

NP Series

+105°C, Non-Polar(无极性)

◆ FEATURES

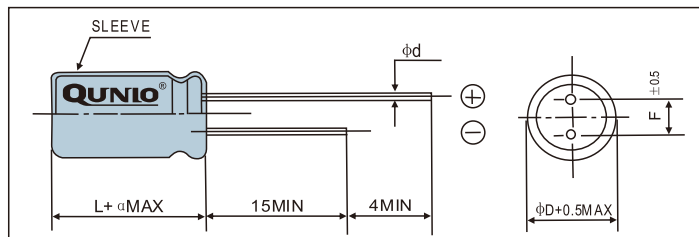
- Standard non-polarized series for entertainment electronics.
- Suit for use in Polarity and change circuits.



◆ SPECIFICATIONS

Items	Characteristics	
Category Temperature Range	-40~+105°C (6.3~100V)	-40~+105°C (160~250V)
Rated Voltage Range	6.3~250V.DC	
Nominal Capacitance Range	1~6800 μ F	
Capacitance Tolerance	±20%(120Hz,+20°C)	
Leakage Current(MAX,+20°C)	I=0.03CV or 3(μA) after 2 minutes with rated working voltage	I=0.03CV+40(μA) after 2 minutes with rated working voltage
Dissipation Factor(MAX) Tan δ (+20°C,120Hz)	Rated Voltage(V)	6.3 10 16 25 35 50 63 100 160~250
	Tan δ	0.26 0.24 0.22 0.20 0.16 0.14 0.12 0.10 0.20
When nominal capacitance is over 1000 μ F,tan δ shall be added 0.02 to the listed value with Increase of every 1000 μ F		
Load Life	After applying rated voltage with max ripple current to each polarity every 250hrs for 1000 hrs at 105 °C,the capacitors shall meet the following requirements	
	Capacitance Change	Within ±20% of the initial value
	Dissipation Factor	Not more than 200% of the specified value
Shelf Life	Afer Leaving capacitors under no load at105°C for 1000hrs,they meet the characteristic requirements listed at right	
	Capacitance Change	Within ±20% of the initial value
	Leakage Current	≤ 200% of initial specified value
Low Temperature Stability Impedance Rate(MAX)	Rated Voltage(V)	6.3 10 16 25 35 50 63 100 160~250
	Z-25°C/Z+20°C	4 3 2 2 2 2 2 2 3
	Z-40°C/Z+20°C	8 6 4 4 3 3 3 3 6
Others	JISC-5141 EIAJ RC-2372	

◆ CASE SIZE TABLE



φ D	5	6.3	8	10	13	16	18
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5
φ d	0.5			0.6		0.8	
α	L ≤ 16: α =1.5				L ≥ 20: α =2.0		

◆ RIPPLE CURRENT MULTIPLIER

Cap(μ F)	Frequency(Hz)				
	50	120	300	1K	10K~
≤47	0.75	1.00	1.35	1.57	2.00
56~470	0.80	1.00	1.23	1.34	1.50
≥560	0.85	1.00	1.10	1.13	1.15

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◆ STANDARD RATINGS

size: $\Phi D \times L$ (mm)

Voltage		6.3V		10V		16V		25V		35V		50V	
Cap(μ F)	Code	0J		1A		1C		1E		1V		1H	
1	010											5×11	13
2.2	2R2											5×11	25
3.3	3R3											5×11	27
4.7	4R7							5×11	26	5×11	34	5×11	34
10	100					5×11	42	5×11	42	5×11	43	5×11	48
22	220			5×11	57	5×11	57	5×11	57	6.3×11	73	8×12	89
33	330	5×11	64	5×11	64	5×11	70	6.3×11	80	8×12	100	8×12	105
47	470	5×11	76	5×11	76	6.3×11	95	6.3×11	95	8×12	120	8×12	130
												10×13	150
100	101	6.3×11	125	6.3×11	125	8×12	160	8×12	160	10×13	187	10×16	250
220	221	8×12	215	8×12	215	10×13	275	10×16	305	10×20	375	13×21	455
330	331	8×12	265	10×13	320	10×16	375	10×20	395	13×21	505	13×25	610
470	471	10×13	370	10×16	410	10×20	485	13×21	540	13×25	655	16×30	835
680	681	10×16	510	10×20	580	13×21	760	13×21	820	16×25	990		
1000	102	10×20	650	10×20	620	13×21	820	16×25	950	16×30	1140		
				13×21	720								
2200	222	13×21	1040	13×25	1160	16×30	1510	18×35	1620				
3300	332	13×25	1320	16×30	1690	18×35	1980						
4700	472	16×30	2020	18×30	2100								
6800	682	18×30	2450										

Maximum Allowable Ripple Current(mA rms) at 105°C 120Hz

◆ STANDARD RATINGS

Voltage		63V		100V		160V		200V		250V	
Cap(μ F)	Code	1J		2A		2C		2D		2E	
1	010	5×11	18	5×11	21	6.3×11	18	8×12	21	8×12	25
2.2	2R2	5×11	25	6.3×11	34	8×12	28	8×12	32	10×13	39
3.3	3R3	5×11	28	6.3×11	39	8×12	37	10×13	40	10×13	43
4.7	4R7	5×11	34	6.3×11	47	10×13	45	10×16	52	10×16	65
6.8	6R8	6.3×11	45	8×12	58	10×13	65	10×16	75	10×20	88
10	100	6.3×11	57	8×12	71	10×16	79	10×20	86	10×20	109
22	220	8×12	95	10×16	135	13×21	140	13×21	160	13×25	189
33	330	8×12	120	10×20	175	13×21	200	13×25	213	16×25	250
47	470	10×13	170	10×20	195	13×25	215				
68	680	10×16	205	13×21	310						
100	101	10×20	275	16×25	365						
220	221	13×21	510	18×30	690						
330	331	13×25	630								
470	471	16×30	890								

Maximum Allowable Ripple Current(mA rms) at 105°C 120Hz

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