

FEATURESS

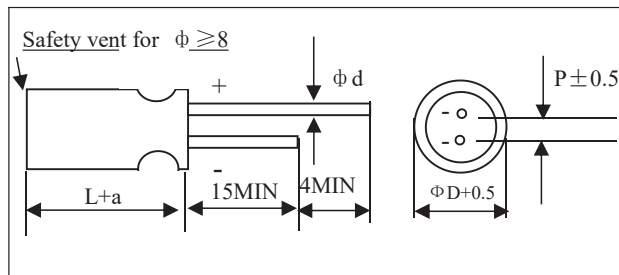
- 1、NP Series for crossover net works for high-pitched, mean and low-pitched sounds in high-fidelity sound systems, have excellent frequency characteristics and small deviation of capacitance

SPECIFICATIONS

Item	Performance Characteristics																																																		
Operating Temperature Range	-40 to +85℃																																																		
Rated Working voltage Range	6.3 to 100V																																																		
Nominal Capacitance Range	0.47to 6800(uF)																																																		
Capacitance Tolerance	±20%（120Hz, +20℃）																																																		
Leakage Current	I≤0.03CV or 3(uA) after 5 minutes application of rated working voltage at +20℃																																																		
Dissipation Factor tan δ (120Hz+20℃)	<table><tr><td>Working voltage(V)</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>tan δ (max.)</td><td>0.26</td><td>0.24</td><td>0.22</td><td>0.20</td><td>0.16</td><td>0.14</td><td>0.12</td><td>0.10</td></tr></table> For capacitance value >1000uF,add 0.02 per another 1000uF									Working voltage(V)	6.3	10	16	25	35	50	63	100	tan δ (max.)	0.26	0.24	0.22	0.20	0.16	0.14	0.12	0.10																								
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Low Temperature Characteristics	Impedance ratio max. at 120Hz <table><tr><td>Working voltage(V)</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℃/Z+20℃</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℃/Z+20℃</td><td>10</td><td>8</td><td>6</td><td>5</td><td>4</td><td>4</td><td>3</td><td>3</td></tr></table>									Working voltage(V)	6.3	10	16	25	35	50	63	100	Z-25℃/Z+20℃	4	3	2	2	2	2	2	2	Z-40℃/Z+20℃	10	8	6	5	4	4	3	3															
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Multiplier for Ripple Current vs. Frequency	<table><tr><td colspan="2">CAP(uF)\Hz</td><td>60(50)</td><td>120</td><td>400</td><td>1K</td><td>10K</td><td colspan="2">50K-100K</td></tr><tr><td rowspan="4">Multiplier</td><td>CAP≤10</td><td>0.8</td><td>1</td><td>1.30</td><td>1.45</td><td>1.65</td><td colspan="2">1.70</td></tr><tr><td>10<CAP≤100</td><td>0.8</td><td>1</td><td>1.23</td><td>1.36</td><td>1.48</td><td colspan="2">1.53</td></tr><tr><td>100<CAP≤1000</td><td>0.8</td><td>1</td><td>1.16</td><td>1.25</td><td>1.35</td><td colspan="2">1.38</td></tr><tr><td>1000<CAP</td><td>0.8</td><td>1</td><td>1.11</td><td>1.17</td><td>1.25</td><td colspan="2">1.28</td></tr></table>									CAP(uF)\Hz		60(50)	120	400	1K	10K	50K-100K		Multiplier	CAP≤10	0.8	1	1.30	1.45	1.65	1.70		10<CAP≤100	0.8	1	1.23	1.36	1.48	1.53		100<CAP≤1000	0.8	1	1.16	1.25	1.35	1.38		1000<CAP	0.8	1	1.11	1.17	1.25	1.28	
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Multiplier for Ripple Current vs. Temperature	<table><tr><td>Temperature℃</td><td>45</td><td>60</td><td>70</td><td>85</td></tr><tr><td>Multiplier</td><td>1.80</td><td>1.50</td><td>1.30</td><td>1.0</td></tr></table>									Temperature℃	45	60	70	85	Multiplier	1.80	1.50	1.30	1.0																																
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High temperature Loading	Test conditions Duration :2000 hours Ambient temperature :+85℃ Applied voltage : Rated DC working voltage to each polarity every 250 hours. Post test requirements at +20℃ Leakage current : ≤ Initial specified value Capacitance change : ≤ ±20% of initial measured value tan δ : ≤200% of initial specified value																																																		
Shelf life	Test conditions Duration :1000 hours Ambient temperature :+85℃ Applied voltage : (None) Post test requirements at +20℃ Same limits for high temperature loading																																																		
Others	JIS C-5141 JIS C-5102																																																		

CASE SIZE TABLE

Unit:mm



D Φ	5	6.3	8	10	13	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
d Φ (± 0.05)	0.5			0.6		0.8	

aMAX	(L<20)1.5 (L $\geq$ 20)2.0
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DIMENSIONS

 $\Phi D \times L(\text{mm})$

WV(SV)		6.3V(8)		10V(13)		16V(20)		25V(32)	
Cap.(uF)	Code	0J		1A		1C		1E	
10	106					5×11	42	5×11	42
22	226			5×11	57	5×11	57	6.3×11	65
33	336	5×11	64	5×11	64	5×11	70	6.3×11	80
47	476	5×11	76	5×11	76	6.3×11	95	6.3×11	95
100	107	6.3×11	125	6.3×11	125	8×12	160	8×12	160
220	227	8×12	215	8×12	215	10×12.5	275	10×15	305
330	337	8×12	265	10×15	345	10×15	375	13×21	450
470	477	10×12.5	370	10×17	410	13×21	485	13×21	540
1000	108	10×20	650	13×21	720	16×26	855	16×26	950
2200	228	13×25	1160	16×26	1280	16×30	1510	18×36	1620
3300	338	16×26	1570	18×30	1690	18×36	1980		
4700	478	16×30	2020	18×36	2160				
6800	688	18×30	2600					Case Size	Allowable ripple

Allowable Ripple (mA rms)at 85℃120Hz

 $\Phi D \times L(\text{mm})$

WV(SV)		35V(44)		50V(63)		63V(79)		100V(125)	
Cap.(uF)	Code	1V		1H		1J		2A	
0.47	474			5×11	11			5×11	14
1	105			5×11	17			5×11	21
2.2	225			5×11	25			6.3×11	34
3.3	335			5×11	27	5×11	28	6.3×11	39
4.7	475	5×11	34	5×11	34	6.3×11	34	6.3×11	47
10	106	5×11	43	6.3×11	52	6.3×11	57	8×12	71
22	226	6.3×11	73	8×12	89	8×12	95	10×15	135
33	336	8×12	100	8×12	105	10×12.5	135	13×21	220
47	476	8×12	120	10×12.5	150	10×17	180	13×21	240
100	107	10×15	230	10×20	265	13×21	320	16×26	425
220	227	13×21	410	13×25	480	16×26	575	18×36	720
330	337	13×21	505	16×26	650	16×30	655		
470	477	13×25	655	16×30	835	18×36	965		
1000	108	16×26	1140						
2200	228	16×30	1220					Case Size	Allowable ripple

Allowable Ripple (mA rms)at 85℃120Hz