

Aluminum Electrolytic Capacitors

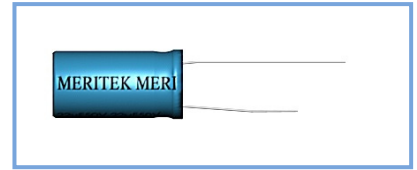


NP Series
(Non Polarity, 85°C)

MERITEK

FEATURES

- Standard non polarity series for using in polarity reversal circuits.



SPECIFICATIONS

Item	Characteristic									
Operating Temp Range	- 40 ~ +85°C									
Rated Working Voltage	6.3 ~ 100VDC									
Capacitance Tolerance (120Hz 20°C)	± 20%(M)									
Leakage Current (20°C)	$I \leq 0.04CV+4$ (uA)					I : Leakage Current (µA)				
	* After 5 minutes					C : Rated Capacitance(µF)				
						V : Working Voltage (V)				
Surge Voltage (20°C)	W.V.	6.3	10	16	25	35	50	63	100	
	S.V.	8	13	20	32	44	63	79	125	
Dissipation Factor (tan δ) (120Hz 20°C)	Add 0.02 per 1000uF for more than 1000uF									
	W.V.	6.3	10	16	25	35	50	63	100	
	tan δ	0.24	0.20	0.17	0.15	0.12	0.12	0.12	0.12	0.12
Low Temperature Stability	Impedance ratio at 120Hz									
	Rated Voltage (V)	6.3	10	16	25	35~100				
	-25°C / +20°C	4	3	2	2	2				
	-40°C / +20°C	10	8	6	4	3				
Load Life	After 2000 hours application of W.V. and +85°C ripple current value , the capacitor shall meet the following limits. (DC + ripple peak voltage ≤ rated working voltage) (The polarity need to exchange every 250 hours)									
	Capacitance Change	≤ ±20% of initial value.								
	Dissipation Factor	≤ 150% of initial specified value								
	Leakage Current	≤ initial specified value								
Shelf Life	At +85°C no voltage application after 500 hours the capacitor shall meet the limits. (with voltage treatment)									
	Capacitance Change	≤ ±20% of initial value.								
	Dissipation Factor	≤ 200% of initial specified value								
	Leakage Current	≤ 200% of initial specified value								

PART NUMBER SYSTEM

NP 10V 221 M TA 10x16

Meritek Series

Rated Voltage

Rated Capacitance

Express in micro farad(µF), First two digits are significant figures, Third digit denotes number of zeros. 'R' denotes decimal point for values less than 10uF

Tolerance

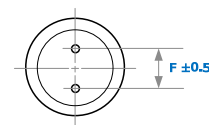
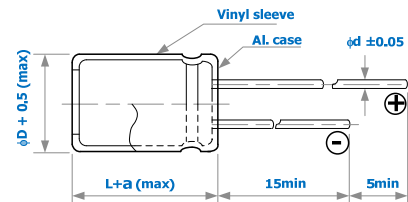
M - ±20%

Package

Code	TA	TR	Blank
	Tape & Ammo	Tape & Reel	

Case size – (D) Diameter x (L) Length in mm (Optional)

DIMENSIONS (mm)



φD	5	6.3	8	10	12.5	16	18
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5
d	0.5	0.5	0.6	0.6	0.6	0.8	0.8
a	1.5	1.5	1.5	1.5	1.5	1.5	1.5

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CASE SIZE & MAX RIPPLE CURRENT

Case size : DxL (mm)
Max. ripple current : mA(rms) 85°C 120Hz

Cap. (uF)	V Item	6.3		10		16	
		DxL	R.C.	DxL	R.C.	DxL	R.C.
10					→	5x11	47
22				5x11	65	6.3x11	80
33		5x11	70	6.3x11	90	8x11.5	110
47		6.3x11	100	6.3x11	110	8x11.5	140
100		8x11.5	170	8x11.5	180	10x16	230
220		10x12.5	260	10x16	310	10x20	380
330		10x16	350	10x20	420	12.5x20	460
470		10x20	460	12.5x20	500	12.5x25	600
1000		12.5x25	740	16x31.5	950	16x31.5	1030
2200		16x31.5	1240	16x35.5	1350	16x31.5	1450
3300		16x25	1540	16x31.5	1500	18x35.5	1900
4700		16x31.5	1660	18x35.5	2000		
6800		18x35.5	2120				

Cap. (uF)	V Item	25		35		50	
		DxL	R.C.	DxL	R.C.	DxL	R.C.
0.47					→	5x11	12
1.0					→	5x11	18
2.2					→	5x11	26
3.3					→	6.3x11	37
4.7		5x11	34	5x11	38	6.3x11	44
10		6.3x11	55	6.3x11	65	8x11.5	75
22		8x11.5	100	8x11.5	110	10x12.5	120
33		8x11.5	120	10x12.5	140	10x16	160
47		10x12.5	150	10x16	190	10x20	210
100		10x20	270	12.5x20	300	12.5x25	330
220		12.5x20	400	12.5x25	490	16x31.5	580
330		16x25	570	16x25	640	16x35.5	750
470		16x31.5	760	16x31.5	840	16x31.5	840
1000		16x31.5	1100	16x35.5	1300		
2200		18x35.5	1730				

Cap. (uF)	V Item	63		100	
		DxL	R.C.	DxL	R.C.
0.47			→	5x11	12
1.0			→	5x11	18
2.2		5x11	26	6.3x11	30
3.3		6.3x11	37	8x11.5	43
4.7		6.3x11	44	8x11.5	50
10		8x11.5	75	10x16	85
22		10x16	130	12.5x20	140
33		10x20	170	12.5x25	190
47		12.5x20	210	16x25	240
100		16x25	350	16x31.5	390
220		16x31.5	580	18x35.5	650
330		18x35.5	800	18x35.5	800
470		18x35.5	950	18x40	1000

All blank voltage on sleeve marking is the same voltage as “→” point to.