

Aluminum Electrolytic Capacitors

AN CD138H GH series

* Life time **105°C 2000 hours**

* **Screw type**

* Suited for smoothing circuits for general purpose inverter control for FA, machine designed for use as input filter capacitor for current



I SPECIFICATIONS

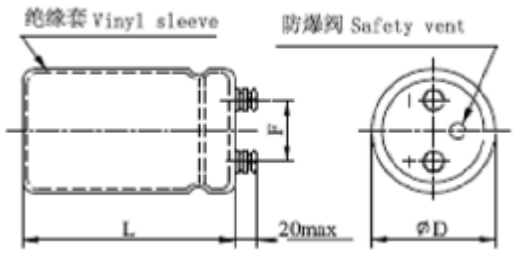
Item	Performance Characteristics																																																																	
Rated Voltage Range	10V.DC~ 100V.DC	160V.DC~ 400V.DC																																																																
Operating Temperature Range	-40°C ~ + 105°C	-25°C ~ + 105°C																																																																
Nominal Capacitance Range	47 μF~1800 μF																																																																	
Capacitance Tolerance	±20%(M,+20°C , 120Hz)																																																																	
Leakage Current	After application of rated voltage for 5minutes: $I \leq 3\sqrt{CV}(\mu A)$ at +20°C Nominal Capacitance in u F Rated Working Voltage in V																																																																	
Dissipation Factor	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">WV(V) ΦD</th> <th>10</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>350-450</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">35</td> <td>0.75</td> <td>0.60</td> <td>0.40</td> <td>0.30</td> <td>0.25</td> <td>0.20</td> <td>0.20</td> <td>0.15</td> <td>0.15</td> <td>0.20</td> </tr> <tr> <td style="text-align: center;">50</td> <td>1.00</td> <td>0.70</td> <td>0.50</td> <td>0.50</td> <td>0.30</td> <td>0.25</td> <td>0.20</td> <td>0.20</td> <td>0.15</td> <td>0.20</td> </tr> <tr> <td style="text-align: center;">65</td> <td>1.30</td> <td>0.80</td> <td>0.70</td> <td>0.60</td> <td>0.50</td> <td>0.30</td> <td>0.25</td> <td>0.25</td> <td>0.20</td> <td>0.25</td> </tr> <tr> <td style="text-align: center;">76-90</td> <td>1.50</td> <td>1.00</td> <td>0.80</td> <td>0.70</td> <td>0.60</td> <td>0.40</td> <td>0.30</td> <td>0.25</td> <td>0.20</td> <td>0.25</td> </tr> </tbody> </table>											WV(V) ΦD	10	16	25	35	50	63	80	100	160-250	350-450	35	0.75	0.60	0.40	0.30	0.25	0.20	0.20	0.15	0.15	0.20	50	1.00	0.70	0.50	0.50	0.30	0.25	0.20	0.20	0.15	0.20	65	1.30	0.80	0.70	0.60	0.50	0.30	0.25	0.25	0.20	0.25	76-90	1.50	1.00	0.80	0.70	0.60	0.40	0.30	0.25	0.20	0.25
	WV(V) ΦD	10	16	25	35	50	63	80	100	160-250	350-450																																																							
	35	0.75	0.60	0.40	0.30	0.25	0.20	0.20	0.15	0.15	0.20																																																							
	50	1.00	0.70	0.50	0.50	0.30	0.25	0.20	0.20	0.15	0.20																																																							
	65	1.30	0.80	0.70	0.60	0.50	0.30	0.25	0.25	0.20	0.25																																																							
76-90	1.50	1.00	0.80	0.70	0.60	0.40	0.30	0.25	0.20	0.25																																																								
Load Life	After application of rated working voltage and maximum permissible current specified at +85°C for 2000 hours, Capacitors meet the characteristics requirement measured at +20°C listed below:																																																																	
	Capacitance Change					Within ± 20% of the initial measured value																																																												
	Leakage current					Less than the initial specified value																																																												
	tan δ					Less than 200% the initial specified value																																																												
Shelf Life	After Leaving capacitor under no load at +85°C for 1000 hours, Capacitors meet the characteristics listed above.																																																																	

MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

Frequency(Hz)		50(60)	100(120)	400	1k	10k
Coefficient	10~50WV	0.80	1.00	1.03	1.05	1.08
	63~100WV	0.80	1.00	1.05	1.07	1.10
	160~450WV	0.80	1.00	1.10	1.13	1.18

