

# Aluminum Electrolytic Capacitors

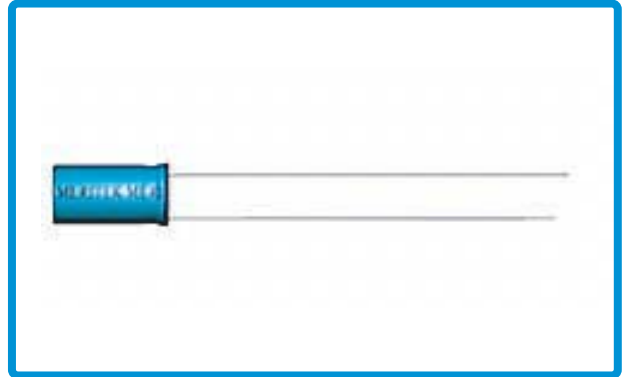


**NP Series**  
(Non-Polar)

**MERITEK**

## FEATURES

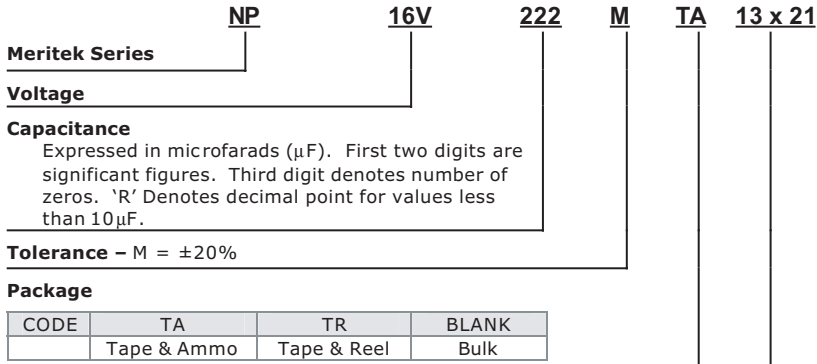
- For crossover networks
- Low dissipation factor



## SPECIFICATIONS

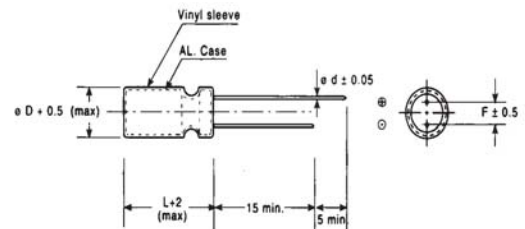
Item	Characteristic																		
Operating Temp Range	-40°C to +85°C																		
Rated Working Voltage	6.3 to 100VDC																		
Capacitance Tolerance	±20% (M)																		
Leakage Current (25°C)	$I \leq 0.02CV$ or $4\mu A$ Whichever is greater after 3 minutes $I$ =Leakage current ( $\mu A$ ) $C$ =Nominal Capacitance ( $\mu F$ ) $V$ =Rated voltage																		
Surge voltage (25°C)	<table border="1"> <tr> <td>WV</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>SV</td> <td>8</td> <td>13</td> <td>20</td> <td>32</td> <td>44</td> <td>63</td> <td>79</td> <td>125</td> </tr> </table>	WV	6.3	10	16	25	35	50	63	100	SV	8	13	20	32	44	63	79	125
WV	6.3	10	16	25	35	50	63	100											
SV	8	13	20	32	44	63	79	125											
Dissipation Factor Tan $\delta$ (120Hz, 25°C)	<table border="1"> <tr> <td>WV</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<math>\delta</math></td> <td>0.24</td> <td>0.20</td> <td>0.17</td> <td>0.16</td> <td>0.12</td> <td>0.10</td> <td>0.10</td> <td>0.10</td> </tr> </table>	WV	6.3	10	16	25	35	50	63	100	tan $\delta$	0.24	0.20	0.17	0.16	0.12	0.10	0.10	0.10
WV	6.3	10	16	25	35	50	63	100											
tan $\delta$	0.24	0.20	0.17	0.16	0.12	0.10	0.10	0.10											
Low Temperature Stability	Impedance ratio at 120Hz <table border="1"> <tr> <td>Rated voltage</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35-100</td> </tr> <tr> <td>-25°C to +25°C</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>-40°C to +25°C</td> <td>10</td> <td>8</td> <td>6</td> <td>4</td> <td>2</td> </tr> </table>	Rated voltage	6.3	10	16	25	35-100	-25°C to +25°C	4	3	2	2	2	-40°C to +25°C	10	8	6	4	2
Rated voltage	6.3	10	16	25	35-100														
-25°C to +25°C	4	3	2	2	2														
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Load Life	After 1000 hours application of WV at 85°C, reversing polarity every 250 hours, the capacitor shall meet the following limits. <table border="1"> <tr> <td>Capacitance change</td> <td><math>\leq \pm 20\%</math> of initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td><math>\leq 150\%</math> of initial specified value</td> </tr> <tr> <td>Leakage current</td> <td><math>\leq</math> initial specified value</td> </tr> </table>	Capacitance change	$\leq \pm 20\%$ of initial value	Dissipation Factor	$\leq 150\%$ of initial specified value	Leakage current	$\leq$ initial specified value												
Capacitance change	$\leq \pm 20\%$ of initial value																		
Dissipation Factor	$\leq 150\%$ of initial specified value																		
Leakage current	$\leq$ initial specified value																		

