

# LARGE ALUMINUM ELECTROLYTIC CAPACITORS

Upgrade

## GT Screw Terminal Type, Standard Series

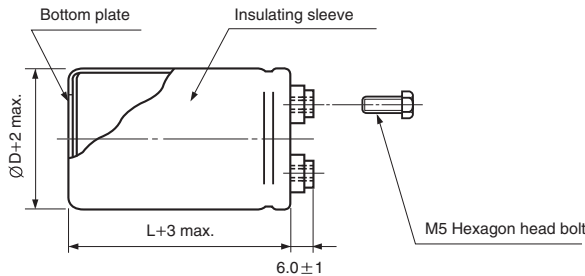
- Ideally suited for use as input and output filter capacitors in power supplies
- Suited for smoothing circuits for general purpose inverters and control circuits for F.A. machines
- Designed for use as input filter capacitor for current U.P.S.
- Complied to the RoHS directive



Item	Characteristics																																																												
Operating temperature range	WV < 350 : -40 ~ +85°C, WV ≥ 350 : -25 ~ +85°C																																																												
Capacitance tolerance	±20% at 120Hz, 20°C																																																												
Leakage current max.	$I = 3\sqrt{CV}$ (µA) (after 5 minutes)																																																												
Dissipation factor max. (at 120Hz, 20°C)	<table border="1"> <thead> <tr> <th>WV</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>80</th> <th>100</th> <th>160 ~250</th> <th>350 ~500</th> </tr> </thead> <tbody> <tr> <td>∅D 35</td> <td>0.70</td> <td>0.45</td> <td>0.45</td> <td>0.30</td> <td>0.25</td> <td>0.25</td> <td>0.20</td> <td>0.15</td> <td>0.25</td> </tr> <tr> <td>51</td> <td>1.00</td> <td>0.60</td> <td>0.60</td> <td>0.45</td> <td>0.35</td> <td>0.30</td> <td>0.20</td> <td>0.15</td> <td>0.25</td> </tr> <tr> <td>63.5</td> <td>1.30</td> <td>0.80</td> <td>0.70</td> <td>0.50</td> <td>0.40</td> <td>0.35</td> <td>0.25</td> <td>0.20</td> <td>0.25</td> </tr> <tr> <td>76.2</td> <td>2.00</td> <td>1.60</td> <td>0.90</td> <td>0.70</td> <td>0.50</td> <td>0.45</td> <td>0.35</td> <td>0.25</td> <td>0.25</td> </tr> <tr> <td>89</td> <td>2.50</td> <td>2.40</td> <td>1.00</td> <td>0.80</td> <td>0.60</td> <td>0.50</td> <td>0.40</td> <td>0.30</td> <td>0.25</td> </tr> </tbody> </table>	WV	16	25	35	50	63	80	100	160 ~250	350 ~500	∅D 35	0.70	0.45	0.45	0.30	0.25	0.25	0.20	0.15	0.25	51	1.00	0.60	0.60	0.45	0.35	0.30	0.20	0.15	0.25	63.5	1.30	0.80	0.70	0.50	0.40	0.35	0.25	0.20	0.25	76.2	2.00	1.60	0.90	0.70	0.50	0.45	0.35	0.25	0.25	89	2.50	2.40	1.00	0.80	0.60	0.50	0.40	0.30	0.25
	WV	16	25	35	50	63	80	100	160 ~250	350 ~500																																																			
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Load life (after application of the rated voltage for 2000 hours at 85°C)	Leakage current	Less than specified value																																																											
	Capacitance change	WV ≤ 250 : Within ±15% of the initial value WV ≥ 350 : Within ±20% of the initial value																																																											
	tanδ	WV ≤ 250 : Less than 175% of the specified value WV ≥ 350 : Less than 300% of the specified value																																																											
Shelf life (at 85°C)	After 1000 hours no load test, leakage current, capacitance and tanδ are same as load life value. The measurement shall be performed at 20°C by the KS C IEC 60384 - 4																																																												

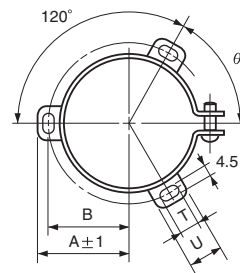
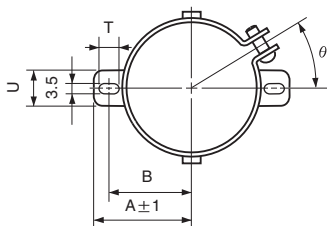
### DRAWING

Unit : mm



#### TWO LEGS ANGLE

#### THREE LEGS ANGLE



#### TWO LEGS ANGLE SIZE TABLE

∅D	B	A	T	U	θ°	P
35	24	29	7	10	30	12.7
51	33.6	39.9	6	14	30	22
63.5	40.8	46.8	6	14	30	28.6

#### THREE LEGS ANGLE SIZE TABLE

∅D	B	A	T	U	θ°	P
51	32.9	38.9	7	12	60	22
63.5	38.4	45.3	7	14	60	28.6
76.2	44.5	51.5	8	16	60	31.8
89	50.8	61	8	16	60	31.8

## GT series

### ● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

$\mu\text{F}$ \diagdown WV	16		25		35		50	
10000							35×60	6.2
15000					35×50	5.8	35×80	8.5
22000			35×60	7.5	35×68	7.9	35×100	11.3
33000	35×60	7.4	35×80	10.3	35×100	11.3	35×120	15.0
47000	35×80	9.9	35×100	13.5	35×120	14.6	51×100	15.2
68000	35×100	13.1	51×80	14.5	51×100	15.9	51×120	19.7
100000	51×80	13.7	51×100	19.2	51×120	20.7	63.5×120	24.2
150000	51×100	18.3	51×140	27.1	63.5×120	25.1	76.2×120	25.9
220000	51×140	25.4	63.5×120	28.4	76.2×120	27.7	76.2×160	35.1
330000	63.5×120	27.3	76.2×120	29.3	76.2×160	37.9		
470000	76.2×120	27.1	76.2×160	39.2				
680000	76.2×160	36.5						

