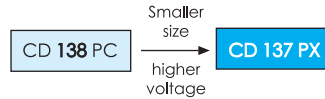


5000h at 85°C

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



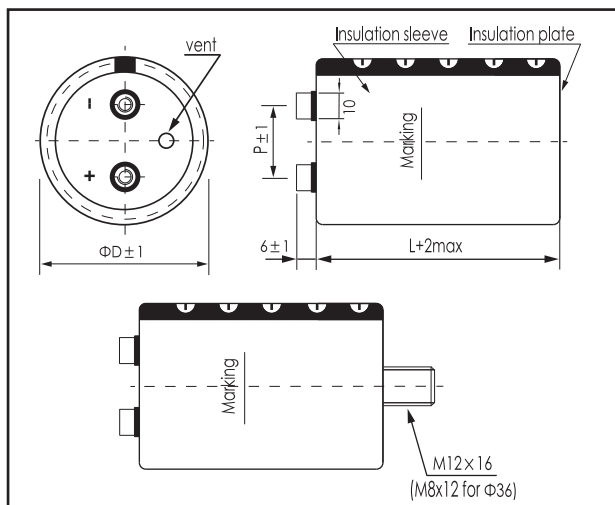
SCREW

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

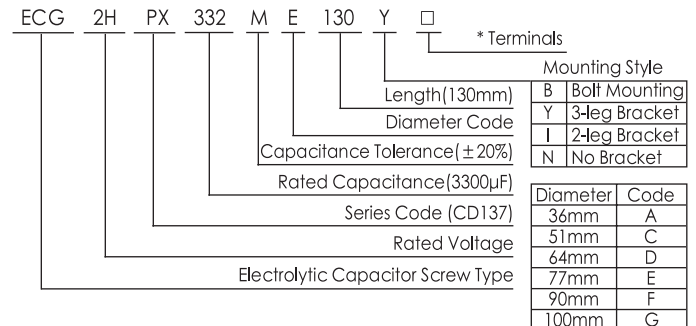
## Dimensions

mm



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

## 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

\*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.

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.

