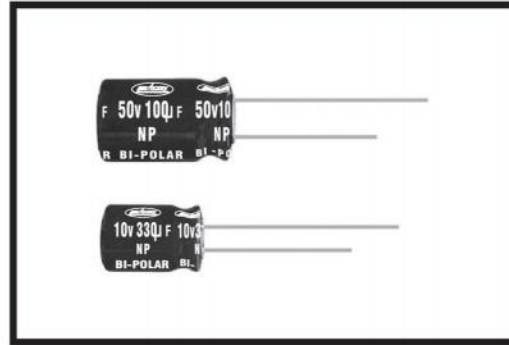


NP SERIES

85°C Bi-polar Miniaturized



◆ SPECIFICATIONS

Items	Characteristics																											
Category Temperature Range	-40~+85°C																											
Rated Voltage Range	6.3~100V.DC																											
Capacitance Tolerance	±20%(20°C,120Hz)																											
Leakage Current(MAX)	I=0.03CV or 3µA whichever is greater. (After 5 minutes application of rated voltage) I=Leakage Current(µA) C=Rated Capacitance(µF) V=Rated Voltage(V)																											
Dissipation Factor(MAX)	<table border="1"> <thead> <tr> <th>Rated Voltage (V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>tanδ</td> <td>0.25</td> <td>0.25</td> <td>0.20</td> <td>0.20</td> <td>0.15</td> <td>0.15</td> <td>0.15</td> <td>0.15</td> </tr> </tbody> </table> (20°C,120Hz)	Rated Voltage (V)	6.3	10	16	25	35	50	63	100	tanδ	0.25	0.25	0.20	0.20	0.15	0.15	0.15	0.15									
Rated Voltage (V)	6.3	10	16	25	35	50	63	100																				
tanδ	0.25	0.25	0.20	0.20	0.15	0.15	0.15	0.15																				
Endurance	After applying rated voltage with rated ripple current for 2000hrs at 85°C, (The polarity shall be reversed every 250hrs.), the capacitors shall meet the following requirements. <table border="1"> <tbody> <tr> <td>Capacitance Change</td> <td>Within ±25% of the initial value.</td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 200% of the specified value.</td> </tr> <tr> <td>Leakage Current</td> <td>Not more than the specified value.</td> </tr> </tbody> </table>	Capacitance Change	Within ±25% of the initial value.	Dissipation Factor	Not more than 200% of the specified value.	Leakage Current	Not more than the specified value.																					
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Low Temperature Stability Impedance Ratio(MAX)	<table border="1"> <thead> <tr> <th>Rated Voltage (V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>6</td> <td>4</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>12</td> <td>10</td> <td>8</td> <td>6</td> <td>4</td> <td>4</td> <td>4</td> <td>3</td> </tr> </tbody> </table> (120Hz)	Rated Voltage (V)	6.3	10	16	25	35	50	63	100	Z(-25°C)/Z(20°C)	6	4	4	3	2	2	2	2	Z(-40°C)/Z(20°C)	12	10	8	6	4	4	4	3
Rated Voltage (V)	6.3	10	16	25	35	50	63	100																				
Z(-25°C)/Z(20°C)	6	4	4	3	2	2	2	2																				
Z(-40°C)/Z(20°C)	12	10	8	6	4	4	4	3																				

◆ MULTIPLIER FOR RIPPLE CURRENT

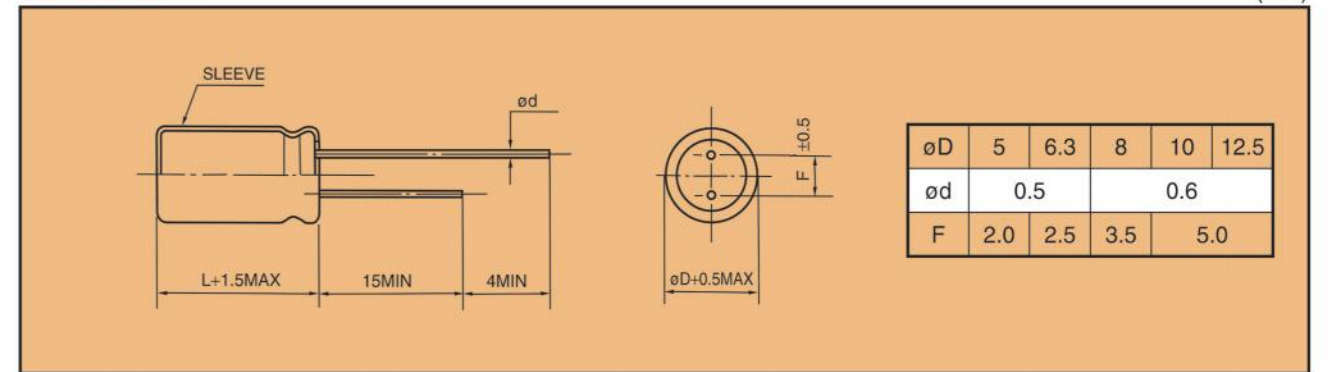
Frequency coefficient

Frequency (Hz)	60(50)	120	500	1k	10k≤
0.47~1µF	0.50	1.00	1.20	1.30	1.50
2.2~4.7µF	0.65	1.00	1.20	1.30	1.50
10~47µF	0.80	1.00	1.20	1.30	1.50
100~1000µF	0.80	1.00	1.10	1.15	1.20

◆ PART NUMBER

□□□ NP □□□□□ □ □□□ □□ DxL
 Rated Voltage Series Rated Capacitance Capacitance Tolerance Option Lead Forming Case Size

◆ DIMENSIONS



◆ STANDARD SIZE, RATED RIPPLE CURRENT

Size øD×L(mm), Ripple Current (mA r.m.s./85°C, 120Hz)

WV(V.DC) Cap(µF)	6.3 (0J)		10 (1A)		16 (1C)		25 (1E)	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
33							5×11	77
47					5×11	80	6.3×11	100
100	5×11	100	6.3×11	115	6.3×11	130	8×11.5	175
220	6.3×11	160	8×11.5	205	8×11.5	220	10×12.5	295
330	8×11.5	225	8×11.5	240	10×12.5	325	10×16	380
470	8×11.5	250	10×12.5	345	10×16	415	10×20	510
1000	10×16	425	10×20	550	12.5×20	695		

WV(V.DC) Cap(µF)	35 (1V)		50 (1H)		63 (1J)		100 (2A)	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
0.47			5×11	8			5×11	10
1			5×11	12			5×11	15
2.2			5×11	19			5×11	20
3.3			5×11	25			5×11	27
4.7			5×11	35	5×11	35	6.3×11	37
10			5×11	40	6.3×11	45	8×11.5	65
22	5×11	65	6.3×11	72	8×11.5	82	10×12.5	96
33	6.3×11	90	6.3×11	95	8×11.5	100	10×16	125
47	6.3×11	110	8×11.5	130	10×12.5	140	10×20	165
100	10×12.5	220	10×16	235	10×20	250	12.5×25	285
220	10×20	390	12.5×20	460	12.5×25	490		
330	12.5×20	540	12.5×25	590				
470	12.5×25	640						