## PART NUMBERING SYSTEM



## CASE SIZE

D	5	6.3	8	10	13	16
F	2.0	2.5	3.5	5.0	7.5	
d	0.5			0.6		0.8



**Case size - (D) Diameter X (L) Length in mm (Optional)**

A suffix may be added to denote tape and reel/tape and ammo lead spacing or customer specific features

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**NP Series**  
(Non-Polar)

**MERITEK**

## CASE SIZE & MAX RIPPLE CURRENT

Case size  
Max ripple current  
(R.C.)

D x L (mm)  
mA (rms)  
85°C, 120Hz

μF	WV	6.3		10		16	
	ITEM	D x L	R.C.	D x L	R.C.	D x L	R.C.
10						5x11	47
22				5x11	65	6.3x11	80
33		5x11	70	6.3x11	90	8x11	110
47		6.3x11	100	6.3x11	110	Bx11	130
100		8x11	160	8x11	180	10x12	230
220		10x12	260	10x12	310	10x16	380
330		10x16	350	10x16	430	13x21	480
470		10x21	470	13x21	530	13x25	630
1000		13x21	770	16x26	960	16x26	1040
2200		13x26	1250	16x32	1410		

μF	WV	25		35		50	
	ITEM	D x L	R.C.	D x L	R.C.	D x L	R.C.
0.1 to 0.47						5x11	13
1						5x11	19
2.2						5x11	29
3.3						5x11	40
4.7		5x11	34	5x11	38	6.3x11	48
10		6.3x11	55	6.3x11	65	6.3x11	80
22		8x11	95	8x11	110	10x12	130
33		8x11	120	10x12	140	10x12	170
47		10x12	150	10x16	190	10x16	230
100		10x16	280	10x21	310	13x21	380
220		13x21	410	13x21	510	16x26	640
330		13x25	570	16x26	640	16x32	810
470		16x26	760	16x32	850		

μF	WV	63		100	
	ITEM	D x L	R.C.	D x L	R.C.
0.1 to 0.47				5x11	13
1				5x11	19
2.2		5x11	29	6.3x11	33
3.3		6.3x11	40	8x11	46
4.7		6.3x11	48	8x11	55
10		8x11	80	10x12	95
22		10x16	140	10x21	160
33		10x21	190	13x21	220
47		13x21	240	13x26	260
100		16x26	390	16x26	430
220		16x32	640		