

Aluminum Electrolytic Capacitors

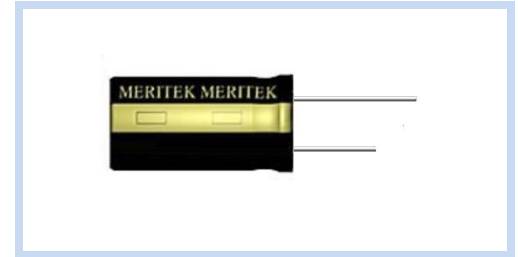
105°C 1000Hrs

REM Series

MERITEK

FEATURE

- Operating Temperature: -55°C ~ +105°C
- Load Life of 1000 Hours
- High Ripple Current, Low Impedance Series With 7mm Height



SPECIFICATIONS

Item	Characteristic						
Operation Temperature	-55°C ~ + 105°C						
Rated Working Voltage	6.3 ~ 50VDC						
Capacitance Tolerance	±20% (M); 120Hz 20°C						
Leakage Current at 20°C	I ≤ 0.01CV or 3 (μA) *Whichever is greater after 3 minutes			I:	Leakage Current (μA)		
				C:	Capacitance (μF)		
				V:	Working Voltage (V)		
Surge Voltage at 20°C	Rated Voltage (V)	6.3	10	16	25	35	50
	Surge Voltage (V)	8	13	20	32	44	63
Dissipation Factor-tan δ At 120Hz 20°C	Rated Voltage (V)	6.3	10	16	25	35	50
	tan δ max	0.22	0.19	0.16	0.14	0.12	0.10
Low Temperature Stability	Rated Voltage (V)	6.3	10	16	25	35	50
	-25°C / +20°C	3	3	3	2	2	2
	-55°C / +20°C	6	6	6	4	4	4
	Impedance ratio at 120Hz						
Load Life	Capacitance Change	≤ ±20% of initial value		After 1000 hours application of W.V. and +105°C ripple current value, the capacitor shall meet the following limits. (DC + ripple peak voltage ≤ rate working voltage)			
	Dissipation Factor	≤ 200% of initial 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)						

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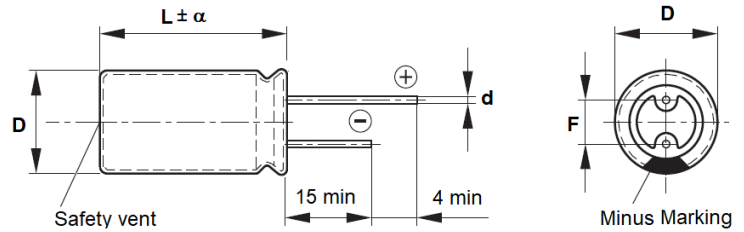
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DIMENSION

Unit: mm

D±0.5(max)	4	5	6.3	8
F±0.5	1.5	2.0	2.5	3.5
d±0.05	0.45	0.45	0.45	0.50
α	1.0	1.0	1.0	1.0



RIPPLE CURRENT COEFFICIENTS

Working Voltage	Frequency Coefficient					
	60Hz	120Hz	400Hz	1KHz	10KHz	100KHz
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
50V	0.36	0.46	0.70	0.88	0.94	1.00

Temperature Coefficient	
°C	Factor
65°C	2.12
75°C	1.92
85°C	1.69
95°C	1.50
105°C	1.00

