

CDNP series

Features

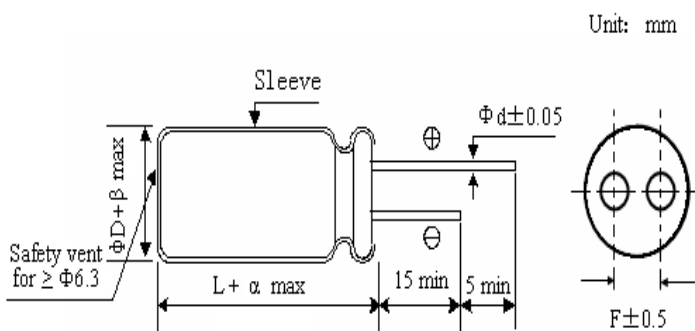
- ◆ For audio equipment Used in stereo, 2000 hours at 105°C.
- ◆ Standard Nonpolar, series for using in polarity reversal circuits.
- ◆ RoHS Compliant .



Specifications

Item	Performance Characteristics																											
Temperature Range	-40~+105°C																											
Rated Voltage Range	6.3~100Vdc																											
Capacitance Range	0.47~1000μF																											
Capacitance Tolerance	±20% (120Hz, +20°C)																											
Leakage Current (+20°C,max.)	I≤0.03CV 或 3 (μA) After 2 minutes, whichever is greater measured with rated working voltage applied																											
Dissipation Factor (tgδ) 120Hz, +20°C	<table border="1"> <tr> <td>Working Voltage(Vdc)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <tr> <td>D.F.(%)max.</td> <td>24</td> <td>20</td> <td>16</td> <td>16</td> <td>14</td> <td>12</td> <td>10</td> <td>10</td> </tr> </table>	Working Voltage(Vdc)	6.3	10	16	25	35	50	63	100	D.F.(%)max.	24	20	16	16	14	12	10	10									
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D.F.(%)max.	24	20	16	16	14	12	10	10																				
Test conditions : C<10μF,20°C,1K Hz; C≥10μF,20°C,120 Hz																												
Low Temperature Characteristics(120Hz)	Impedance ratio max.																											
	<table border="1"> <tr> <td>Working Voltage(Vdc)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <tr> <td>Z-25°C / Z+20°C</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z-40°C / Z+20°C</td> <td>8</td> <td>6</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> </table>	Working Voltage(Vdc)	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	3	3	3	3	3
	Working Voltage(Vdc)	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	3	3	3	3	3																				
The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 2000 hours at 105°C(The polarity shall be reversed every 250 hours).																												
Endurance	Capacitance Change	≤±20% of the initial value																										
	D.F.(tgδ)	≤200% of the initial specified value																										
	Leakage Current	≤The initial specified value																										
Shelf Life	After storing the capacitors under no load at 105°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the specified values for the load life characteristics listed above.																											
Others	JISC-5101(IEC 60384)																											

Diagram of Dimensions



Frequency Multipliers

μF \ Hz	Hz					
	60	120	400	1K	10K	100K
< 10	0.80	1.00	1.30	1.45	1.65	1.70
10~100	0.80	1.00	1.23	1.36	1.48	1.53
220~1000	0.80	1.00	1.16	1.25	1.35	1.38

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	0.5	0.5	0.6	0.6	0.8	0.8
α	(L< 20) + 1.5			(L≥20) + 2.0			
β	(D< 20) + 0.5			(D≥20) + 1.0			

CDNP series**Standard Ratings**

Voltage	6.3V		10V		16V		25V	
Cap(μ F)	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
4.7							5×11	26
10					5×11	43	5×11	44
22			5×11	60	6.3×11	71	6.3×11	71
33	5×11	62	6.3×11	70	6.3×11	90	8×12	110
47	6.3×11	76	6.3×11	95	8×12	122	10×12	150
100	8×12	154	10×12	188	10×12	208	10×17	250
220	10×12	245	10×17	294	10×20	360	13×25	478
330	10×17	330	10×20	360	13×20	480	13×25	615
470	10×20	360	13×20	538	13×25	638	16×25	720
1000	13×25	910	16×25	940	16×31	1090		

Voltage	35V		50V		63V		100V	
Cap(μ F)	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
0.47			5×11	12	6.3×11	14	6.3×11	17
1			5×11	18	6.3×11	22	6.3×11	25
2.2	5×11	18	5×11	27	6.3×11	33	6.3×11	39
3.3	5×11	27	5×11	29	8×12	36	8×12	49
4.7	5×11	34	6.3×11	42	8×12	44	10×12	60
6.8	6.3×11	42	6.3×11	48	8×12	65	10×12	72
10	6.3×11	48	8×12	65	8×12	73	10×17	98
22	8×12	96	10×12	118	10×12	125	10×20	165
33	10×12	135	10×17	155	10×17	170	13×20	275
47	10×12	154	10×20	200	10×20	215	16×30	277
100	10×20	275	13×25	370	13×25	384	18×45	431
220	13×25	560	16×25	645				
330	16×25	670	16×30	760				

Max Allowable Ripple Current (mA,rms) at 105°C 120Hz,Case Size Φ D×L(mm).

Above size is the standard size for our product. If you need special size please contact our sales offices.