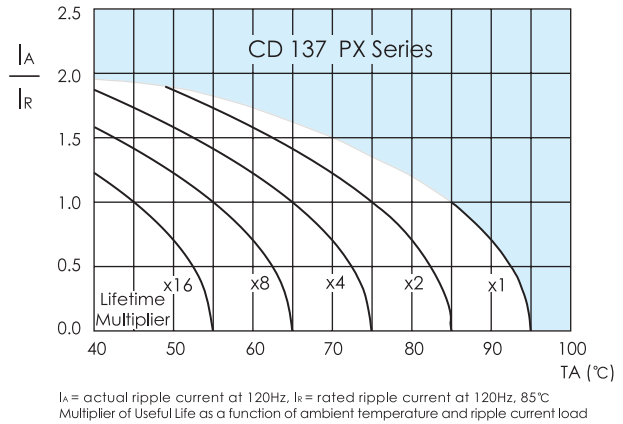
## Ratings for CD 137 PX Series

$U_r$ (Surge Voltage) Code	Rated Capacitance	Max.ESR 20°C, 120Hz	Typ ESR 20°C, 120Hz	Rated Ripple Current 85°C, 120Hz	Size $\Phi D \times L$	P/N
(V)	( $\mu F$ )	(m $\Omega$ )	(m $\Omega$ )	(Arms)	(mm)	-
400 (450) 2G	2200	98	28	8.8	51 x 115	ECC2GPX222MC115□□
	2700	80	24	10.2	51 x 130	ECC2GPX272MC130□□
	3300	65	21	11.0	64 x 96	ECC2GPX332MD096□□
	3900	55	19	12.8	64 x 115	ECC2GPX392MD115□□
	4700	46	15	14.8	64 x 130	ECC2GPX472MD130□□
	5600	38	14	16.2	77 x 115	ECC2GPX562ME115□□
	6800	32	13	18.7	77 x 130	ECC2GPX682ME130□□
	8200	26	12	22.0	77 x 155	ECC2GPX822ME155□□
	10000	22	10	26.7	77 x 195	ECC2GPX103ME195□□
	10000	22	10	24.2	90 x 131	ECC2GPX103MF131□□
	12000	18	8	28.5	90 x 157	ECC2GPX123MF157□□
	15000	14	6	34.8	90 x 196	ECC2GPX153MF196□□
	18000	12	5	41.2	90 x 236	ECC2GPX183MF236□□
	22000	10	5	47.0	101 x 237	ECC2GPX223MG237□□
	450 (500) 2W	1800	119	45	7.6	51 x 115
2200		98	35	8.8	51 x 130	ECC2WPX222MC130□□
2700		80	30	9.5	64 x 96	ECC2WPX272MD096□□
3300		65	24	11.2	64 x 115	ECC2WPX332MD115□□
3900		55	20	12.8	64 x 130	ECC2WPX392MD130□□
4700		46	16	14.1	77 x 115	ECC2WPX472ME115□□
5600		38	13	16.2	77 x 130	ECC2WPX562ME130□□
6800		32	11	19.1	77 x 155	ECC2WPX682ME155□□
8200		26	10	23.0	77 x 195	ECC2WPX822ME195□□
8200		26	10	21.0	90 x 131	ECC2WPX822MF131□□
10000		22	9	25.7	90 x 171	ECC2WPX103MF171□□
12000		18	8	29.7	90 x 196	ECC2WPX123MF196□□
12000		18	8	29.3	101 x 175	ECC2WPX123MG175□□
15000		14	7	35.9	90 x 236	ECC2WPX153MF236□□
15000		14	7	34.2	101 x 195	ECC2WPX153MG195□□
18000	12	6	40.5	101 x 237	ECC2WPX183MG237□□	
500 (550) 2H	1200	215	94	6.2	51 x 115	ECC2HPX122MC115□□
	1200	215	94	6.3	64 x 96	ECC2HPX122MD096□□
	1500	172	72	7.3	51 x 130	ECC2HPX152MC130□□
	1500	172	72	7.1	64 x 96	ECC2HPX152MD096□□
	1800	143	51	8.3	64 x 115	ECC2HPX182MD115□□
	2200	117	40	9.6	64 x 130	ECC2HPX222MD130□□
	2700	96	35	10.7	77 x 115	ECC2HPX272ME115□□
	3300	78	30	12.4	77 x 130	ECC2HPX332ME130□□
	3900	66	25	14.4	77 x 155	ECC2HPX392ME155□□
	4700	55	24	16.5	77 x 171	ECC2HPX472ME171□□
	4700	55	24	15.8	90 x 131	ECC2HPX472MF131□□
	5600	46	22	19.0	77 x 195	ECC2HPX562ME195□□
	5600	46	22	18.6	90 x 157	ECC2HPX562MF157□□
	6800	38	19	21.2	90 x 171	ECC2HPX682MF171□□
	8200	31	14	24.5	90 x 196	ECC2HPX822MF196□□
8200	31	14	24.2	101 x 175	ECC2HPX822MG175□□	
10000	26	12	29.3	90 x 236	ECC2HPX103MF236□□	
10000	26	12	27.9	101 x 195	ECC2HPX103MG195□□	
12000	22	11	33.1	101 x 237	ECC2HPX123MG237□□	
550 (600) 2Y	1000	258	110	5.9	51 x 130	ECC2YPX102MC130□□
	1200	215	95	6.8	64 x 115	ECC2YPX122MD115□□
	1500	172	74	8.0	64 x 130	ECC2YPX152MD130□□
	1800	143	72	8.7	77 x 115	ECC2YPX182ME115□□
	2200	117	50	10.1	77 x 130	ECC2YPX222ME130□□
	2700	96	40	12.0	77 x 155	ECC2YPX272ME155□□
	3300	78	36	13.3	77 x 155	ECC2YPX332ME155□□
	3900	66	30	15.5	90 x 157	ECC2YPX392MF157□□
	4700	55	24	17.6	90 x 171	ECC2YPX472MF171□□
	5600	46	20	20.3	90 x 196	ECC2YPX562MF196□□
	6800	38	16	24.1	90 x 236	ECC2YPX682MF236□□
	8200	31	14	27.3	101 x 237	ECC2YPX822MG237□□

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

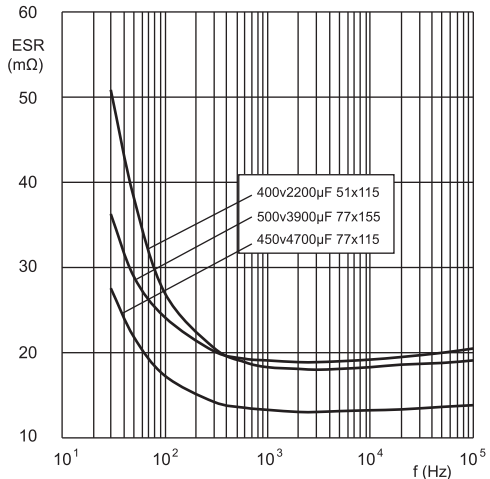
Customer products are available on request.

## Lifetime Diagram



## Typical Curves

### ESR ~ Frequency f at 20°C



### Impedance Z ~ Frequency f at 20°C

