

Aluminum Electrolytic Capacitors

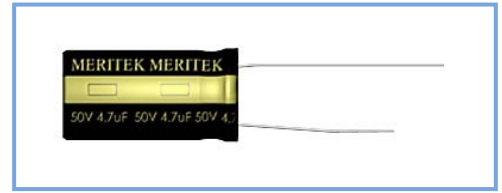


REW Series
(Low Impedance, Miniature Sized)

MERITEK

FEATURES

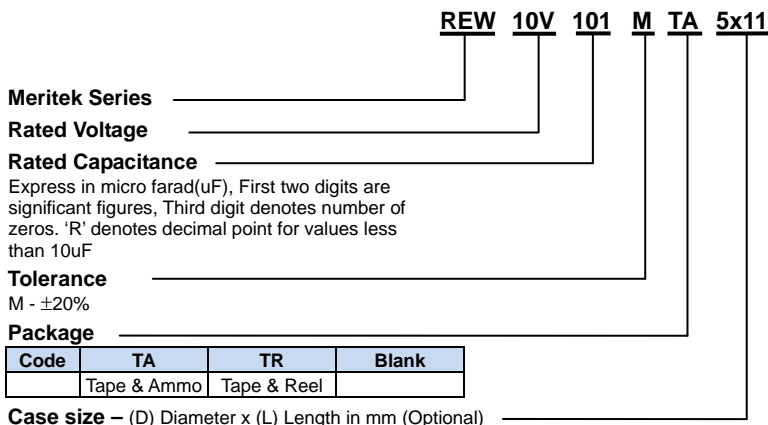
- Smaller case sizes than RE series.
- Lower impedance at high frequency and high ripple current.
- Suitable for output of motherboard and switching power supplies.



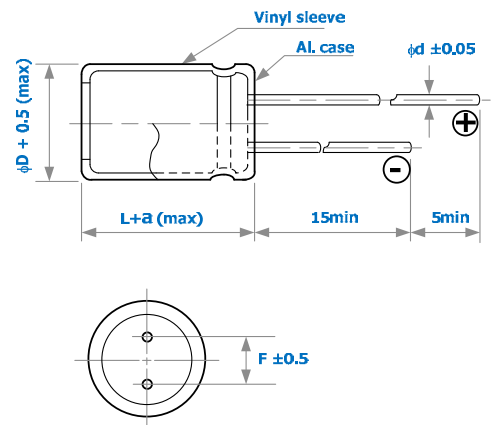
SPECIFICATIONS

Item	Characteristic								
Operating Temp Range	- 55 ~ +105°C								
Rated Working Voltage	6.3 ~ 50VDC								
Capacitance Tolerance (120Hz 20°C)	± 20%(M)								
Leakage Current (20°C)	I ≤ 0.01CV or 3 (uA) * Whichever is greater after 3 minutes				I : Leakage Current (μA) C : Rated Capacitance(μF) V : Working Voltage (V)				
Surge Voltage (20°C)	W.V.	6.3	10	16	25	35	50		
	S.V.	8	13	20	32	44	63		
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		
	tan δ	0.22	0.19	0.16	0.14	0.12	0.10		
Low Temperature Stability	Impedance ratio at 120Hz								
	Rated Voltage (V)	6.3~16			25~50				
	-25°C / +20°C	3			2				
	-55°C / +20°C	6			4				
Load Life	After hours application (φD ≤8mm 1000hrs, φD ≥10mm 2000hrs) of W.V. and +105°C ripple current value , the capacitor shall meet the following limits. (DC + ripple peak voltage ≤ rated working voltage)								
	Capacitance Change	≤ ±20% of initial value.							
	Dissipation Factor	≤ 200% of initial specified value							
	Leakage Current	≤ initial specified value							
Shelf Life	At +105°C no voltage application after 1000 hours the capacitor shall meet the limits for load life characteristics. (with voltage treatment)								

PART NUMBER SYSTEM



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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RIPPLE CURRENT COEFFICIENTS

Frequency(Hz)	60	120	400	1k	10k	100k
W.V.	Multiplier					
10~16V	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
50V	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 : mA(rms) 105°C 100kHz

