

Non-Polarized Radical Capacitors



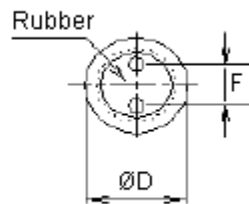
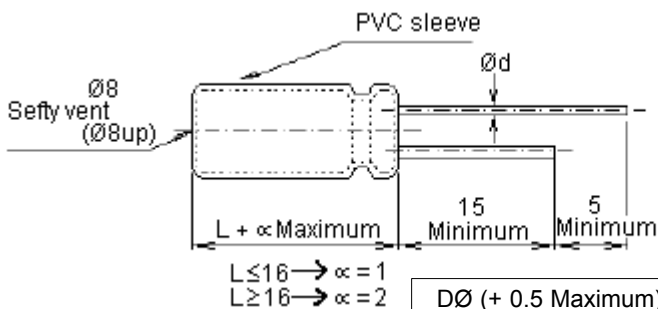
Features:

- NP series capacitors are suitable for crossover network for HI-FI equipments and speakers, etc
- Have excellent frequency characteristic and small deviation of capacitance

Specifications Table

Item	Performance	
Operating Temperature Range	-40 to +85°C	
Rated Working Voltage Range	10 - 250 V dc	
Nominal Capacitance Range	0.47 – 2,200 μ F	
Capacitance Tolerance	\pm 20% (at+20°C ,120 Hz)	
Leakage Current	\leq 0.03CV or 3(μ A) after five minutes	
Dissipation Factor (tan δ) (120Hz \ +20°C)	Working voltage (V) 16 35 63 100	
	tan δ maximum 0.2 0.15 0.1 0.12	
(at 120 Hz) Characteristics at low temperature (stability at 120 Hz)	Working voltage (V) 16 35 63 100	
	-25°C / +20°C 2 2 2 2	
	-40°C / +20°C 4 3 3 3	
High Temperature Loading	After 2000hrs. application of DC rated working voltage at +85°C, The capacitor shall meet the following limits: Post test requirements at +20°C.	
	Leakage current	\leq the Initial specified value
	Capacitance change	$\leq \pm$ 20% of initial measured value
	Dissipation Factor (tan δ)	\leq 150% of initial specified value
Shelf Life	After storage for 500hrs. at +105°C with no voltage applied. Post test requirements at +20°C Same limits as high temperature loading.	

Diagram of Dimensions



DØ (+ 0.5 Maximum)	5	6.3	8	10	13	16
F (± 0.5)	2	2.5	3.5	5	5	7.5
dØ (± 0.02)	0.5	0.5	0.6	0.6	0.6	0.8

Dimensions : Millimetres

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Case Size Table

Ø D × L (mm)

W.V. (SV) µF	16 (20)	35 (44)	63 (79)	100 (125)	
0.47	5 × 11	5 × 11	5 × 11	5 × 11	
1					
2.2				6.3 × 11	
3.3					
4.7			8 × 11.5		
10					
22			6.3 × 11	8 × 11.5	10 × 16
33			8 × 11.5	10 × 12.5	13 × 21
47	10 × 16				
100	8 × 11.5	10 × 16	13 × 21	16 × 26	
220	10 × 12.5	13 × 21	16 × 26	-	
330	10 × 16		-	-	
470	10 × 20	13 × 26	-	-	
1,000	13 × 26	-	-	-	
2,200	-	-	-	-	

Permissible Ripple Current

Maximum ripple current: mA (rms) (at 85°C 120 Hz)

WW (SV) µF	16 (20)	35 (44)	63 (79)	100 (125)
0.47	10	10	13	15
1	15	15	19	19
2.2	20	20	25	25
3.3	30	30	30	35
4.7			35	40
10	40	40	55	70
22	55	70	90	135
33	70	100	135	220
47	95	120	180	240
100	160	230	320	425
220	275	410	575	-
330	375	505	-	-
470	485	655	-	-
1,000	855	-	-	-
2,200	-	-	-	-

Non-Polarized Radical Capacitors



Part Number Table

Description	Part Number
Capacitor, N / P, 1 UF, 16 V	NP16V105M5X11
Capacitor, N / P, 4.7 UF, 16 V	NP16V475M5X11
Capacitor, N / P, 10 UF, 16 V	NP16V106M5X11
Capacitor, N / P, 22 UF, 16 V	NP16V226M5X11
Capacitor, N / P, 47 UF, 16 V	NP16V476M6.3X11
Capacitor, N / P, 100 UF, 16 V	NP16V107M8X11.5
Capacitor, N / P, 220 UF, 16 V	NP16V227M10X12.5
Capacitor, N / P, 470 UF, 16 V	NP16V477M10X20
Capacitor, N / P, 1000 UF, 16 V	NP16V108M13X25
Capacitor, N / P, 1 UF, 35 V	NP35V105M5X11
Capacitor, N / P, 2.2 UF, 35 V	NP35V225M5X11
Capacitor, N / P, 4.7 UF, 35 V	NP35V475M5X11
Capacitor, N / P, 10 UF, 35 V	NP35V106M5X11
Capacitor, N / P, 22 UF, 35 V	NP35V226M6.3X11
Capacitor, N / P, 47 UF, 35 V	NP35V476M8X11.5
Capacitor, N / P, 100 UF, 35 V	NP35V107M10X16
Capacitor, N / P, 220 UF, 35 V	NP35V227M13X20
Capacitor, N / P, 470 UF, 35 V	NP35V477M13X25
Capacitor, N / P, 0.47 UF, 63 V	NP63V474M5X11
Capacitor, N / P, 1 UF, 63 V	NP63V105M5X11
Capacitor, N / P, 2.2 UF, 63 V	NP63V225M5X11
Capacitor, N / P, 4.7 UF, 63 V	NP63V475M6.3X11
Capacitor, N / P, 10 UF, 63 V	NP63V106M6.3X11
Capacitor, N / P, 22 UF, 63 V	NP63V226M8X11.5
Capacitor, N / P, 47 UF, 63 V	NP63V476M10X16
Capacitor, N / P, 100 UF, 63 V	NP63V107M13X20
Capacitor, N / P, 220 UF, 63 V	NP63V227M16X25
Capacitor, N / P, 1 UF, 100 V	NP100V105M5X11
Capacitor, N / P, 2.2 UF, 100 V	NP100V225M6.3X11
Capacitor, N / P, 3.3 UF, 100 V	NP100V335M6.3X11
Capacitor, N / P, 4.7 UF, 100 V	NP100V475M6.3X11
Capacitor, N / P, 33 UF, 100 V	NP100V336M13X20
Capacitor, N / P, 47 UF, 100 V	NP100V476M13X20
Capacitor, N / P, 100 UF, 100 V	NP100V107M16X25

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