NP series

+105℃, 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 Rance	-40~+105℃(6.3~100V)	-40~+105℃(160~250V)
Rated Voltage Range	6.3~250V.DC	
Nominal Capacitance Rance	1~6800μ F	
Capacitance Tolerance	±20%(120Hz,+20℃)	
Leakage Current(MAX, 20℃)	I=0.03CV or 3(uA) after 2 minutes with rated working voltage	I=0.03CV+40(uA) after 2 minutes with rated working voltage

Dissipation Factor(MAX) Tanδ (20℃,120Hz)

Rated Voltage(V)	6.3	10	16	25	35	50	63	100	160~250
Tanδ	0.26	0.24	0.22	0.20	0.16	0.14	0.12	0.10	0.20

When nominal capacitance is over 1000μ F,tanδ shall be added 0.02 to the listed value with Increase of every 1000μ F

Load Life

After applying rated voltage with max ripple current to each polarity every 250hrs for 1000 hrs at 105℃,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
Leakage Current	Not more than the specified value

Shelf Life

After Leaving capacitors under no load at 105℃ for 1000hrs,they meet the characteristic requirements listed at right

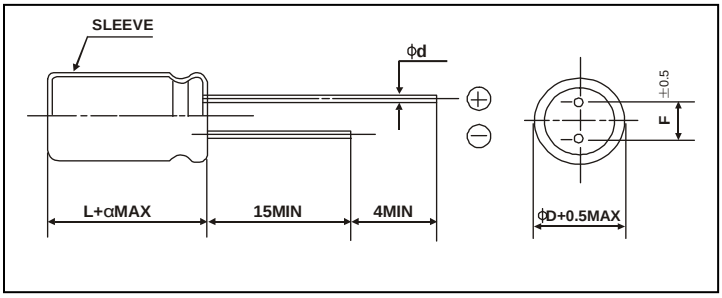
Capacitance change	Within ±20% of the initial value
Tanδ	≤200% of initial specified value
Leakage current	≤200% of initial specified value

Low Temperature Stability Impedance Rate(MAX)

Rated Voltage(V)	6.3	10	16	25	35	50	63	100	160~250
Z-25℃/Z+20℃	4	3	2	2	2	2	2	2	3
Z-40℃/Z+20℃	8	6	4	4	3	3	3	3	6

Other	JISC-5141 EIAJ RC-2372

◆ CASE SIZE TABLE



ΦD	5	6.3	8	10	13	16	18
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5
Φd	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

◆ STANDARD RATINGS

size:ΦD×L(mm)

Cap(μF) \ Voltage / Code		6.3V		10V		16V		25V		35V		50V	
		OJ		1A		1C		1E		1V		1H	
1	105											5×11	13
2.2	225											5×11	25
3.3	335											5×11	27
4.7	475							5×11	26	5×11	34	5×11	34
10	106					5×11	42	5×11	42	5×11	43	5×11	48
22	226			5×11	57	5×11	57	5×11	57	6.3×11	73	8×12	89
33	336	5×11	64	5×11	64	5×11	70	6.3×11	80	8×12	100	8×12	105
47	476	5×11	76	5×11	76	6.3×11	95	6.3×11	95	8×12	120	8×12 10×13	130 150
100	107	6.3×11	125	6.3×11	125	8×12	160	8×12	160	10×13	187	10×16	250
220	227	8×12	215	8×12	215	10×13	275	10×16	305	10×20	375	13×21	455
330	337	8×12	265	10×13	320	10×16	375	10×20	395	13×21	505	13×25	610
470	477	10×13	370	10×16	410	10×20	485	13×21	540	13×25	655	16×30	835
680	687	10×16	510	10×20	580	13×21	760	13×21	820	16×25	990		
1000	108	10×20	650	10×20 13×21	620 720	13×21	820	16×25	950	16×30	1140		
2200	228	13×21	1040	13×25	1160	16×30	1510	18×35	1620				
3300	338	13×25	1320	16×30	1690	18×35	1980						
4700	478	16×30	2020	18×30	2100								
6800	688	18×30	2450										

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

◆ STANDARD RATINGS

Cap(μF) \ Voltage / Code		63V		100V		160V		200V		250V	
		1J		2A		2C		2D		2E	
1	105	5×11	18	5×11	21	6.3×11	18	8×12	21	8×12	25
2.2	225	5×11	25	6.3×11	34	8×12	28	8×12	32	10×13	39
3.3	335	5×11	28	6.3×11	39	8×12	37	10×13	40	10×13	43
4.7	475	5×11	34	6.3×11	47	10×13	45	10×16	52	10×16	65
6.8	685	6.3×11	45	8×12	58	10×13	65	10×16	75	10×20	88
10	106	6.3×11	57	8×12	71	10×16	79	10×20	86	10×20	109
22	226	8×12	95	10×16	135	13×21	140	13×21	160	13×25	189
33	336	8×12	120	10×20	175	13×21	200	13×25	213	16×25	250
47	476	10×13	170	10×20	195	13×25	215				
68	686	10×16	205	13×21	310						
100	107	10×20	275	16×25	365						
220	227	13×21	510	18×30	690						
330	337	13×25	630								
470	477	16×30	890								

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