Cap. (uF)	V	6.3				10				
		Item	DxL	IMP		R.C.	DxL	IMP		R.C.
				20°C	-10°C			20°C	-10°C	
100					→	5x11	0.312	0.937	230	
120					→	5x11	0.266	0.798	250	
150		5x11	0.219	0.656	250	5x11	0.218	0.653	280	
180		5x11	0.190	0.571	270	5x15	0.189	0.568	360	
					→	6.3x11	0.189	0.568	350	
220		5x11	0.162	0.487	300	5x15	0.161	0.484	400	
					→	6.3x11	0.161	0.484	390	
270		5x15	0.148	0.444	380	5x15	0.147	0.442	440	
		6.3x11	0.148	0.444	380	6.3x11	0.147	0.442	430	
330		5x15	0.130	0.389	420	6.3x15	0.129	0.387	550	
		6.3x11	0.130	0.389	420	8x11.5	0.129	0.387	560	
390		6.3x15	0.117	0.351	520	6.3x15	0.116	0.349	600	
		8x11.5	0.117	0.351	530	8x11.5	0.116	0.349	610	
470		6.3x15	0.106	0.319	570	6.3x15	0.106	0.317	660	
		8x11.5	0.106	0.319	580	8x11.5	0.106	0.317	670	
560		6.3x15	0.094	0.283	620	6.3x15	0.094	0.281	720	
		8x11.5	0.094	0.283	630	8x11.5	0.094	0.281	730	
680		6.3x15	0.084	0.252	680	8x15	0.083	0.250	900	
		8x11.5	0.084	0.252	700	10x12.5	0.083	0.250	950	
820		8x15	0.077	0.230	860	8x15	0.076	0.228	990	
		10x12.5	0.077	0.230	900	10x12.5	0.076	0.228	1040	
1000		8x15	0.069	0.206	950	8x20	0.068	0.204	1240	
		10x12.5	0.069	0.206	990	10x16	0.068	0.204	1280	
1200		8x20	0.059	0.178	1180	10x20	0.059	0.177	1540	
		10x16	0.059	0.178	1210	12.5x15	0.059	0.148	1480	
1500		10x20	0.036	0.107	1450	10x25	0.035	0.106	1830	
		12.5x15	0.036	0.089	1390	12.5x18	0.035	0.089	1720	
1800		10x20	0.031	0.094	1590	10x25	0.031	0.094	2000	
		12.5x15	0.031	0.078	1520	12.5x18	0.031	0.078	1880	
2200		10x25	0.028	0.083	1880	10x28	0.027	0.082	2250	
		12.5x18	0.028	0.069	1770	16x15	0.027	0.068	1960	

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

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CASE SIZE & MAX RIPPLE CURRENT

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

Cap. (uF)	V	6.3				10				
		Item	DxL	IMP		R.C.	DxL	IMP		R.C.
				20°C	-10°C			20°C	-10°C	
2700		10x28	0.025	0.075	2140	12.5x20	0.025	0.062	2250	
		16x15	0.025	0.063	1870	16x15	0.025	0.062	2100	
3300		12.5x20	0.023	0.058	2150	12.5x25	0.023	0.057	2650	
		16x15	0.023	0.058	2010	18x15	0.023	0.057	2300	
3900		12.5x25	0.022	0.055	2520	12.5x30	0.022	0.055	3030	
		18x15	0.022	0.055	2190	16x20	0.022	0.055	2670	
4700		12.5x30	0.021	0.053	2860	12.5x35	0.021	0.053	3210	
		16x20	0.021	0.053	2520	16x25	0.021	0.053	3050	
5600		12.5x35	0.020	0.050	3060	12.5x40	0.020	0.049	3550	
		16x25	0.020	0.050	2900	18x20	0.020	0.049	2940	
6800		12.5x40	0.019	0.047	3450	16x31.5	0.019	0.047	3680	
		18x20	0.019	0.047	2850	18x25	0.019	0.047	3390	
8200		16x31.5	0.018	0.045	3540	16x35.5	0.018	0.044	4010	
		18x25	0.018	0.045	3260	18x31.5	0.018	0.044	3870	
10000		16x35.5	0.017	0.043	3880					
		18x31.5	0.017	0.043	3740	18x35.5	0.017	0.042	4190	

