Screw Type Aluminum Electrolytic Capacitors

NH [High Temperature, Long Life for Inverter]

High Ripple Current Products

DESCRIPTION

Endurance : 105°C 5000 Hours

MULTIPLIER FOR RIPPLE CURRENT

Frequency Coefficient

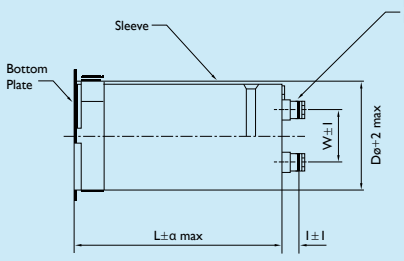
FREQUENCY (Hz)	50	120	1K	10K	50K
10~50V	0.95	1.00	1.05	1.09	1.12
63~100V	0.90	1.00	1.10	1.18	1.22
100~250V	0.80	1.00	1.22	1.30	1.33
350~500V	0.80	1.00	1.50	1.60	1.70

ELECTRICAL CHARACTERISTICS

Operating Temperature Range	-40 to +105°C	-25 to +105°C
Rated Voltage Range	10 ~ 100V	160 ~ 500V
Rated Capacitance Range	330 ~ 390000μF	
Capacitance Tolerance	±20% (120Hz, +20°C)	
Leakage Current	I = 0.02CV or 5mA whichever is smaller. (After 5 Minutes Application of DC Voltage at 20°C)	
Temperature Characteristics	Impedance Ratio at 120Hz Ur (V) 10~100 160~500 Z -25°C /Z +20°C - 8 Z -40°C / Z +20°C 12 -	
Endurance	After the rated voltage has been applied at 105°C for 5000 hours and then has resumed its original condition for 16 hours. (a) Capacitance Change: ±20% Initial Measured Value (b) Dissipation Factor: ≤ 2 Times Initial Specified Value (c) Leakage Current: ≤ Initial Specified Value	
Shelf Life	After having been stored for 1000 hours at 105°C, the rated voltage has been applied for 30 minutes and then has resumed its original condition for 16 hours. (a) Capacitance Change: ±20% Initial Measured Value (b) Dissipation Factor: ≤ 2 Times Initial Specified Value (c) Leakage Current: ≤ Initial Specified Value	

DIAGRAM OF DIMENSIONS

Unit: mm



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51	22	6	3	M5
63.5	28.6	6	3	M5
76	31.8	6	3	M5
89	31.8	6	3	M5

CASE SIZE & PERMISSIBLE RIPPLE CURRENT OF STANDARD PRODUCTS

D x L: mm

CAP.	RATED VOLTAGE WV (SURGE VOLTAGE WV)											
(μF)	10 (13)			16 (20)			25 (32)			35 (44)		
	SIZE	RIPPLE CURRENT	DISSIPATION FACTOR	SIZE	RIPPLE CURRENT	DISSIPATION FACTOR	SIZE	RIPPLE CURRENT	DISSIPATION FACTOR	SIZE	RIPPLE CURRENT	DISSIPATION FACTOR
8200										35 x 80	3.0	0.30
10000										35 x 80	3.3	0.30
12000							35 x 80	3.3	0.35	35 x 80	3.6	0.30
15000				35 x 50	2.9	0.45	35 x 80	3.7	0.35	35 x 80	4.1	0.30
18000				35 x 80	3.5	0.45	35 x 80	4.0	0.35	35 x 100	4.8	0.30
22000				35 x 80	3.9	0.45	35 x 80	4.5	0.35	35 x 120	5.2	0.35
27000	35 x 80	4.3	0.45	35 x 80	4.3	0.45	35 x 100	5.0	0.40	51 x 80	5.9	0.40
33000	35 x 80	4.7	0.45	35 x 100	4.8	0.50	35 x 120	5.9	0.40	51 x 100	6.6	0.40
39000	35 x 80	5.3	0.45	35 x 100	5.3	0.50	51 x 80	6.5	0.40	51 x 120	7.8	0.40
47000	35 x 100	6.1	0.45	35 x 120	6.2	0.50	51 x 100	7.9	0.40	51 x 120	8.0	0.45
56000	35 x 100	6.2	0.50	51 x 80	6.3	0.60	51 x 120	8.8	0.40	63.5 x 100	9.2	0.45
68000	35 x 120	6.8	0.60	51 x 100	7.6	0.60	51 x 120	9.1	0.50	63.5 x 120	11.0	0.45
82000	51 x 80	7.8	0.60	51 x 120	8.3	0.70	63.5 x 100	10.6	0.50	76 x 120	12.7	0.50
100000	51 x 100	8.5	0.70	51 x 120	9.2	0.70	63.5 x 120	11.4	0.60	76 x 140	13.5	0.60
120000	51 x 100	9.5	0.70	63.5 x 100	9.9	0.80	76 x 100	12.8	0.60	89 x 140	16.1	0.60
150000	63.5 x 100	11.0	0.80	76 x 100	12.3	0.80	76 x 120	13.7	0.75			
180000	63.5 x 100	12.1	0.80	76 x 120	14.5	0.80	76 x 140	16.1	0.76			
220000	76 x 100	13.2	1.00	76 x 140	15.2	1.00	89 x 140	16.6	1.00			
270000	76 x 120	14.4	1.20	89 x 140	16.8	1.20						
330000	76 x 140	17.0	1.20									
390000	89 x 140	18.6	1.40									