Ancol



D±2.0	35	50	65	76	90
L±3.0	50 60 80 100	80 100	100 120	100 120 140	140 150
		120	140	150	
F±1.0	12.7	21.8	28.2	31.4	31.4

DIMENSIONS, RATED VOLTAGE AND CAPACITANCE

WV(V) p(μF)	1 0(LB)		1 6(LG)		25(LD)		35(LE)		50(LF)		63(LG)		80(LH)		
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	
300(332)													35×50	30	
900(392)													35×60	3.3	
700(472)												35×50	3.2	35×80	3.6
600(562)												35×60	3.5	35×80	3.9
800(682)							35×50	2.5	35×50	3.6	35×60	3.8	35×80	4.3	
200(822)							35×50	2.8	35×60	3.9	35×80	4.3	35×100	5.1	
3000(1 03)							35×50	3.8	35×80	4.2	35×80	4.7	35× 120	5.8	
2000(123)							35×60	4.3	35×80	5.0	35×100	5.6	50×80	7.0	
5000(153)					35×50	4.2	35×80	4.7	35×100	5.5	35×120	6.4	50×80	7.6	
8000(183)					35×60	4.6	35×80	5.1	35×100	5.7	50×80	7.5	50×100	7.7	
2000(223)			35×50	4.0	35×80	5.2	35×100	6.6	35×120	7.5	50×80	7.5	50× 120	9.0	
7000(273)	35×50	4.4	35×60	5.0	35×80	5.4	35×120	6.7	50×80	7.5	50×100	8.7	65×100	10.1	
3000(333)	35×60	5.5	35×80	5.0	35×100	6.5	50×80	7.1	50×100	9.3	50×120	10.3	65×120	11.6	
9000(393)	35×60	6.0	35×80	5.8	35×100	7.5	50×80	8.4	50×100	9.4	65×100	11.2	65×140	13.5	
7000(473)	35×80	6.6	35×100	6.8	35×20	~9	50×100	~9	50×120	11.7	65×120	12.9	76×100	15.8	
6000(563)	35×80	7.5	35×100	~9	50×80	10±~	50×100	11~3	65×100	12.4	65×140	15.2	76×120	17.0	
8000(683)	35×100	7.6	35×120	8.4	50×100	10.7	50×120	11.4	65×120	15.1	76×100	16.0	76×40	20.4	
2000(823)	35×120	9.0	50×80	8.4	50×100	12.0	65×100	12.5	76×100	15~	76×120	17.7	76×50	21.5	
3000(104)	5×80	10.2	50×100	11.3	50×120	13.1	65×120	15.5	76×100	16.3	76×40	21.5	90×40	22.3	
3000(124)	5×80	11.0	50×100	11.4	65×100	13.7	76×100	15.5	76×120	19.1	90×40	22.4			
3000(154)	5×100	13.4	50/120	12.5	65x120	16.4	76/120	17.9	76/140	23.4					
3000(184)	5×120	14.0	65/100	14.2	76/100	16.7	76/140	20.0	90/140	23.7					
3000(224)	6.5×100	14.5	65/120	16.6	76/120	20.5	76/150	24.1							
3000(274)	6.5×120	16.0	76/100	17.5	76/140	21.3	90/140	26.5							
3000(334)	7.6×100	18.0	76/120	24.3	76/150	26.0									
3000(394)	7.6×100	19.5	76/140	25.2	90/140	27.2									
3000(474)	7.6×120	20.0	76/150	26.7											
3000(564)	7.6×140	24.1	90/140	29.1											
3000(684)	90×140	26.5													