$\mu\text{F}$ \diagdown WV	63		80		100		160	
1500							35×60	3.4
2200							35×80	4.6
3300							35×100	6.2
4700					35×60	5.2	51×80	7.7
6800	35×50	5.2	35×60	5.6	35×80	7.0	51×100	10.0
10000	35×60	6.8	35×80	7.6	35×100	9.4	51×140	14.1
15000	35×80	9.3	35×120	11.1	51×80	11.8	63.5×140	16.5
22000	35×120	13.4	51×80	11.7	51×100	15.6	76.2×140	17.6
33000	51×100	14.5	51×120	16.8	51×140	22.0		
47000	51×120	18.6	63.5×100	18.5	63.5×140	25.0		
68000	63.5×100	20.8	63.5×140	25.4	76.2×140	26.2		
100000	76.2×120	25.0	76.2×140	29.7				
150000	76.2×140	32.5						

$\mu\text{F}$ \diagdown WV	200		250	
330				
470				
680			35×50	2.1
1000	35×60	2.8	35×68	2.9
1500	35×68	3.6	35×80	3.8
2200	35×100	5.1	35×120	5.5
3300	35×120	6.7	51×100	7.0
4700	51×100	8.3	51×140	9.6
6800	51×140	11.5	63.5×120	10.0
10000	63.5×120	12.1	76.2×120	11.2
15000	76.2×120	13.7	76.2×160	15.3
22000	76.2×160	18.6		

← Ripple current (A rms) at 85°C, 120Hz  
 ← Case size  $\varnothing D \times L$  (mm)

# LARGE ALUMINUM ELECTROLYTIC CAPACITORS

**GT** series

## ● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

WV Item μF	350			400			450		
	∅D×L (mm)	Ripple current (A rms)		∅D×L (mm)	Ripple current (A rms)		∅D×L (mm)	Ripple current (A rms)	
		40°C 120Hz	85°C 120Hz		40°C 120Hz	85°C 120Hz		40°C 120Hz	85°C 120Hz
180							35×60	2.9	1.0
220				35×50	3.0	1.1	35×60	3.2	1.1
270	35×50	3.3	1.2	35×50	3.3	1.2	35×60	3.6	1.2
330	35×50	3.7	1.3	35×60	3.9	1.4	35×80	4.4	1.5
390	35×60	4.3	1.5	35×60	4.3	1.5	35×80	4.8	1.7
470	35×60	4.7	1.6	35×80	5.3	1.8	35×100	5.8	2.0
560	35×80	5.8	2.0	35×100	6.3	2.2	35×100	6.3	2.2
680	35×80	6.4	2.2	35×100	7.0	2.4	35×120	7.5	2.6
820	35×100	7.7	2.7	35×120	8.3	2.9	51×80	8.0	2.8
1000	35×120	9.2	3.2	51×80	8.8	3.1	51×80	9.6	3.4
1200	51×80	9.7	3.4	51×80	9.7	3.4	51×100	10.6	3.7
1500	51×80	10.8	3.8	51×100	11.8	4.1	51×100	12.7	4.4
1800	51×100	12.9	4.5	51×100	13.9	4.9	51×110	13.8	4.8
2200	51×120	15.4	5.4	51×120	16.4	5.7	51×120	16.3	5.7
2700	51×140	18.2	6.4	63.5×100	18.1	6.3	51×140	19.2	6.7
3300	63.5×120	20.0	7.0	63.5×120	21.3	7.4	63.5×120	20.6	7.2
3900	63.5×140	23.1	8.1	63.5×130	24.4	8.6	63.5×130	23.7	8.3
4700	63.5×160	26.8	9.4	76.2×120	26.0	9.1	76.2×120	27.5	9.6
5600	76.2×140	28.4	10.0	76.2×130	30.0	10.5	76.2×130	31.3	10.9
6800	76.2×160	33.0	11.6	76.2×140	34.5	12.1	76.2×140	36.3	12.7
8200	89×140	37.8	13.2	76.2×160	39.8	13.9			
10000	89×160	44.0	15.4	89×140	44.0	15.4			

WV Item μF	500		
	∅D×L (mm)	Ripple current (A rms)	
		40°C 120Hz	85°C 120Hz
1000	51×120	12.2	4.2
1200	63.5×100	13.1	4.5
1500	63.5×100	14.8	5.1
1800	63.5×120	17.4	6.0
2200	63.5×140	20.3	7.0
2700	76.2×120	22.3	7.5
3300	76.2×140	26.1	8.8

## ● FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

WV	Frequency	50Hz	120Hz	300Hz	1kHz	10kHz≤
~ 100		0.8	1.0	1.1	1.15	1.2
160 ~ 250		0.8	1.0	1.1	1.15	1.3
350 ~		0.8	1.0	1.2	1.35	1.4