Note: 1. Max. Allowable Ripple Current: (A/rms) 105°C, 120Hz
2. Dissipation Factor: 120Hz / 20°C

CASE SIZE & PERMISSIBLE RIPPLE CURRENT OF STANDARD PRODUCTS

D x L: mm

CAP.	RATED VOLTAGE WV (SURGE VOLTAGE WV)											
(μF)	50 (63)			63 (79)			80 (100)			100 (125)		
	SIZE	RIPPLE CURRENT	DISSIPATION FACTOR	SIZE	RIPPLE CURRENT	DISSIPATION FACTOR	SIZE	RIPPLE CURRENT	DISSIPATION FACTOR	SIZE	RIPPLE CURRENT	DISSIPATION FACTOR
1200										35 x 50	1.4	0.15
1500										35 x 80	1.6	0.15
1800										35 x 80	1.8	0.15
2200							35 x 50	1.9	0.15	35 x 80	2.0	0.15
2700				35 x 50	1.9	0.19	35 x 80	2.2	0.15	35 x 80	2.4	0.15
3300				35 x 50	2.1	0.15	35 x 80	2.5	0.15	35 x 100	2.8	0.15
3900	35 x 50	2.0	0.20	35 x 80	2.7	0.20	35 x 80	2.9	0.15	35 x 120	3.1	0.15
4700	35 x 50	2.2	0.25	35 x 80	2.9	0.20	35 x 100	3.1	0.15	51 x 80	3.6	0.15
5600	35 x 80	2.8	0.25	35 x 80	3.2	0.20	35 x 100	3.6	0.15	51 x 100	4.3	0.15
6800	35 x 80	3.0	0.25	35 x 80	3.5	0.20	35 x 120	4.1	0.20	51 x 120	5.0	0.15
8200	35 x 80	3.3	0.25	35 x 100	4.2	0.25	51 x 80	4.8	0.20	51 x 120	5.5	0.15
10000	35 x 80	3.7	0.25	35 x 120	4.3	0.25	51 x 100	5.6	0.20	63.5 x 100	6.4	0.15
12000	35 x 100	4.4	0.25	51 x 80	4.8	0.25	51 x 100	6.1	0.20	63.5 x 120	6.6	0.20
15000	35 x 120	4.7	0.30	51 x 100	5.9	0.25	51 x 120	7.4	0.20	76 x 100	7.5	0.20
18000	51 x 80	4.8	0.35	51 x 120	6.3	0.30	63.5 x 120	8.0	0.25	76 x 120	8.0	0.25
22000	51 x 100	5.9	0.35	51 x 120	6.7	0.30	76 x 100	9.1	0.25	76 x 140	9.4	0.25
27000	51 x 120	7.0	0.35	63.5 x 120	8.8	0.30	76 x 120	9.7	0.30	89 x 140	10.4	0.30
33000	63.5 x 100	7.6	0.40	76 x 120	10.0	0.35	76 x 140	11.5	0.30			
39000	63.5 x 120	8.9	0.40	76 x 140	12.5	0.35	89 x 140	12.5	0.30			
47000	63.5 x 120	9.8	0.40	89 x 140	13.8	0.40						
56000	76 x 120	11.9	0.40									
68000	76 x 140	13.1	0.45									
82000	89 x 140	14.8	0.50									