Ancol

AN CD138H GH DIMENSIONS, RATED VOLTAGE AND CAPACITANCE

wv(v) Cap(uF)	1 00(MA)		1 60(MB)		200(MC)		250(MD)		31 5(MQ)		350(MF)		400(VA)	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
220(221)											35×50	0.9	35×50	1.0
270(271)									35×50	1.0	35×50	1.0	35×60	1.0
330(331)									35×50	1.2	35×60	1.2	35×60	1.2
390(391)									35×60	1.3	35×80	1.3	35×80	1.4
470(471)							35×50	1.3	35×80	1.5	35×80	1.5	35×100	1.5
560(561)					35×50	1.4	35×60	1.6	35×80	1.6	35×100	1.7	35×100	1.7
680(681)					35×50	1.5	35×80	1.7	35×100	1.9	35×100	1.9	50×80	2.3
820(821)			35×50	1.4	35×80	1.9	35×80	1.9	35×120	2.2	35×120	2.1	50×100	2.4
1000(102)			35×60	1.9	35/80	2.2	35×100	2.3	50×80	2.3	50×100	2.5	50×20	2.7
1200(122)			35×80	2.3	35×80	2.3	35×100	2.4	50×100	2.7	50×100	2.7	50×120	3.0
1500(152)			35×80	2.6	35×100	2.9	35×120	2.9	50×100	3.1	50×120	3.3	65×100	3.5
1800(182)			35×80	2.6	35×100	2.9	35×120	3.0	50×120	3.6	65×100	3.8	65×120	3.6
2200(222)	35×50	2.9	35×100	3.2	35×120	3.3	50×100	3.8	65×100	4.2	65×120	4.6	76×100	4.1
2700(272)	35×60	3.4	35×120	3.2	50×80	3.8	50×120	4.5	65×120	4.3	76×100	4.6	76×120	4.8
3300(332)	35×80	3.9	35×120	3.7	50×100	4.7	65×100	5.2	76×100	4.9	76×120	5.3	76×140	5.7
3900(392)	35/80	4.2	50×100	4.3	50×120	5.4	65×120	5.2	76×120	5.8	76×140	6.2	90×140	6.7
4700(472)	35×80	4.6	50×100	4.8	65×100	6.2	65×120	5.7	76×120	6.3	90×140	7.4	90×140	7.4
5600(562)	35×100	4.9	50×120	5.5	65×100	6.3	76×100	6.4	76×140	7.3	90×140	8.1		
6800(682)	35×120	5.5	65×100	6.3	65×120	7.3	76×120	7.6	90×140	8.9				
8200(822)	50×80	6.2	65×120	7.1	76×100	8.5	76×140	8.3						
10000(103)	50×100	6.7	76×100	7.9	76×120	9.5	90×140	9.9						
12000(123)	50×100	7.3	76×120	9.0	76×140	10.5	90×140	10.8						
15000(153)	50×120	8.6	76×140	11.3	90×140	12.5								
18000(183)	65×100	8.9	90×140	13.0	90×140	13.3								
22000(223)	65×120	10.3	90×140	14.3										
27000(273)	65×140	12.1												
33000(333)	76×120	14.1												
39000(393)	76×140	16.5												
47000(473)	76×140	18.3												
56000(563)	90×140	19.2												
68000(683)														



Aluminum Electrolytic Capacitors

AN CD13S GS series

* Life time: **105.C 5000 hours**

* **Screw type**

* Suited for smoothing circuits for general purpose inverter control for
FA, machine designed for use as input filter capacitor for current



