ~ 100 VDC							
Capacitance Range		47 ~ 4,700µF							
Operating Temperature Range		-40 ~ +105°C							
Capacitance Tolerance		± 20% (M)							
Max. Leakage Current @ (20°C)	After 1 min.	0.03CV or 4µA , whichever is greater							
	After 2 min.	0.01CV or 3µA , whichever is greater							
Max. Tan δ @ 120Hz/20°C	W.V. (Vdc)	10	16	25	35	50	63	100	
	S.V. (Vdc)	13	20	32	44	63	79	125	
	C ≤ 1,000µF	0.20	0.16	0.14	0.12	0.10	0.09	0.08	
	C = 2,200µF	0.22	0.18	0.16					
	C = 3,300µF	0.24	0.20	0.18					
Low Temperature Stability Impedance Ratio @ 120Hz	Z-25°C/Z+20°C	3	3	2	2	2	2	2	
	Z-40°C/Z+20°C	8	6	4	3	3	3	3	
Load Life Test at Rated W.V. 105°C 1,000 Hours	Capacitance Change	Within ±20% of initial measured value							
	Tan δ	Less than 200% of specified maximum value							
	Leakage Current	Less than specified maximum value							

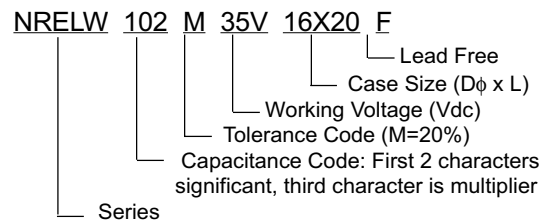


LEADED

### STANDARD PRODUCTS AND CASE SIZE D φ x L (mm)

Cap (µF)	Code	Working Voltage (Vdc)							
		10	16	25	35	50	63	100	
47	470								10 x 12.5
100	101								10 x 12.5 16 x 16
220	221					10 x 12.5	10 x 12.5	16 x 16	16 x 21
330	331			10 x 12.5	12.5 x 16	16 x 16	16 x 21		
470	471		10 x 12.5	12.5 x 16	16 x 16	16 x 21			
1,000	102	12.5 x 15	16 x 16	16 x 21	16 x 21				
2,200	222	16 x 16	16 x 21	16 x 21					
3,300	332	16 x 21							
4,700	472	18 x 21							

### PART NUMBERING SYSTEM

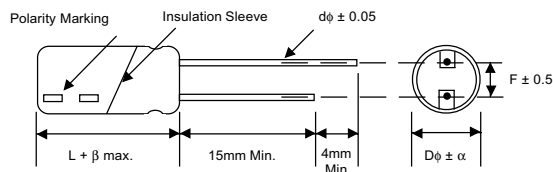


### MAXIMUM PERMISSIBLE RIPPLE CURRENT (mA rms) AT 120Hz AND 105°C

Cap (µF)	Working Voltage							
	10	16	25	35	50	63	100	
47							240	
100						210	275	
220				270	310	380	490	
330			310	350	440	525		
470		340	390	490	570			
1000	470	630	720	840				
2200	780	940	1080					
3300	1000							
4700	1200							

### LEAD SPACING AND DIAMETER

Case Dia. (Dφ)	5	6.3	8	10	12.5	16	18	22
Leads Dia. (dφ)	0.5	0.5	0.6	0.6	0.6	0.8	0.8	0.8
Lead Spacing (F)	2.0	2.5	3.5	5.0	5.0	7.5	7.5	10
Dim. α	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0



### RIPPLE CURRENT CORRECTION FACTORS

#### Frequency Factor

W.V. (Vdc)	C(µF)	Frequency (Hz)			
		50	120	1K	10K
6.3-16	ALL	0.8	1.0	1.1	1.2
25-35	≤1000	0.8	1.0	1.5	1.7
	1000<	0.8	1.0	1.2	1.3
50-100	≤1000	0.8	1.0	1.6	1.9
	1000<	0.8	1.0	1.2	1.3

#### Temperature Factor

Temp. (°C)	≤+70	+85	+105
Factor	1.6	1.4	1.0

