

# Aluminum Electrolytic Capacitors



REZ Series

(Long Life, Low Impedance)

MERITEK

## FEATURES

- Low impedance, long life and high reliability with standing 5000 hours load life.
- Suitable for electronic ballast, adaptor and switching power



## SPECIFICATIONS

Item	Characteristic							
Operating Temp Range	- 55 ~ +105°C							
Rated Working Voltage	6.3 ~ 63VDC							
Capacitance Tolerance (120Hz 20°C)	$\pm 20\%$ (M)							
Leakage Current (20°C)	$I \leq 0.01CV$ or $3 (\mu A)$ * Whichever is greater after 2 minutes						I : Leakage Current ( $\mu A$ )	C : Rated Capacitance( $\mu F$ )
Surge Voltage (20°C)	W.V.	6.3	10	16	25	35	50	63
	S.V.	8	13	20	32	44	63	79
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
	tan δ	0.22	0.19	0.16	0.14	0.12	0.10	0.09
Low Temperature Stability	Impedance ratio at 120Hz							
	Rated Voltage (V)	6.3	10	16	25	35	50	63
	-25°C / +20°C	2	2	2	2	2	2	2
	-55°C / +20°C	3	3	3	3	3	3	3
Load Life	After hours ( $\phi 5\sim 6.3mm$ 2000hrs, $\phi 8mm$ 3000hrs, $\phi D \geq 10mm$ 5000hrs) application of W.V. and +105°C ripple current value , the capacitor shall meet the following limits. ( DC + ripple peak voltage $\leq$ rated working voltage )							
	Capacitance Change	$\leq \pm 20\%$ of initial value.						
	Dissipation Factor	$\leq 200\%$ of initial specified value						
	Leakage Current	$\leq$ initial specified value						
Shelf Life	At +105°C no voltage application after 1000 hours the capacitor shall meet the following limits. ( with voltage treatment )							
	Capacitance Change	$\leq \pm 20\%$ of initial value.						
	Dissipation Factor	$\leq 150\%$ of initial specified value						
	Leakage Current	$\leq 200\%$ of initial specified value						

## PART NUMBER SYSTEM

REZ 10V 101 M TR 11x30

Meritek Series \_\_\_\_\_

Rated Voltage \_\_\_\_\_

Rated Capacitance \_\_\_\_\_

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

Tolerance \_\_\_\_\_

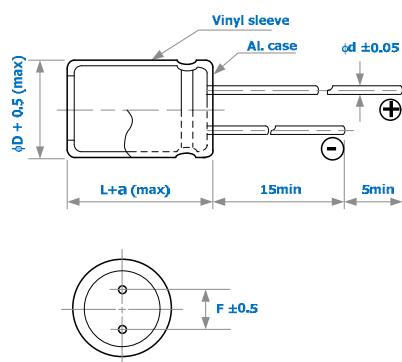
M -  $\pm 20\%$

Package \_\_\_\_\_

Code	TA	TR	Blank
Tape & Ammo	Tape & Reel		

Case size - (D) Diameter x (L) Length in mm (Optional) \_\_\_\_\_

## DIMENSIONS (mm)



$\phi D$	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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## RIPPLE CURRENT COEFFICIENTS

Frequency(Hz)	60	120	400	1k	10k	100k
W.V.	Multiplier					
6.3~16V	0.45	0.60	0.83	0.94	0.98	1.00
25~35V	0.38	0.50	0.75	0.90	0.97	1.00
50~63V	0.36	0.46	0.70	0.88	0.94	1.00

Temperature(°C)	65	75	85	95	105
Multiplier	2.12	1.92	1.69	1.50	1.00

## CASE SIZE & MAX RIPPLE CURRENT

Case size : DxL (mm)  
 Max. impedance : Ω 100kHz  
 Max. ripple current : A(rms) 105°C 100kHz