I SPECIFICATIONS

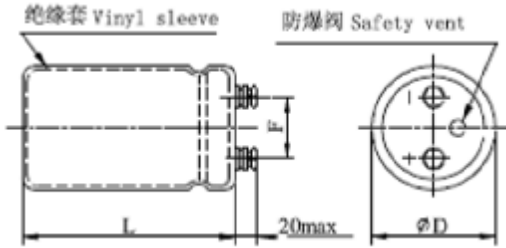
Item	Performance Characteristics																																																																
Rated Voltage Range	10V.DC~ 100V.DC	160V.DC~ 400V.DC																																																															
Operating Temperature Range	-40°C ~ + 105°C	-25°C ~ + 105°C																																																															
Nominal Capacitance Range	220 μF~680000 μF																																																																
Capacitance Tolerance	±20%(M,+20°C , 120Hz)																																																																
Leakage Current	After application of rated voltage for 5minutes:0.02CV or 5mA(whichever is greater)20°C C: Nominal Capacitance in u F V:Rated Working Voltage in V																																																																
Dissipation Factor	<table border="1"> <thead> <tr> <th>WV(V) ΦD</th> <th>10</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>350-450</th> </tr> </thead> <tbody> <tr> <td>35</td> <td>0.75</td> <td>0.60</td> <td>0.40</td> <td>0.30</td> <td>0.25</td> <td>0.20</td> <td>0.20</td> <td>0.15</td> <td>0.15</td> <td>0.20</td> </tr> <tr> <td>50</td> <td>1.00</td> <td>0.70</td> <td>0.50</td> <td>0.50</td> <td>0.30</td> <td>0.25</td> <td>0.20</td> <td>0.20</td> <td>0.15</td> <td>0.20</td> </tr> <tr> <td>65</td> <td>1.30</td> <td>0.80</td> <td>0.70</td> <td>0.60</td> <td>0.50</td> <td>0.30</td> <td>0.25</td> <td>0.25</td> <td>0.20</td> <td>0.25</td> </tr> <tr> <td>76-90</td> <td>1.50</td> <td>1.00</td> <td>0.80</td> <td>0.70</td> <td>0.60</td> <td>0.40</td> <td>0.30</td> <td>0.25</td> <td>0.20</td> <td>0.25</td> </tr> </tbody> </table>										WV(V) ΦD	10	16	25	35	50	63	80	100	160-250	350-450	35	0.75	0.60	0.40	0.30	0.25	0.20	0.20	0.15	0.15	0.20	50	1.00	0.70	0.50	0.50	0.30	0.25	0.20	0.20	0.15	0.20	65	1.30	0.80	0.70	0.60	0.50	0.30	0.25	0.25	0.20	0.25	76-90	1.50	1.00	0.80	0.70	0.60	0.40	0.30	0.25	0.20	0.25
WV(V) ΦD	10	16	25	35	50	63	80	100	160-250	350-450																																																							
35	0.75	0.60	0.40	0.30	0.25	0.20	0.20	0.15	0.15	0.20																																																							
50	1.00	0.70	0.50	0.50	0.30	0.25	0.20	0.20	0.15	0.20																																																							
65	1.30	0.80	0.70	0.60	0.50	0.30	0.25	0.25	0.20	0.25																																																							
76-90	1.50	1.00	0.80	0.70	0.60	0.40	0.30	0.25	0.20	0.25																																																							
Load Life	After applying rated voltage for 2000 hours at +105°C , Capacitors meet the characteristics requirement measured at +20°C listed below: <table border="1" style="margin-left: 20px;"> <tbody> <tr> <td>Capacitance Change</td> <td>Within ±15% of the initial measured value</td> </tr> <tr> <td>Leakage current</td> <td>Less than the initial specified value</td> </tr> <tr> <td>tan δ</td> <td>Less than 150% the initial specified value</td> </tr> </tbody> </table>										Capacitance Change	Within ±15% of the initial measured value	Leakage current	Less than the initial specified value	tan δ	Less than 150% the initial specified value																																																	
Capacitance Change	Within ±15% of the initial measured value																																																																
Leakage current	Less than the initial specified value																																																																
tan δ	Less than 150% the initial specified value																																																																
Shelf Life	After Leaving capacitor under no load at +105°C for 1000 hours, Capacitors meet the characteristics listed above.																																																																

MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

Frequency(Hz)		50(60)	100(120)	400	1k	10k
Coefficient	1 0~50WV	0.80	1 00	1 03	1. 05	1.08
	63 1 00WV	0.80	1.00	1 05	1. 07	1.10
	160-450WV	080	100	1 10	1. 13	1. 18

