JARO Components, Inc. An ISO Registered Firm

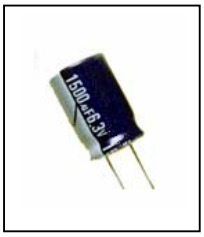
Series: **GMAR**

General Purpose Low Profile Aluminum Electrolytic Capacitor

GMAR

Specifications

- Features
  - Lifetime:85 ,2000hrs
  - Shorter profile for GAR
  - General purpose
- Recommended Applications
  - AV(TV, Video, Audio)
  - Monitor/Computer
  - OA/HA/Communication



Items	Characteristics
Capacitance Tolerance	±20% (M) (120Hz,20℃)
Rated Voltage Range (WV)	6.3~100 VDC / 160~250 VDC
Operating Temperature Range	-40 ~ +85℃ / -25 ~ +85℃

Surge Voltage (V) (20℃)

WV	6.3	10	16	25	35	50	63	100	160	200	250
SV	8	13	20	32	44	63	79	125	200	250	300

Leakage Current (Max) (20℃)

I≦ 0.01CV or3μA whichever is greater (After rated voltage applied for 2 minutes)

I≦ 0.03CV+10μA (After rated voltage applied for 3 minutes)

I= Leakage Current (μA) C= Nominal Capacitance (μF) V= Rated Voltage (V)

Dissipation Factor (Max) (tanδ) (120Hz ,20℃)

WV	6.3	10	16	25	35	50	63	100	160	200	250
tanδ	0.24	0.20	0.16	0.14	0.12	0.10	0.10	0.10	0.15	0.15	0.15

When nominal capacitance is over 1000μF,

tanδ shall be added 0.02 to the listed value with increase of every 1000μF.

Low Temperature Stability Impedance Ratio (Max)

WV / Z (120Hz)	6.3	10	16	25	35	50	63	100	160	200	250
Z(-25℃) / Z(20℃)	5	4	3	2	2	2	2	2	4	4	4
Z(-40℃) / Z(20℃)	12	10	8	5	4	3	4	4	4	5	5

Load Life

After applying rated voltage for 2000 hours at 85℃, the capacitor shall meet the following requirement.

Capacitance Change	Within±20% of the initial value
Dissipation Factor	Not more than 200% of the specified value
Leakage Current	Not more than the specified value

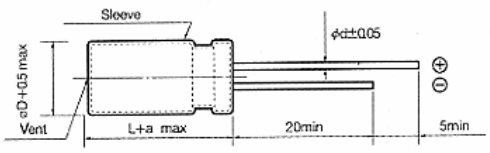
Shelf Life

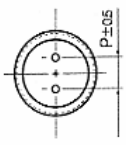
After placed at 85℃without voltage applied for 1000 hours, the capacitor shall meet the same requirement as load life.

Applicable standards

Refer to JIS C 5101

Dimensions (mm)





ϕD	10	13	16	18
P	5.0	5.0	7.5	7.5
ϕd	0.6	0.6	0.8	0.8
a	1.0	2.0	2.0	2.0

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Multiplier for Ripple Current

Frequency coefficient

WV (VDC)	Freq.(Hz) / Cap (μ F)	50	120	1K	10K~100K
6.3~100	10~82	0.75	1.00	1.57	2.00
	100~820	0.80	1.00	1.34	1.50
	1000~10000	0.85	1.00	1.13	1.15
160~250	10~100	0.80	1.00	1.40	1.60

Temperature coefficient

Ambient Temperature (℃)	≦ 50	70	85
Coefficient	1.36	1.25	1.00

Case Size / Max Ripple Current

CASE SIZE (ϕDxL(mm)) / MAX PERMISSIBLE RIPPLE CURRENT (RC(mArms) / 120Hz,85℃)

WV	6.3		10		16		25		35		50		63	
SPEC / μ F	ϕDxL	RC	ϕDxL	RC	ϕDxL	RC	ϕDxL	RC	ϕDxL	RC	ϕDxL	RC	ϕDxL	RC
100											10x12.5	330	10x12.5	240
220									10x12.5	365	13x16	570	13x16	415
330					10x12.5	450	10x12.5	495	13x16	570	13x16	630	16x16	690
470			10x12.5	510	10x12.5	535	13x16	765	13x16	800	16x16	900	16x16	810
1000	10x12.5	555	10x12.5	665	13x16	910	16x20	1170	16x20	1010	18x20	1380	18x26	1210
2200	13x16	990	13x16	1060	16x16	1250	16x20	1480	18x20	1610	18x32	1960		
3300	16x16	1340	16x16	1370	16x20	1580	18x26	1970						
4700	16x16	1460	18x20	1870	18x26	2120								
6800	16x20	1780	18x20	1970										
10000	18x26	2180	18x26	2280										

WV	100		160		200		250	
SPEC / μ F	ϕDxL	RC	ϕDxL	RC	ϕDxL	RC	ϕDxL	RC
10			10x12.5	110	10x12.5	120	10x12.5	130
22			13x16	215	13x16	230	13x16	250
33	10x12.5	187	13x16	245	13x16	270	16x16	340
47	13x16	315	16x16	340	16x16	360	18x16	425
100	13x16	410	16x20	535	18x20	580	18x26	680
220	18x16	700						
330	18x26	930						