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Cap. (uF)	V	16				25				
		Item	DxL	IMP		R.C.	DxL	IMP		R.C.
				20°C	-10°C			20°C	-10°C	
47					→	5x11	0.283	0.085	220	
56		5x11	0.253	0.759	190	5x11	0.253	0.758	240	
68		5x11	0.221	0.662	210	5x11	0.220	0.661	270	
82		5x11	0.203	0.610	230	5x15	0.203	0.609	340	
					→	6.3x11	0.203	0.609	330	
100		5x11	0.183	0.550	250	5x15	0.183	0.549	370	
					→	6.3x11	0.183	0.549	370	
120		5x15	0.156	0.469	320	5x15	0.156	0.468	410	
		6.3x11	0.156	0.469	320	6.3x11	0.156	0.468	400	
150		5x15	0.128	0.383	360	6.3x15	0.128	0.383	510	
		6.3x11	0.128	0.383	350	8x11.5	0.128	0.383	520	
180		5x15	0.111	0.333	390	6.3x15	0.111	0.333	560	
		6.3x11	0.111	0.333	390	8x11.5	0.111	0.333	570	
220		5x15	0.095	0.284	430	6.3x15	0.095	0.284	620	
		6.3x11	0.095	0.284	430	8x11.5	0.095	0.284	630	
270		6.3x15	0.086	0.259	550	8x15	0.086	0.259	790	
		8x11.5	0.086	0.259	550	10x12.5	0.086	0.259	830	
330		6.3x15	0.076	0.227	600	8x15	0.076	0.227	870	
		8x11.5	0.076	0.227	610	10x12.5	0.076	0.227	910	
390		8x15	0.068	0.205	750	8x20	0.068	0.205	1080	
		10x12.5	0.068	0.205	790	10x16	0.068	0.205	1100	
470		8x15	0.062	0.186	820	8x20	0.062	0.186	1180	
		10x12.5	0.062	0.186	860	10x16	0.062	0.186	1210	

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CASE SIZE & MAX RIPPLE CURRENT

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

Cap. (uF)	V	16				25				
		Item	DxL	IMP		R.C.	DxL	IMP		R.C.
				20°C	-10°C			20°C	-10°C	
560		8x20	0.055	0.165	1020	8x20	0.055	0.165	1290	
		10x16	0.055	0.165	1050	10x16	0.055	0.165	1320	
680		8x20	0.049	0.147	1120	10x20	0.049	0.147	1610	
		10x16	0.049	0.147	1150	12.5x15	0.049	0.122	1550	
820		8x20	0.045	0.134	1230	10x25	0.045	0.134	1950	
		10x16	0.045	0.134	1270	12.5x18	0.045	0.112	1830	
1000		10x20	0.040	0.120	1540	10x28	0.040	0.120	2270	
		12.5x15	0.040	0.100	1480	16x15	0.040	0.100	1980	
1200		10x25	0.035	0.104	1870	12.5x20	0.035	0.104	2320	
		12.5x18	0.035	0.087	1750	16x15	0.035	0.087	2170	
1500		10x28	0.029	0.088	2100	12.5x25	0.029	0.074	2710	
		16x15	0.029	0.074	1830	18x15	0.029	0.074	2480	
1800		12.5x20	0.026	0.065	2140	12.5x30	0.026	0.065	3230	
		16x15	0.026	0.065	2000	16x20	0.026	0.065	2840	
2200		12.5x25	0.023	0.057	2500	12.5x35	0.023	0.057	3470	
		18x15	0.023	0.057	2170	16x25	0.023	0.057	3290	
2700		12.5x30	0.021	0.052	2890	12.5x40	0.021	0.052	3910	
		16x20	0.021	0.052	2540	18x20	0.021	0.052	3240	
3300		12.5x35	0.019	0.048	3130	16x31.5	0.019	0.047	4100	
		16x25	0.019	0.048	2970	18x25	0.019	0.047	3770	
3900		12.5x40	0.018	0.046	3500	16x35.5	0.018	0.046	4530	
		18x20	0.018	0.046	2900	18x31.5	0.018	0.046	4360	
4700		16x31.5	0.016	0.040	3560					
		18x25	0.016	0.040	3280	18x35.5	0.016	0.040	4720	
5600		16x35.5	0.015	0.038	3880					
		18x31.5	0.015	0.038	3740					