CASE SIZE TABLE



D±2.0	35	50	65	76	90
L±3.0	50 60 80 100	80 100 120	100 120 140	100 120 140 150	140 150
F±1.0	12.7	21.8	28.2	31.4	31.4

DIMENSIONS, RATED VOLTAGE AND CAPACITANCE

Vv(v) p(uF)	10(LB)		16(LC)		25(LD)		35(LE)		50(LF)		63(LG)		80(LH)	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
300(332)													35×50	3.0
390(392)													35×60	3.3
470(472)											35×50	3.2	35×80	3.6
560(562)											35×60	3.5	35×80	3.9
680(682)							35×50	2.5	35×50	3.6	35×60	3.8	35×80	4.3
820(822)							35×50	2.8	35×60	3.9	35×80	4.3	35×100	5.1
1000(103)							35×50	3.8	35×80	4.2	35×80	4.7	35×120	5.8
1200(123)							35×60	4.3	35×80	5.0	35×100	5.6	50×80	7.0
1500(153)					35×50	4.2	35×80	4.7	35×100	5.5	35×120	6.4	50×80	7.6
1800(183)					35×60	4.6	35×80	5.1	35×100	5.7	50×80	7.5	50×100	7.7
2200(223)			35×50	4.0	35×80	5.2	35×100	6.6	35×120	7.5	50×80	7.5	50×120	9.0
2700(273)	35×50	4.4	35×60	5.0	35×80	5.4	35×120	6.7	50×80	7.5	50×100	8.7	65×100	10.1
3300(333)	35×60	5.5	35×80	5.2	35×100	6.5	50×80	7.1	50×100	9.3	50×120	10.3	65×120	11.6
3900(393)	35×60	6.0	35×80	5.8	35×100	7.5	50×80	8.4	50×100	9.4	65×100	11.2	65×140	13.5
4700(473)	35×80	6.6	35×100	6.8	35×120	8.9	50×100	9.9	50×120	11.7	65×120	12.9	76×100	15.8
5600(563)	35×80	7.5	35×100	6.9	50×80	10.0	50×100	10.3	65×100	12.4	65×140	15.2	76×120	17.0
6800(683)	35×100	7.6	35×120	8.4	50×100	10.7	50×120	11.4	65×120	15.1	76×100	16.0	76×140	20.4
8200(823)	35×120	9.0	50×80	8.4	50×100	12.0	65×100	12.5	76×100	15.5	76×120	17.7	76×150	21.5
10000(104)	50×80	10.2	50×100	11.3	50×120	13.1	65×120	15.5	76×100	16.3	76×140	21.5	90×140	22.3
12000(124)	50×80	11.0	50×100	11.4	65×100	13.7	76×100	15.5	76×120	19.1	90×140	22.4		
15000(154)	50×100	13.4	50×120	12.5	65×120	16.4	76×120	17.9	76×140	23.4				
18000(184)	50×120	14.0	65×100	14.2	76×100	16.7	76×140	20.0	90×140	23.7				
22000(224)	65×100	14.5	65×120	16.6	76×120	20.5	76×150	24.1						
27000(274)	65×120	16.0	76×100	17.5	76×140	21.3	90×140	26.5						
33000(334)	76×100	18.0	76×120	24.3	76×150	26.0								
39000(394)	76×100	19.5	76×140	25.2	90×140	27.2								
47000(474)	76×120	20.0	76×150	26.7										
56000(564)	76×140	24.1	90×140	29.1										
68000(684)	90×140	26.5												

Ancol

AN CD13S GS DIMENSIONS, RATED VOLTAGE AND CAPACITANCE

wv(v) μF	100(MA)		160(MB)		200(MC)		250(MD)		315(MQ)		350(MF)		400(VA)	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
)(221)											35×50	0.9	35×50	1.0
)(271)									35×50	1.0	35×50	1.0	35×60	1.0
)(331)									35×50	1.2	35×60	1.2	35×60	1.2
)(391)									35×60	1.3	35×80	1.3	35×80	1.4
)(471)							35×50	1.3	35×80	1.5	35×80	1.5	35×100	1.5
)(561)					357.50	1.4	35×60	1.6	35×80	1.6	35×100	1.7	35×100	1.7
)(681)					35×50	1.5	35×80	1.7	35×100	1.9	35×100	1.9	50×80	2.3
)(821)			35×50	1.4	35×80	1.9	35×80	1.9	35×120	2.2	35×120	2.1	50×100	2.4
0(102)			35×60	1.9	35×80	2.2	35×100	2.3	50×80	2.3	50×100	2.5	50×120	2.7
0(122)			35×80	2.3	35×80	2.3	35×100	2.4	50×100	2.7	50×100	2.7	50×120	3.0
0(152)			35×80	2.6	35×100	2.9	35×120	2.9	50×100	3.1	50×120	3.3	65×100	3.5
0(182)			35×80	2.6	35×100	2.9	35×120	3.0	50×120	3.6	65×100	3.8	65×120	3.6
0(222)	35×50	2.9	35×100	3.2	35×120	3.3	50×100	3.8	65×100	4.2	65×120	4.6	76×100	4.1
0(272)	35×60	3.4	35×120	3.2	50×80	3.8	50×120	4.5	65×120	4.3	76×100	4.6	76×120	4.8
0(332)	35×80	3.9	35×120	3.7	50×100	4.7	65×100	5.2	76×100	4.9	76×120	5.3	76×140	5.7
0(392)	35×80	4.2	50×100	4.3	50×120	5.4	65×120	5.2	76×120	5.8	76×140	6.2	90×140	6.7
0(472)	35×80	4.6	50×100	4.8	65×100	6.2	65×120	5.7	76×120	6.3	90×140	7.4	90×140	7.4
0(562)	35×100	4.9	50×120	5.5	65×100	6.3	76×100	6.4	76×140	7.3	90×140	8.1		
0(682)	35×120	5.5	65×100	6.3	65×120	7.3	76×120	7.6	90×140	8.9				
0(822)	50×80	6.2	65×120	7.1	76×100	8.5	76×140	8.3						
0(103)	50×100	6.7	76×100	7.9	75×120	9.5	90×140	9.9						
0(123)	50×100	7.3	76×120	9.0	76×140	10.5	90×140	10.8						
0(153)	50×120	8.6	76×140	11.3	90×140	12.5								
0(183)	65×100	8.9	90×140	13.0	90×140	13.3								
0(223)	65×120	10.3	90×140	14.3										
0(273)	65×140	12.1												
0(333)	76×120	14.1												
0(393)	76×140	16.5												
0(473)	76×140	18.3												
0(563)	90×140	19.2												
0(683)														



