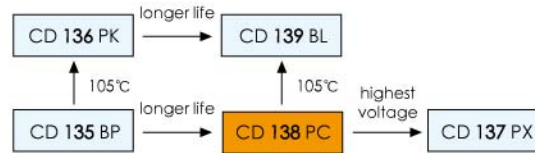




CD 138 PC Series

5000h at 85°C

- Long Life
- High Reliability
- High Currents for High Professional Applications and High Power Inverter

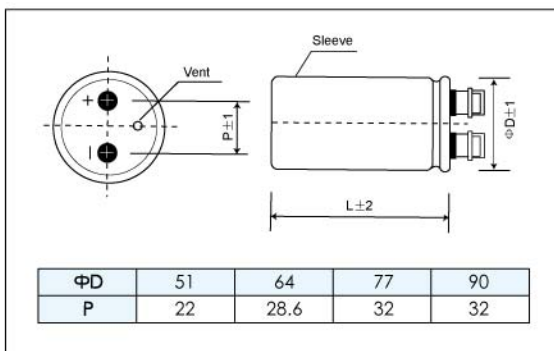


Item	Characteristics
Operating Temperature Range (°C)	-40 ~ +85
Voltage Range (V)	350 ~ 450
Capacitance Range (μF)	1000 ~ 18000
Capacitance Tolerance (20°C, 120Hz)	± 20%
Leakage Current (μA)	After 5 minutes at 20°C application of rated voltage, leakage current is not more than 0.01CV or 5mA, whichever is smaller. C: Nominal Capacitance (μF) V: Rated Voltage (V)
Dissipation Factor (20°C, 120Hz)	Less than 0.15

	Useful Life		Load Life	Endurance Test	Shelf Life
Lifetime	10000h	>100000h	5000h	5000h	1000h
Leakage Current	Not more than specified value		Not more than specified value	Not more than specified value	Not more than specified value
Capacitance Change	Within ± 30% of initial value		Within ± 20% of initial value	Within ± 10% of initial value	Within ± 20% of initial value
Dissipation Factor	Not more than 300% of specified value		Not more than 200% of specified value	Not more than 130% of specified value	Not more than 200% of specified value
Condition: Applied Voltage Applied Current Applied Temperature Failure Rate Level	U_R I_R 85°C ≤ 1% Failure Rate	U_R $1.4 \times I_R$ 40°C ≤ 1% Failure Rate	U_R I_R 85°C guaranteed	U_R $I_R = 0$ 85°C	$U_R = 0$ $I_R = 0$ 85°C After test: U_R to be applied for 30min >24h before measurement

Dimensions

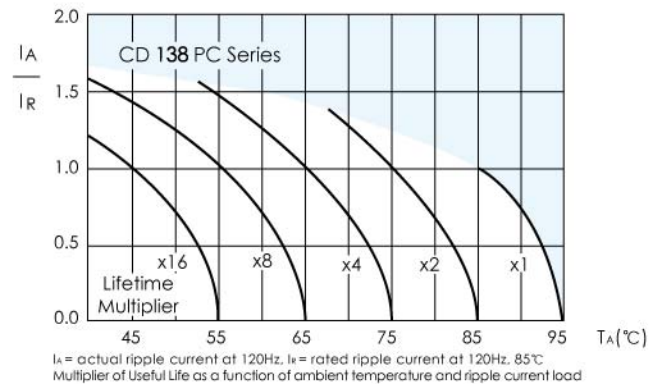
mm



Frequency Coefficient

Frequency	50Hz	120Hz	300Hz	1kHz	≥ 10kHz
Factor	0.70	1.00	1.10	1.30	1.40

Lifetime Diagram



LARGE SIZE



Ratings for CD 138 PC Series

Ur (Surge Voltage) Code	Rated Capa- citan- ce	Max ESR 20°C, 120Hz	Typ ESR 20°C, 120Hz	Rated Ripple Current 85°C, 120Hz	Size Φ D x L
(V)	(μF)	(mΩ)	(mΩ)	(Arms)	(mm)
350 (400) 2V	1200	215	67	5.50	51×83
	1500	172	55	6.10	51×83
	1800	143	43	7.40	51×96
	2200	117	30	8.20	51×96
	2700	96	27	10.20	51×130
	3300	78	23	11.30	51×130
	3900	66	19	12.80	64×115
	4700	55	16	14.80	64×130
	5600	46	14	16.30	77×115
	6800	38	13	18.80	77×130
	8200	31	11	22.10	77×155
	10000	26	10	25.90	90×157
	12000	22	8	28.40	90×157
	15000	17	6	34.60	90×196
	18000	14	4	41.40	90×236
400 (450) 2G	1000	215	72	5.00	51×83
	1200	179	80	5.50	51×83
	1500	143	50	6.70	51×96
	1800	119	40	7.40	51×96
	2200	98	28	9.20	51×130
	2700	80	23	9.90	64×96
	3300	65	21	11.80	64×115

Ur (Surge Voltage) Code	Rated Capa- citan- ce	Max ESR 20°C, 120Hz	Typ ESR 20°C, 120Hz	Rated Ripple Current 85°C, 120Hz	Size Φ D x L
(V)	(μF)	(mΩ)	(mΩ)	(Arms)	(mm)
400 (450) 2G	3900	55	19	13.50	64×130
	4700	46	15	14.90	77×115
	5600	39	14	17.00	77×130
	6800	32	13	20.20	77×155
	8200	26	12	23.50	90×157
	10000	22	10	25.90	90×157
	12000	18	8	31.00	90×196
	15000	14	6	37.50	90×236
450 (500) 2W	1000	215	93	5.00	51×83
	1200	179	69	6.00	51×96
	1500	143	56	7.20	51×115
	1800	119	45	8.30	51×130
	2200	98	35	9.00	64×96
	2700	80	30	10.70	64×115
	3300	65	24	12.40	64×130
	3900	55	20	13.60	77×115
	4700	46	16	15.60	77×130
	5600	38	13	18.30	77×155
	6800	32	11	21.40	90×157
	8200	26	10	23.50	90×157
	10000	22	9	28.30	90×196
	12000	18	8	33.60	90×236

Customer products are available on request.

Typical Curves

