

5000h at 85°C

- Features
 - High Reliability at High Voltage
 - Long Life at Compact Size
 - RoHS Compliant
- Applications
 - Professional Inverters and Power Supplies

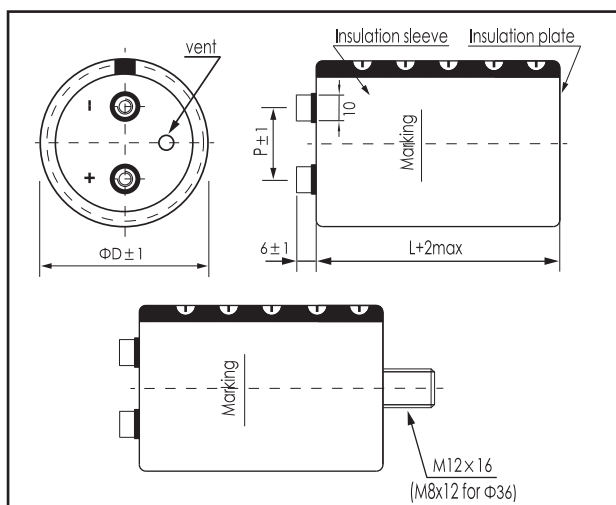


Items	Characteristics				
Operating Temperature Range (°C)	-40 ~ +85				
Voltage Range (V)	400 ~ 550				
Capacitance Range (µF)	1000 ~ 22000				
Capacitance Tolerance (20°C, 120Hz)	± 20%				
Leakage Current (µA)	After 5 minutes at 20°C application of rated voltage, leakage current is not more than 0.01CV or 5mA, whichever is smaller. C: Nominal Capacitance (µF) V: Rated Voltage (V)				
Dissipation Factor (20°C, 120Hz)	$U_R(V)$	400	450	500	550
	$\tan\delta_{max}$	0.15		0.20	

	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	U_R I_R 85°C	U_R $1.2 \times I_R$ 40°C	U_R I_R 85°C	U_R $I_R = 0$ 85°C	$U_R = 0$ $I_R = 0$ 85°C After test: U_R to be applied for 60min >24h before measurement

Dimensions

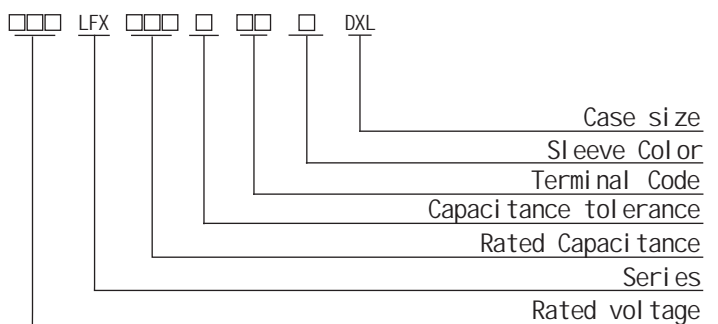
mm



ΦD/mm	51	64	77	90	101
P/mm	22.0	28.2	31.4	31.4	41.5

*Hex head screw M5 x 10 and M6 x 12 are standard screws. Longer screws are available on request.
 *Max tightening torque for screw terminal M5: 3Nm, M6: 4Nm. Max torque for bolt mounting M12: 12.5Nm.
 *Screws, Bracket and cap nut will be delivered separately. See "Accessories" for shape and dimensions

Part Number System



Ripple Current Coefficient

Frequency (Hz)	50/60	120	300	1k	>10k
Coefficient	0.80	1.00	1.10	1.30	1.40

Ambient Temp (°C)	40	60	85
Coefficient	1.89	1.67	1.00

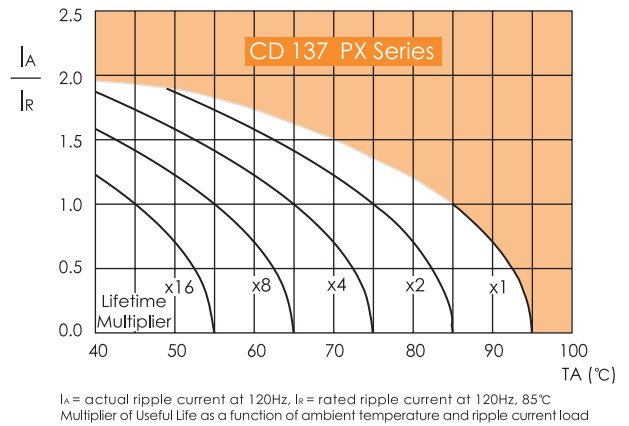
The useful life can be prolonged by operating capacitor at loads below the rated values (e.g. lower operating voltage, Rms ripple current or ambient temperature) and by appropriate cooling measures.
 It is advisable not to apply a ripple current exceeding the rated ripple current without any cooling measures as this will shorten capacitor's life.