Ancol

Aluminum Electrolytic Capacitors

AN CD138 GT series

* Life time:85°C 2000 hours

* Screw type

* Suited for smoothing circuits for general purpose inverter control for F.A.

Machine designed for use as input filter capacitor for current



I SPECIFICATIONS

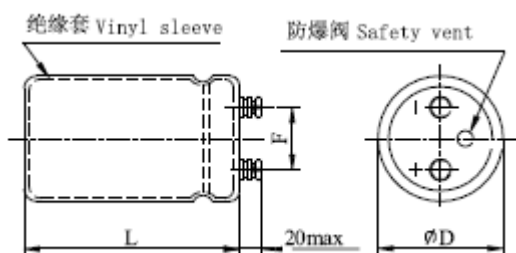
Item	Performance Characteristics																																																								
Rated Voltage Range	10V.DC~ 100V.DC	160V.DC~ 450V.DC																																																							
Operating Temperature Range	-40°C ~ + 85°C	-25°C ~ + 85°C																																																							
Nominal Capacitance Range	270 μF~1000000 μF																																																								
Capacitance Tolerance	±20%(M,+20°C , 120Hz)																																																								
Leakage Current	After application of rated voltage for 5minutes: $I \leq 0.02CV$ or 5mA(whichever is greater)20°C C: Nominal Capacitance in u F V:Rated Working Voltage in V																																																								
Dissipation Factor	<table border="1"> <thead> <tr> <th>WV(V) ΦD</th> <th>10</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>350-450</th> </tr> </thead> <tbody> <tr> <td>35</td> <td>0.75</td> <td>0.60</td> <td>0.40</td> <td>0.30</td> <td>0.25</td> <td>0.20</td> <td>0.20</td> <td>0.15</td> <td>0.15</td> <td>0.20</td> </tr> <tr> <td>50</td> <td>1.00</td> <td>0.70</td> <td>0.50</td> <td>0.50</td> <td>0.30</td> <td>0.25</td> <td>0.20</td> <td>0.20</td> <td>0.15</td> <td>0.20</td> </tr> <tr> <td>65</td> <td>1.30</td> <td>0.80</td> <td>0.70</td> <td>0.60</td> <td>0.50</td> <td>0.30</td> <td>0.25</td> <td>0.25</td> <td>0.20</td> <td>0.25</td> </tr> <tr> <td>76-90</td> <td>1.50</td> <td>1.00</td> <td>0.80</td> <td>0.70</td> <td>0.60</td> <td>0.40</td> <td>0.30</td> <td>0.25</td> <td>0.20</td> <td>0.25</td> </tr> </tbody> </table>		WV(V) ΦD	10	16	25	35	50	63	80	100	160-250	350-450	35	0.75	0.60	0.40	0.30	0.25	0.20	0.20	0.15	0.15	0.20	50	1.00	0.70	0.50	0.50	0.30	0.25	0.20	0.20	0.15	0.20	65	1.30	0.80	0.70	0.60	0.50	0.30	0.25	0.25	0.20	0.25	76-90	1.50	1.00	0.80	0.70	0.60	0.40	0.30	0.25	0.20	0.25
WV(V) ΦD	10	16	25	35	50	63	80	100	160-250	350-450																																															
35	0.75	0.60	0.40	0.30	0.25	0.20	0.20	0.15	0.15	0.20																																															
50	1.00	0.70	0.50	0.50	0.30	0.25	0.20	0.20	0.15	0.20																																															
65	1.30	0.80	0.70	0.60	0.50	0.30	0.25	0.25	0.20	0.25																																															
76-90	1.50	1.00	0.80	0.70	0.60	0.40	0.30	0.25	0.20	0.25																																															
Load Life	After applying rated voltage for 2000 hours at +86°C, Capacitors meet the characteristics requirement measured at +20°C listed below: <table border="1" style="margin-left: 20px;"> <tbody> <tr> <td>Capacitance Change</td> <td>Within ±15% of the initial measured value</td> </tr> <tr> <td>Leakage current</td> <td>Less than the initial specified value</td> </tr> <tr> <td>tan δ</td> <td>Less than 150% the initial specified value</td> </tr> </tbody> </table>		Capacitance Change	Within ±15% of the initial measured value	Leakage current	Less than the initial specified value	tan δ	Less than 150% the initial specified value																																																	
Capacitance Change	Within ±15% of the initial measured value																																																								
Leakage current	Less than the initial specified value																																																								
tan δ	Less than 150% the initial specified value																																																								
Shelf Life	After Leaving capacitor under no load at +85°C for 1000 hours, Capacitors meet the characteristics listed above.																																																								

MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

Frequency(Hz)		50(60)	100(120)	400	1k	≥10k
Coefficient	10-50WV	0.80	1.00	1.03	1.05	1.08
	63-100WV	0.80	1.00	1.05	1.07	1.08
	160-450WV	0.80	1.00	1.10	1.13	1.18

AN CD138 GT- CASE SIZE TABLE



D±1.5	35	50	65	76	90
L±3.0	506080100	80100120	100 120 140	100 120 140 150	140 150
F±1.0	12.7	21.8	28.2	31.4	31.4

DIMENSIONS, RATED VOLTAGE AND CAPACITANCE

wv(v) p(μF)	1 0(LB)		1 6(LC)		25(LD)		35(LE)		50(LF)		63(LG)		80(LH)	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
300(332)													35×50	2.50
900(392)													35×50	2.60
700(472)													35×50	2.80
600(562)											35×50	3.00	35×60	2.90
800(682)									35×50	3.30	35×50	3.20	35×80	3.70
1200(822)									35×50	3.70	35×60	3.80	35×80	4.20
3000(103)							35×50	3.60	35×50	4.30	35×80	4.10	35×100	5.00
2000(123)							35×50	3.70	35×60	5.30	35×80	4.40	50×80	5.40
5000(153)							35×50	4.00	35×80	5.50	35×100	5.50	50×80	7.70
8000(183)					35×50	5.00	35×60	4.70	35×80	5.70	50×80	6.20	50×80	7.80
2000(223)					35×60	5.40	35×80	5.60	35×100	6.10	50×80	7.10	50×80	8.00
7000(273)			35×50	5.10	35×80	5.80	35×80	6.20	50×80	6.70	50×80	7.40	50×100	8.70
3000(333)			35×60	5.10	35×80	6.00	35×80	6.30	50×80	7.10	50×100	8.80	50×120	10.5
9000(393)	35×50	5.00	35×80	7.10	35×80	6.70	35×100	7.60	50×80	7.40	50×120	10.0	65×100	12.1
2000(423)	35×60	6.00	35×80	7.30	35×100	8.00	50×80	8.70	50×100	8.70	65×100	11.9	65×100	14.4
5000(563)	35×80	6.30	35×100	7.60	50×80	8.40	50×80	10.0	50×100	9.80	65×100	12.6	65×120	15.0
8000(683)	35×80	7.90	35×100	10.3	50×80	9.30	50×80	10.8	50×120	12.0	65×120	15.0	65×140	16.8
2000(823)	35×80	8.40	50×80	10.5	50×80	10.0	50×100	12.0	65×100	12.3	76×100	16.4	76×120	19.4
3000(104)	50×80	9.30	50×80	10.9	50×100	12.0	50×120	13.6	65×120	14.2	76×120	18.9	76×140	21.5
5000(124)	50×80	10.0	50×100	11.1	50×120	12.9	65×100	13.8	65×120	16.0	76×140	21.6	90×140	22.3
7000(154)	50×80	11.0	50×100	12.6	65×100	15.3	65×100	14.6	76×120	18.6	90×140	26.0	90×150	26.5
10000(184)	50×100	12.1	50×120	13.2	65×100	15.5	65×120	16.7	76×140	19.5	90×150	30.8	90×150	31.7
15000(224)	50×100	14.0	65×100	14.7	65×120	18.0	76×100	17.4	90×140	23.3	90×150	37.0		
20000(274)	50×120	14.2	65×120	15.4	76×100	18.8	76×140	23.1	90×140	24.8				
30000(334)	65×100	17.3	65×140	18.3	76×120	23.2	76×150	25.9	90×150	29.0				
40000(394)	65×120	18.0	76×120	19.0	76×140	23.5	90×140	26.5	90×150	35.0				
50000(474)	65×140	19.3	76×140	22.0	90×140	24.7	90×150	28.3						
70000(564)	76×120	20.1	76×150	23.0	90×140	26.2	90×150	33.0						
100000(684)	76×140	24.0	76×150	27.0	90×140	30.8								
150000(824)	76×150	28.5	90×140	32.0	90×150	37.0								

