JARO Components, Inc. An ISO Registered Firm

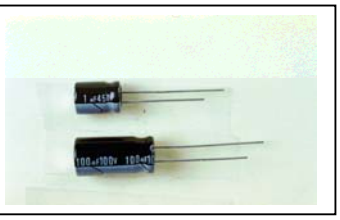
Series: GUHR

Aluminum Electrolytic Capacitor - High Reliability

GUHR Series

Specifications

- Features
  - Lifetime:125℃,1000hrs
  - High temperature
  - High reliability
- Recommended Applications
  - AV(TV, Video, Audio)
  - Monitor/Computer
  - OA/HA/Communication
  - Converter/Inverter
  - Adapter
  - SMPS



Items	Characteristics
Capacitance Tolerance	±20% (M) (120Hz,20℃)
Rated Voltage Range (WV)	6.3~100 VDC / 160~250 VDC
Operating Temperature Range	-40 ~ +125℃ / -25 ~ +125℃

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 or3μ A whichever is greater (After rated voltage applied for 2 minutes) / I≦ 0.03CV+10μ A (After rated voltage applied for 3 minutes)
	I= Leakage Current (μ A) C= Nominal Capacitance (μ F) V= Rated Voltage (V)

Dissipation Factor (Max) (tanδ) (120Hz ,20℃)												
WV	6.3	10	16	25	35	50	63	100	160	200	250
tanδ	0.20	0.15	0.12	0.10	0.09	0.08	0.08	0.08	0.15	0.15	0.15
	When nominal capacitance is over 1000μ F, tanδ shall be added 0.02 to the listed value with increase of every 1000μ F.											

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℃)	4	3	2	2	2	2	2	2	3	3	3
Z(-40℃) / Z(20℃)	6	4	3	3	3	3	3	3	-	-	-

Load Life

After applying rated voltage for 1000 hours at 125℃, 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

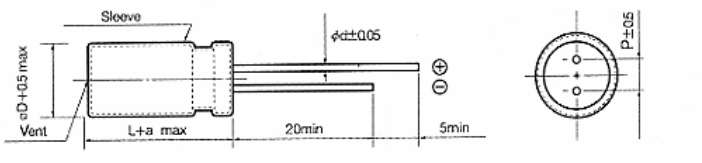
Shelf Life

After placed at 125℃without voltage applied for 500 hours, the capacitor shall meet the same requirement as load life.

Applicable standards

Refer to JIS C 5101

Dimensions (mm)



φD	8	10	13	16
P	3.5	5.0	5.0	7.5
ψ d	0.6	0.6 (0.8)	0.6	0.8
a	1.0	1.0	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	3.3~82	0.75	1.00	1.57	2.00
	100~820	0.80	1.00	1.34	1.50
	1000~6800	0.85	1.00	1.13	1.15
160~250	3.3~100	0.80	1.00	1.40	1.60

Temperature coefficient

Ambient Temperature (℃)	≦ 70	85	105	125
Coefficient	1.90	1.75	1.40	1.00

Case Size / Max Ripple Current

CASE SIZE (ϕDxL(mm)) / MAX PERMISSIBLE RIPPLE CURRENT (RC(mArms) / 120Hz,125℃)

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
22													8x11	120
33											8x11	130	8x11	130
47									8x11	140	8x11	160	10x12.5	200
100					8x11	170	8x11	190	10x12.5	240	10x17	300	10x17	330
220	8x11	180	8x11	210	10x12.5	300	10x17	390	10x17	410	13x20	550	13x20	600
330	8x11	220	10x12.5	300	10x17	420	10x20	510	13x20	620	13x20	670	13x25	810
470	10x12.5	310	10x17	410	10x17	500	13x20	700	13x20	740	13x25	880	13x36	1110
1000	10x17	350	13x20	740	13x20	900	13x25	1120	13x36	1360	13x40	1590		
2200	13x20	860	13x25	1070	13x36	1250	13x40	1660						
3300	13x25	1120	13x30	1440										
4700	13x30	1390	13x40	1760										
6800	13x40	1790												

WV	100		160		200		250	
SPEC / μ F	ϕDxL	RC	ϕDxL	RC	ϕDxL	RC	ϕDxL	RC
3.3	8x11	70	10x12.5	80	10x12.5	90	10x25	110
4.7	8x11	80	10x15	100	10x15	110	10x30	150
10	10x12.5	90	10x20	130	10x20	140	13x25	190
22	10x17	160	13x20	200	13x20	210	13x30	250
33	10x20	210	13x25	250	13x30	270	13x40	310
47	13x20	280	13x36	320	13x36	330	16x32	510
100	13x30	490	16x32	530	16x32	540		

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