Ratings for CD 137 Series

U _R (Surge Voltage) Code	Rated Capaci- tance	Max.ESR 20°C, 120Hz	Typ ESR 20°C, 120Hz	Rated Ripple Current 85°C, 120Hz	Size ΦD x L
(V)	(μF)	(mΩ)	(mΩ)	(Arms)	(mm)
400 (450) 2G	2200	98	28	8.8	51 × 115
	2700	80	24	10.2	51 × 130
	3300	65	21	11.0	64 × 96
	3900	55	19	12.8	64 × 115
	4700	46	15	14.8	64 × 130
	5600	38	14	16.2	77 × 115
	6800	32	13	18.7	77 × 130
	8200	26	12	22.0	77 × 155
	10000	22	10	26.7	77 × 195
	10000	22	10	24.2	90 × 131
	12000	18	8	28.5	90 × 157
	15000	14	6	34.8	90 × 196
	18000	12	5	41.2	90 × 236
	22000	10	5	47.0	101 × 237
450 (500) 2W	1800	119	45	7.6	51 × 115
	2200	98	35	8.8	51 × 130
	2700	80	30	9.5	64 × 96
	3300	65	24	11.2	64 × 115
	3900	55	20	12.8	64 × 130
	4700	46	16	14.1	77 × 115
	5600	38	13	16.2	77 × 130
	6800	32	11	19.1	77 × 155
	8200	26	10	23.0	77 × 195
	8200	26	10	21.0	90 × 131
	10000	22	9	25.7	90 × 171
	12000	18	8	29.7	90 × 196
	12000	18	8	29.3	101 × 175
	15000	14	7	35.9	90 × 236
15000	14	7	34.2	101 × 195	
18000	12	6	40.5	101 × 237	
500 (550) 2H	1200	215	94	6.2	51 × 115
	1200	215	94	6.3	64 × 96
	1500	172	72	7.3	51 × 130
	1500	172	72	7.1	64 × 96
	1800	143	51	8.3	64 × 115
	2200	117	40	9.6	64 × 130
	2700	96	35	10.7	77 × 115
	3300	78	30	12.4	77 × 130
	3900	66	25	14.4	77 × 155
	4700	55	24	16.5	77 × 171
	4700	55	24	15.8	90 × 131
	5600	46	22	19.0	77 × 195
	5600	46	22	18.6	90 × 157
	6800	38	19	21.2	90 × 171
	8200	31	14	24.5	90 × 196
	8200	31	14	24.2	101 × 175
	10000	26	12	29.3	90 × 236
	10000	26	12	27.9	101 × 195
12000	22	11	33.1	101 × 237	
550 (600) 2Y	1000	258	110	5.9	51 × 130
	1200	215	95	6.8	64 × 115
	1500	172	74	8.0	64 × 130
	1800	143	72	8.7	77 × 115
	2200	117	50	10.1	77 × 130
	2700	96	40	12.0	77 × 155
	3300	78	36	13.3	77 × 155
	3900	66	30	15.5	90 × 157
	4700	55	24	17.6	90 × 171
	5600	46	20	20.3	90 × 196
	6800	38	16	24.1	90 × 236
	8200	31	14	27.3	101 × 237

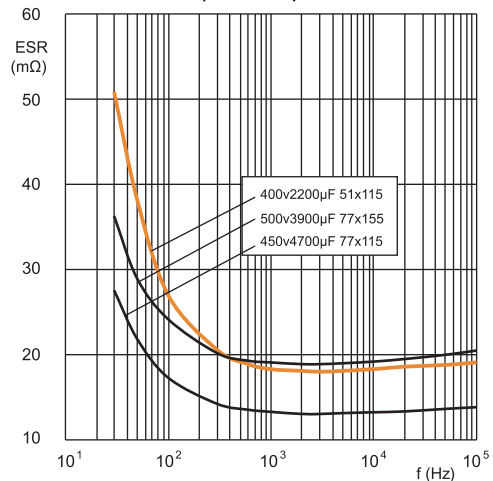
Mounting code(B "for bolt mounting, Y/I/N "for bracket mounting)
Terminal options(A,B,C see "Dimensions" for details.)

Lifetime Diagram



Typical Curves

ESR ~ Frequency f at 20°C



Impedance Z ~ Frequency f at 20°C