Note: 1. Max. Allowable Ripple Current: (A/rms) 105°C, 120Hz

2. Dissipation Factor: 120Hz / 20°C

CASE SIZE & PERMISSIBLE RIPPLE CURRENT OF STANDARD PRODUCTS

D x L: mm

CAP.	RATED VOLTAGE WV (SURGE VOLTAGE WV)											
(μF)	160 (200)			200 (250)			250 (300)			350 (400)		
	SIZE	RIPPLE CURRENT	DISSIPATION FACTOR	SIZE	RIPPLE CURRENT	DISSIPATION FACTOR	SIZE	RIPPLE CURRENT	DISSIPATION FACTOR	SIZE	RIPPLE CURRENT	DISSIPATION FACTOR
330							35 x 50	0.7	0.15			
390							35 x 80	0.8	0.15			
470				35 x 50	0.9	0.15	35 x 80	0.9	0.15			
560				35 x 80	1.0	0.15	35 x 80	1.0	0.15			
680	35 x 50	1.1	0.15	35 x 80	1.1	0.15	35 x 100	1.2	0.15			
820	35 x 80	1.2	0.15	35 x 80	1.3	0.15	35 x 100	1.4	0.15	51 x 81	3.3	0.25
1000	35 x 80	1.3	0.15	35 x 80	1.5	0.15	35 x 120	1.6	0.15			
1200	35 x 80	1.5	0.15	35 x 100	1.7	0.15	51 x 80	1.8	0.15			
1500	35 x 80	1.7	0.15	35 x 120	1.9	0.15	51 x 100	2.2	0.15	51 x 90	5.2	0.25
1800	35 x 100	2.0	0.15	35 x 120	2.2	0.15	51 x 120	2.6	0.15			
2200	35 x 120	2.3	0.15	51 x 80	2.7	0.15	51 x 120	2.8	0.15	51 x 100	7.0	0.25
2700	35 x 120	2.7	0.15	51 x 100	3.2	0.15	63.5 x 100	3.3	0.15	51 x 130	8.4	0.25
										63.5 x 90	8.1	0.25
3300	51 x 100	3.3	0.15	51 x 120	3.5	0.15	63.5 x 120	4.0	0.15	51 x 150	9.9	0.25
3900	51 x 120	3.8	0.15	63.5 x 100	4.0	0.15	76 x 100	4.4	0.15	63.5 x 130	11.5	0.25
										76 x 90	10.8	0.25
4700	51 x 120	4.2	0.15	63.5 x 120	4.7	0.15	76 x 120	5.2	0.15			
5600	51 x 120	4.7	0.15	76 x 100	5.3	0.15	76 x 140	6.1	0.15	63.5 x 150	14.7	0.25
6800	63.5 x 120	5.7	0.15	76 x 120	6.3	0.15	89 x 140	7.4	0.15	76 x 130	16.8	0.25
8200	76 x 100	6.4	0.20	76 x 140	6.4	0.20				76 x 150	19.6	0.25
10000	76 x 120	6.8	0.20	89 x 140	7.7	0.20				76 x 190	23.0	0.25
12000	76 x 140	7.8	0.20									
15000	89 x 140	9.5	0.20							89 x 190	30.6	0.25
22000										89 x 270	43.5	0.25

Note: 1. Max. Allowable Ripple Current: (A/rms) 105°C, 120Hz
2. Dissipation Factor: 120Hz / 20°C

CASE SIZE & PERMISSIBLE RIPPLE CURRENT OF STANDARD PRODUCTS

D x L: mm

CAP.	RATED VOLTAGE WV (SURGE VOLTAGE WV)								
(μF)	400 (450) SIZE	RIPPLE CURRENT	DISSIPATION FACTOR	450 (500) SIZE	RIPPLE CURRENT	DISSIPATION FACTOR	500 (550) SIZE	RIPPLE CURRENT	DISSIPATION FACTOR
470							51 x 80	2.4	0.20
560				51 x 80	2.6	0.25			
680	51 x 80	3.0	0.25						
820							51 x 90	3.6	0.20
1000				51 x 90	4.0	0.25	51 x 110	4.4	0.20
1200	51 x 90	4.7	0.25	51 x 110	4.8	0.25	51 x 130	5.2	0.20
							63.5 x 90	5.0	0.20
1500							51 x 150	6.3	0.20
1800	51 x 110	6.3	0.25	51 x 130	6.4	0.25	63.5 x 110	6.8	0.20
				63.5 x 90	6.2	0.25			
2200	51 x 130	7.5	0.25	51 x 150	7.6	0.25			
	63.5 x 90	7.3	0.25	63.5 x 100	7.5	0.25			
2700	51 x 150	8.9	0.25	63.5 x 130	8.9	0.25	63.5 x 150	9.6	0.20
	63.5 x 110	8.8	0.25	76 x 90	8.4	0.25	76 x 110	9.2	0.20
3300	63.5 x 130	10.5	0.25	63.5 x 150	10.6	0.25			
	76 x 90	9.9	0.25	76 x 110	10.2	0.25			
3900				76 x 130	11.9	0.25	76 x 150	12.7	0.20
							89 x 130	11.9	0.20
4700	63.5 x 150	13.4	0.25	76 x 150	14.0	0.25			
	76 x 130	13.9	0.25						
5600				89 x 130	14.2	0.25			
6800	76 x 150	17.9	0.25	76 x 190	17.3	0.25	89 x 190	18.8	0.20
	89 x 130	17.2	0.25	89 x 150	16.7	0.25			
8200	76 x 190	20.8	0.25						
	89 x 150	20.1	0.25						
10000				89 x 190	22.8	0.25	89 x 270	26.8	0.20
12000	89 x 190	27.4	0.25						
15000				89 x 270	32.8	0.25			
22000	89 x 270	39.4	0.25						

Note: 1. Max. Allowable Ripple Current: (A/rms) 105°C, 120Hz

2. Dissipation Factor: 120Hz / 20°C