Cap. (uF)	V	6.3				10				16			
		Item	DxL	IMP		R.C.	DxL	IMP		R.C.	DxL	IMP	
				20°C	-10°C			20°C	-10°C			20°C	-10°C
47											5x11	0.568	1.421
68											5x11	0.500	1.250
100						5x11	0.500	1.250	0.24	6.3x11	0.367	0.918	0.29
220	6.3x11	0.308	0.769	0.39	6.3x11	0.249	0.623	0.41	8x11.5	0.190	0.474	0.52	
330	6.3x11	0.246	0.615	0.48	8x11.5	0.169	0.423	0.61	10x12.5	0.114	0.285	0.75	
470	8x11.5	0.178	0.446	0.70	8x11.5	0.139	0.346	0.73	10x12.5	0.093	0.233	0.90	
680	10x12.5	0.081	0.203	1.00	10x12.5	0.077	0.194	1.03	10x16	0.074	0.184	1.20	
1000	8x20	0.066	0.166	1.31	10x16	0.063	0.158	1.39	10x20	0.060	0.150	1.60	
1200	10x16	0.058	0.144	1.47	10x20	0.055	0.137	1.68	10x25	0.052	0.130	1.94	
1500	10x20	0.049	0.123	1.75	10x25	0.047	0.116	2.01	12.5x20	0.044	0.111	2.13	
2200	10x25	0.038	0.094	2.27	12.5x20	0.036	0.090	2.41	12.5x25	0.034	0.086	2.75	
3300	12.5x20	0.032	0.079	2.69	12.5x25	0.030	0.075	3.05	16x25	0.029	0.057	3.14	
4700	12.5x30	0.027	0.067	3.56	16x25	0.025	0.051	3.35	16x31.5	0.024	0.048	3.24	
6800	16x25	0.024	0.048	3.61	16x31.5	0.023	0.045	3.46	18x35.5	0.022	0.043	3.75	
10000	16x31.5	0.022	0.043	3.64	18x35.5	0.021	0.041	3.92	18x40	0.019	0.039	4.20	
15000	18x35.5	0.020	0.041	4.12	18x40	0.019	0.039	4.40					

Cap. (uF)	V	25				35			
		Item	DxL	IMP		R.C.	DxL	IMP	
				20°C	-10°C			20°C	-10°C
4.7						5x11	1.912	4.781	0.08
10						5x11	1.498	3.745	0.11
22						5x11	0.817	2.043	0.16
33						5x11	0.636	1.589	0.20
47	5x11	0.539	1.348	0.22	6.3x11	0.510	1.275	0.27	
68	6.3x11	0.419	1.049	0.30	6.3x11	0.397	0.991	0.33	
100	6.3x11	0.349	0.871	0.36	8x11.5	0.330	0.824	0.49	
220	8x11.5	0.180	0.450	0.65	10x12.5	0.128	0.319	0.85	
330	10x12.5	0.108	0.270	0.94	10x16	0.102	0.255	1.15	
470	10x16	0.088	0.221	1.25	10x20	0.084	0.209	1.52	
680	10x20	0.070	0.175	1.65	12.5x20	0.066	0.165	2.07	
1000	12.5x20	0.057	0.143	2.27	12.5x25	0.054	0.135	2.77	
1200	12.5x20	0.050	0.124	2.49	12.5x30	0.047	0.117	3.29	
1500	12.5x25	0.042	0.105	2.94	16x25	0.040	0.079	3.32	
2200	16x25	0.032	0.065	3.42	16x31.5	0.031	0.077	3.49	
3300	16x31.5	0.027	0.054	3.66	18x35.5	0.026	0.064	4.17	
4700	18x35.5	0.023	0.046	4.23					

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## CASE SIZE & MAX RIPPLE CURRENT

<b>Case size</b>	: DxL	(mm)
<b>Max. impedance</b>	: $\Omega$	100kHz
<b>Max. ripple current</b>	: A(rms)	105°C 100kHz

Cap. (uF)	V	50				63			
		Item	DxL	IMP		R.C.	DxL	IMP	
				20°C	-10°C			20°C	-10°C
4.7		5x11	1.699	5.096	0.09	5x11	1.699	5.096	0.09
10		5x11	1.331	3.992	0.13	5x11	1.331	3.992	0.13
22		5x11	0.726	2.177	0.19	6.3x11	0.726	1.814	0.22
33		6.3x11	0.564	1.411	0.26	6.3x15	0.564	1.411	0.30
47		6.3x11	0.453	1.132	0.31	8x11.5	0.453	1.132	0.38
68		8x11.5	0.352	0.880	0.46	10x12.5	0.264	0.660	0.54
100		8x20	0.220	0.549	0.71	10x16	0.220	0.549	0.73
220		10x16	0.113	0.283	1.09	10x25	0.113	0.283	1.33
330		10x20	0.091	0.227	1.47	12.5x20	0.091	0.227	1.66
470		12.5x20	0.074	0.186	1.99	12.5x25	0.074	0.186	2.19
680		12.5x25	0.059	0.147	2.63	16x25	0.059	0.117	2.63
1000		16x25	0.048	0.096	3.19	16x35.5	0.048	0.096	3.17
1200		16x31.5	0.042	0.083	3.29	18x35.5	0.042	0.083	3.48
1500		16x35.5	0.035	0.071	3.44	18x40	0.035	0.071	3.87
2200		18x35.5	0.027	0.055	4.20				
3300		18x40	0.023	0.046	4.97				