

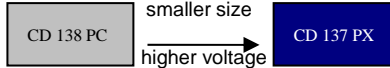
## 5000h at 85°C

### ■ Features

- High Reliability at High Voltage
- Long Life at Compact Size
- RoHS Compliant

### ■ Applications

- Professional Inverters and Power Supplies

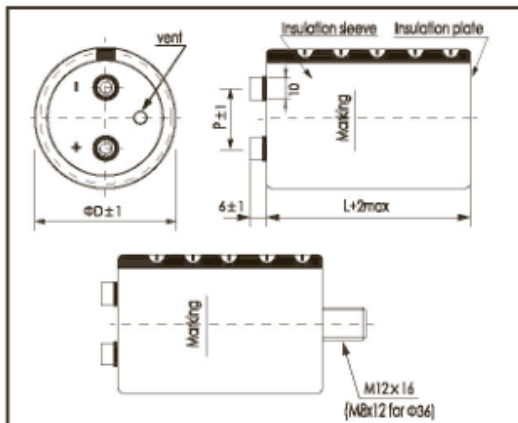


Items	Characteristics										
Operating Temperature Range(°C)	-40 ~ +85										
Voltage Range (V)	400~550										
Capacitance Range(µF)	1000~22000										
Capacitance Tolerance (20°C,120Hz)	±20%										
Leakage Current (µA)	After 5 minutes at 20°C application of rated voltage, leakage current is not more than 0.01CV or 5mA, whichever is smaller. C: Nominal Capacitance(µF) V: Rated Voltage(V)										
Dissipation Factor (20°C, 120Hz)	<table border="1"> <tr> <td>U<sub>R</sub> (V)</td> <td>400</td> <td>450</td> <td>500</td> <td>550</td> </tr> <tr> <td>Tan δ .max</td> <td colspan="2">0.15</td> <td colspan="2">0.20</td> </tr> </table>	U <sub>R</sub> (V)	400	450	500	550	Tan δ .max	0.15		0.20	
	U <sub>R</sub> (V)	400	450	500	550						
Tan δ .max	0.15		0.20								

	Useful Life		Load Life	Endurance Test	Shelf Life
Life Time	> 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 <sub>R</sub> I <sub>R</sub> 85°C	U <sub>R</sub> 1.2×I <sub>R</sub> 40°C	U <sub>R</sub> I <sub>R</sub> 85°C	U <sub>R</sub> I <sub>R</sub> = 0 85°C	U <sub>R</sub> = 0 I <sub>R</sub> = 0 85°C  After test: U <sub>R</sub> to be applied for 60min>24h before measurement

### Dimensions

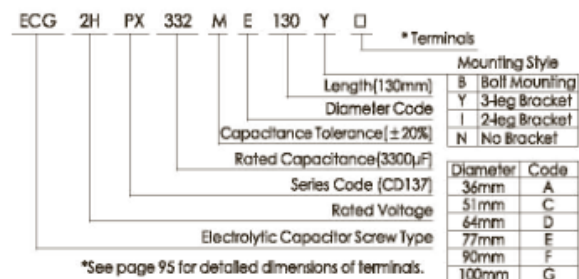
mm



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

\*Hex head screw MS x 10 and M6 x 12 are standard screws. Longer screws are available on request.  
 \*Max tightening torque for screw terminal M5: 3Nm, M6: 6Nm.  
 Max torque for bolt mounting M12: 12.5Nm.  
 \*Screws, bracket and cap nut will be delivered separately.  
 See "Accessories" (page 94.95) for shape and dimensions.