Ancol

AN CD138 GT DIMENSIONS, RATED VOLTAGE AND CAPACITANCE

WV(V) Cap(uF)	100(MA)		160(MB)		200(MC)		250(MD)		350(MF)		400(VA)		450(VB)		
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(1)	(2)	(1)	
270(271)											35×50	1.30	35×50	1	
330(331)											35×50	1.70	35×60	1	
390(391)										35×50	1.90	35×60	1.80	35×80	2.
470(471)								35×50	1.60	35×60	2.10	35×80	2.30	35×80	2
560(561)								35×60	1.60	35×80	2.40	35×80	2.70	35×100	2
680(681)					35×50	1.60	35×60	1.70	35×80	2.90	35×100	2.90	50×80	3	
820(821)					35×50	1.70	35×60	1.80	35×100	3.40	35×100	3.40	50×80	3.	
1000(102)					35×60	2.20	35×80	2.40	35×100	3.80	50×80	3.90	50×80	4	
1200(122)			35×50	2.30	35×60	2.30	35×80	2.40	50×80	4.20	50×80	4.20	50×100	4	
1500(152)			35×60	3.20	35×80	2.90	35×100	3.10	50×80	4.70	50×100	4.80	50×120	5	
1800(182)			35×80	3.40	35×80	2.90	50×80	3.40	50×100	6.30	50×100	5.70	65×100	6	
2200(222)	35×50	2.50	35×80	3.60	35×100	3.60	50×80	3.90	50×100	6.40	50×120	7.00	65×100	7	
2700(272)	35×50	2.70	35×80	3.80	50×80	4.00	50×80	4.00	65×100	8.80	65×100	7.90	65×120	8	
3300(332)	35×50	3.20	50×80	4.70	50×80	4.60	50×100	5.40	65×100	8.80	65×120	9.50	76×120	10	
3900(392)	35×60	3.30	50×80	5.30	50×80	4.70	50×120	6.00	65×120	10.3	76×100	10.7	76×120	11	
4700(472)	35×80	3.50	50×80	5.60	50×100	7.10	65×100	7.30	76×100	12.0	76×120	12.8	76×140	12	
5600(562)	35×80	3.80	50×100	6.40	50×120	8.30	65×100	7.30	76×120	12.7	76×140	14.5	76×140	13	
6800(682)	35×100	4.50	50×100	7.50	65×100	9.50	65×120	8.90	76×140	16.0	76×150	17.5	90×150	14	
8200(822)	50×80	6.00	50×120	8.10	65×100	10.0	76×100	8.90	90×140	19.0	90×140	18.0			
10000(103)	50×80	6.30	65×100	9.90	65×120	11.1	76×120	11.8	90×140	20.0	90×150	20.8			
12000(123)	50×80	6.60	65×120	10.8	76×100	11.6	76×140	13.1							
15000(153)	50×80	8.50	76×100	12.7	76×120	12.9	96×140	16.5							
18000(183)	50×100	8.90	76×120	14.1	76×140	15.2									
22000(223)	50×120	10.2	76×140	16.6	90×140	15.6									
27000(273)	65×100	11.0	90×140	17.7											
33000(333)	65×120	11.7	90×140	18.9											
39000(393)	76×100	12.5													
47000(473)	76×120	14.5													
56000(563)	76×140	16.2													
68000(683)	76×150	18.3													
82000(823)	90×140	20.1													
100000(104)															