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

Cap. (uF)	V	35				50				
		Item	DxL	IMP		R.C.	DxL	IMP		R.C.
				20°C	-10°C			20°C	-10°C	
0.47					→	5x11	3.006	9.017	27	
1					→	5x11	2.825	8.476	40	
2.2					→	5x11	1.511	4.533	60	
3.3					→	5x11	1.259	3.777	70	
4.7		5x11	1.062	3.185	75	5x11	1.061	3.182	85	
6.8		5x11	0.917	2.752	90	5x11	0.916	2.749	100	
10		5x11	0.832	2.495	110	5x11	0.831	2.493	130	
15		5x11	0.610	1.829	130	5x11	0.609	1.828	150	
18		5x11	0.531	1.594	150	5x11	0.531	1.593	170	
22		5x11	0.454	1.361	160	5x11	0.453	1.360	190	
27		5x11	0.400	1.201	180	5x11	0.400	1.200	210	
33		5x11	0.353	1.058	200	5x11	0.353	1.058	230	

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CASE SIZE & MAX RIPPLE CURRENT

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

Cap. (μ F)	V Item	35				50			
		DxL	IMP		R.C.	DxL	IMP		R.C.
			20°C	-10°C			20°C	-10°C	
39		5x11	0.320	0.096	210	5x15	0.320	0.959	290
					→	6.3x11	0.320	0.959	280
47		5x11	0.283	0.849	230	5x15	0.283	0.849	310
					→	6.3x11	0.283	0.849	310
56		5x15	0.252	0.757	290	5x15	0.252	0.757	340
		6.3x11	0.252	0.757	290	6.3x11	0.252	0.757	340
68		5x15	0.220	0.660	320	6.3x15	0.220	0.660	430
		6.3x11	0.220	0.660	320	8x11.5	0.220	0.660	430
82		5x15	0.203	0.608	360	6.3x15	0.203	0.608	470
		6.3x11	0.203	0.608	350	8x11.5	0.203	0.608	480
100		6.3x15	0.183	0.549	450	8x15	0.183	0.548	590
		8x11.5	0.183	0.549	450	10x12.5	0.183	0.548	620
120		6.3x15	0.109	0.327	490	8x15	0.109	0.327	650
		8x11.5	0.109	0.327	500	10x12.5	0.109	0.327	680
150		6.3x15	0.089	0.268	550	8x20	0.089	0.268	820
		8x11.5	0.089	0.268	550	10x16	0.089	0.268	840
180		8x15	0.078	0.233	680	8x20	0.078	0.233	900
		10x12.5	0.078	0.233	720	10x16	0.078	0.233	920
220		8x15	0.066	0.198	750	8x20	0.066	0.198	1000
		10x12.5	0.066	0.198	790	10x16	0.066	0.198	1020
270		8x20	0.060	0.181	950	10x20	0.060	0.181	1250
		10x16	0.060	0.181	970	12.5x15	0.060	0.151	1200
330		8x20	0.053	0.159	1050	10x25	0.053	0.159	1530
		10x16	0.053	0.159	1080	12.5x18	0.053	0.132	1430
390		10x20	0.048	0.143	1290	10x25	0.048	0.143	1660
		12.5x15	0.048	0.119	1240	12.5x18	0.048	0.119	1560
470		10x20	0.043	0.130	1420	12.5x20	0.043	0.108	1790
		12.5x15	0.043	0.108	1360	16x15	0.043	0.108	1680
560		10x25	0.038	0.115	1710	12.5x25	0.038	0.096	2150
		12.5x18	0.038	0.096	1610	18x15	0.038	0.096	1870
680		10x28	0.034	0.103	1990	12.5x30	0.034	0.086	2580
		16x15	0.034	0.086	1730	16x20	0.034	0.086	2260
820		10x30	0.031	0.094	2250	12.5x35	0.031	0.078	2880
		16x15	0.031	0.078	1900	16x25	0.031	0.078	2730
1000		12.5x25	0.028	0.070	2480	12.5x40	0.028	0.070	3390
		18x15	0.028	0.070	2150	18x20	0.028	0.070	2800
1200		12.5x30	0.024	0.061	2940	16x31.5	0.024	0.061	3660
		16x20	0.024	0.061	2590	18x25	0.024	0.061	3370
1500		12.5x35	0.021	0.051	3160	16x35.5	0.021	0.051	4040
		16x25	0.021	0.051	3000	18x31.5	0.021	0.051	3890
1800		12.5x40	0.018	0.045	3690				
		18x20	0.018	0.045	3050				
2200		16x31.5	0.016	0.040	3810				
		18x25	0.016	0.040	3510				

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