### Part Number System (Ex: 500v3300µF)



### 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.

# CD 137 PX SERIES



## Ratings for CD 137 PX Series

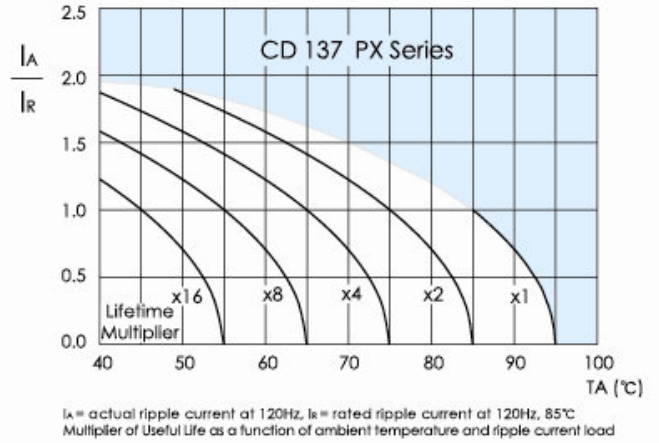
U <sub>r</sub> (Surge Voltage) Code	Rated Capacitance	Max .ESR 20°C, 120Hz	Typ ESR 20°C, 120Hz	Rated Ripple Current 85°C, 120Hz	Size ΦD x L	P/N
(V)	(μF)	(mΩ)	(mΩ)	(Arms)	(mm)	-
40 (450) 2G	2200	98	28	8.8	51X115	ECG2GPX222MC115 □□
	2700	80	24	10.2	Typical Cur	ECG2GPX272MC130 □□
	3300	65	21	11.0	64X96	ECG2GPX332MD096 □□
	3900	55	19	12.8	64X115	ECG2GPX392MD115 □□
	4700	46	15	14.8	64X130	ECG2GPX472MD130 □□
	5600	38	14	16.2	77X115	ECG2GPX562ME115 □□
	6800	32	13	18.7	77X130	ECG2GPX682ME130 □□
	8200	26	12	22.0	77X155	ECG2GPX822ME155 □□
	10000	22	10	26.7	77X195	ECG2GPX103MF195 □□
	10000	22	10	24.2	90X131	ECG2GPX103MF131 □□
	12000	18	8	28.5	90X157	ECG2GPX123MF157 □□
15000	14	6	34.8	90X196	ECG2GPX153MF196 □□	
18000	12	5	41.2	90X236	ECG2GPX183MF236 □□	
22000	10	5	47.0	101X237	ECG2GPX223MG237 □□	
450 (500) 2W	1800	119	45	7.6	51X115	ECG2WPX182MC115 □□
	2200	98	35	8.8	51X130	ECG2WPX222MC130 □□
	2700	80	30	9.5	64X96	ECG2WPX272MD096 □□
	3300	65	24	11.2	64X115	ECG2WPX332MD115 □□
	3900	55	20	12.8	64X130	ECG2WPX392MD130 □□
	4700	46	16	14.1	77X115	ECG2WPX472ME115 □□
	5600	38	13	16.2	77X130	ECG2WPX562ME130 □□
	6800	32	11	19.1	77X155	ECG2WPX682ME155 □□
	8200	26	10	23.0	77X195	ECG2WPX822ME195 □□
	8200	26	10	21.0	90X131	ECG2WPX822MF131 □□
	10000	22	9	25.7	90X171	ECG2WPX103MF171 □□
	12000	18	8	29.7	90X196	ECG2WPX123MF196 □□
	12000	18	8	29.3	101X175	ECG2WPX123MG175 □□
	15000	14	7	35.9	90X236	ECG2WPX153MF236 □□
15000	14	7	34.2	101X195	ECG2WPX153MG195 □□	
18000	12	6	40.5	101X237	ECG2WPX183MG237 □□	
500 (550) 2H	1200	215	94	6.2	51X115	ECG2HPX122MC115 □□
	1200	215	94	6.3	64X96	ECG2HPX122MD096 □□
	1500	172	72	7.3	51X130	ECG2HPX152MC130 □□
	1500	172	72	7.1	64X96	ECG2HPX152MD096 □□
	1800	143	51	8.3	64X115	ECG2HPX182MD115 □□
	2200	117	40	9.6	64X130	ECG2HPX222MD130 □□
	2700	96	35	10.7	77X115	ECG2HPX272ME115 □□
	3300	78	35	12.4	77X130	ECG2HPX332ME130 □□
	3900	66	25	14.4	77X155	ECG2HPX392ME155 □□
	4700	55	24	16.5	77X171	ECG2HPX472ME171 □□
	4700	55	24	15.8	90X131	ECG2HPX472MF131 □□
	5600	46	22	19.0	77X195	ECG2HPX562ME195 □□
	5600	46	22	18.6	90X157	ECG2HPX562MF157 □□
	6800	38	19	21.2	90X171	ECG2HPX682MF171 □□
	8200	31	14	24.5	90X196	ECG2HPX822MF196 □□
	8200	31	14	24.2	101X175	ECG2HPX822MG175 □□
	10000	26	12	29.3	90X236	ECG2HPX103MF236 □□
10000	26	12	27.9	101X195	ECG2HPX103MG195 □□	
12000	22	11	33.1	101X237	ECG2HPX123MG237 □□	
550 (600) 2Y	1000	258	110	5.9	51X130	ECG2YPX102MC130 □□
	1200	215	95	6.8	64X115	ECG2YPX122MD115 □□
	1500	172	74	8.0	64X130	ECG2YPX152MD130 □□
	1800	143	72	8.7	77X115	ECG2YPX182ME115 □□
	2200	117	50	10.1	77X130	ECG2YPX222ME130 □□
	2700	96	40	12.0	77X155	ECG2YPX272ME155 □□
	3300	78	36	13.3	77X155	ECG2YPX332ME155 □□
	3900	66	30	15.5	90X157	ECG2YPX392MF157 □□
	4700	55	24	17.6	90X171	ECG2YPX472MF171 □□
	5600	46	20	20.3	90X196	ECG2YPX562MF196 □□
	6800	38	16	24.1	90X236	ECG2YPX682MF236 □□
	8200	31	14	27.3	101X237	ECG2YPX822MG237 □□

Mounting code ("B" for bolt mounting, "Y/I/N" for bracket mounting)

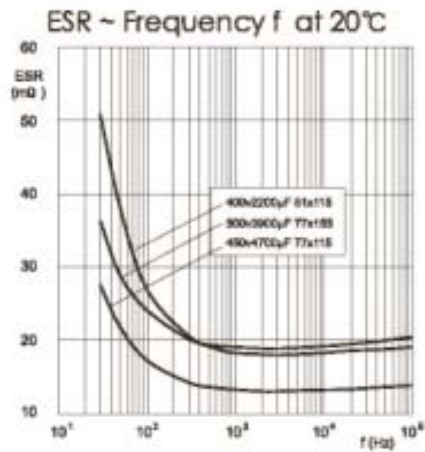
Terminal options (A, B, C see "Dimensions" for details.)

Customer products are available on request.

## Lifetime Diagram



## Typical Curves



### Impedance $Z$ ~ Frequency $f$ at 20°C