CASE SIZE AND MAX RIPPLE CURRENT

Capacitance		6.3VDC (0J)				10VDC (1A)			
		DxL	Impedance		RC	DxL	Impedance		RC
μF	Code	(mm)	20°C(Ω)	-10°C(Ω)	mA(rms)	(mm)	20°C(Ω)	-10°C(Ω)	mA(rms)
15	150	→	→	→	→	4x7	1.592	4.775	80
22	220	4x7	1.191	3.572	80	4x7	1.184	3.552	95
27	270	4x7	1.051	3.153	90	4x7	1.045	3.135	100
33	330	4x7	0.926	2.778	100	4x7	0.921	2.763	110
39	390	4x7	0.839	2.518	110	5x7	0.835	2.505	140
47	470	5x7	0.629	1.886	130	5x7	0.568	1.705	160
56	560	5x7	0.561	1.682	150	5x7	0.507	1.521	170
68	680	5x7	0.489	1.467	160	6.3x7	0.442	1.326	210
82	820	6.3x7	0.450	1.351	200	6.3x7	0.407	1.222	230
100	101	6.3x7	0.406	1.219	220	6.3x7	0.367	1.102	260
120	121	6.3x7	0.346	1.039	250	6.3x7	0.313	0.939	280
150	151	6.3x7	0.283	0.850	280	8x7	0.256	0.768	370
180	181	8x7	0.246	0.739	350	--	--	--	--
220	221	8x7	0.210	0.630	390	--	--	--	--
Capacitance		16VDC (1C)				25VDC (1E)			
		DxL	Impedance		RC	DxL	Impedance		RC
μF	Code	(mm)	20°C(Ω)	-10°C(Ω)	mA(rms)	(mm)	20°C(Ω)	-10°C(Ω)	mA(rms)
10	100	4x7	1.416	4.249	75	4x7	1.332	3.995	95
15	150	4x7	1.039	3.116	90	4x7	0.977	2.930	110
18	180	4x7	0.897	2.692	100	5x7	0.851	2.552	140
22	220	4x7	0.772	2.317	100	5x7	0.726	2.179	150
27	270	5x7	0.682	2.046	130	6.3x7	0.641	1.923	190
33	330	5x7	0.601	1.802	140	6.3x7	0.565	1.695	210
39	390	6.3x7	0.545	1.634	180	6.3x7	0.512	1.537	220
47	470	6.3x7	0.482	1.446	190	6.3x7	0.453	1.360	250
56	560	6.3x7	0.430	1.290	210	8x7	0.404	1.213	310
68	680	6.3x7	0.375	1.125	230	8x7	0.352	1.057	340
82	820	6.3x7	0.345	1.036	260	--	--	--	--
100	101	6.3x7	0.312	0.935	280	--	--	--	--

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CASE SIZE AND MAX RIPPLE CURRENT

Capacitance		35VDC (1V)				50VDC (1H)			
		DxL	Impedance		RC	DxL	Impedance		RC
μF	Code	(mm)	20°C(Ω)	-10°C(Ω)	mA(rms)	(mm)	20°C(Ω)	-10°C(Ω)	mA(rms)
4.7	4R7	→	→	→	→	4x7	2.758	8.274	90
6.8	6R8	→	→	→	→	5x7	2.383	7.149	110
10	100	5x7	0.998	2.994	110	6.3x7	0.499	1.496	150
15	150	5x7	0.732	2.195	140	6.3x7	0.366	1.097	180
18	180	6.3x7	0.638	1.913	170	6.3x7	0.319	0.956	200
22	220	6.3x7	0.544	1.633	180	8x7	0.272	0.816	240
27	270	6.3x7	0.480	1.441	200	8x7	0.240	0.720	270
33	330	8x7	0.423	1.270	250	8x7	0.212	0.635	290
39	390	8x7	0.384	1.151	270	--	--	--	--
47	470	8x7	0.340	1.019	300	--	--	--	--

Note:

1. Max ripple current :mA(rms) at 105°C. 100KHz
2. Impedance(Ω) at 100KHz
3. All blank voltage on sleeve marking is the same voltage as "→"point to.

PART NUMBERING SYSTEM

REM 1H 100 M F 070 A C
 (1) (2) (3) (4) (5) (6) (7) (8)

No	Item	Code	Description	Series Reference
(1)	Meritek Series	REM	Aluminum Electrolytic Capacitors	High Ripple Current, Low Impedance, 1KHz 105°C
(2)	Rated Voltage Code	1H	1H: 50V	DC working voltage, See Table Below
(3)	Capacitance	100	100: 10μF	First two digit: significant, Third: Multiplier
(4)	Tolerance	M	M: ± 20%	-20% ~ +20%
(5)	Case Diameter Code	F	F: 6.3 mm	See Table Below
(6)	Case Height	070	070: 7.0 mm	Third digit denotes the first decimal place
(7)	Package	A	A: Tape & Ammo	R: Tape & Reel, Blank : Bulk
(8)	Taping Pitch Code	C	C: 2.5 mm	See Table Below, Blank: Bulk

Voltage	4	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450	500
Code	0G	0J	1A	1C	1E	1V	1H	1J	2A	2C	2D	2E	2V	2G	2W	2H

Diameter	4	5	6.3	8	10	12.5	14.5	16	18	20	22	25
Code	D	E	F	H	J	K	U	L	M	N	P	Q

Pitch	1.5	2	2.5	3.5	5	7.5
Code	A	B	C	D	E	F

LEGACY PART NUMBERING SYSTEM

REM 50V 100 M TA 0607
 (1) (2) (3) (4) (5) (6)

No	(1)	(2)	(3)	(4)	(5)	(6)
Item	Meritek Series	Rated Voltage	Capacitance	Tolerance	Package	Case Size

*Specifications subject to change without notice.