

## CBB60B 型 DC-Link 电容器(PCB)

### CBB60B Type DC-Link Capacitor (PCB)

< 60°C/93%RH /1000h / U<sub>NDC</sub> >

#### ◆ 外形尺寸图及产品结构 Outline Drawing and Capacitor Construction

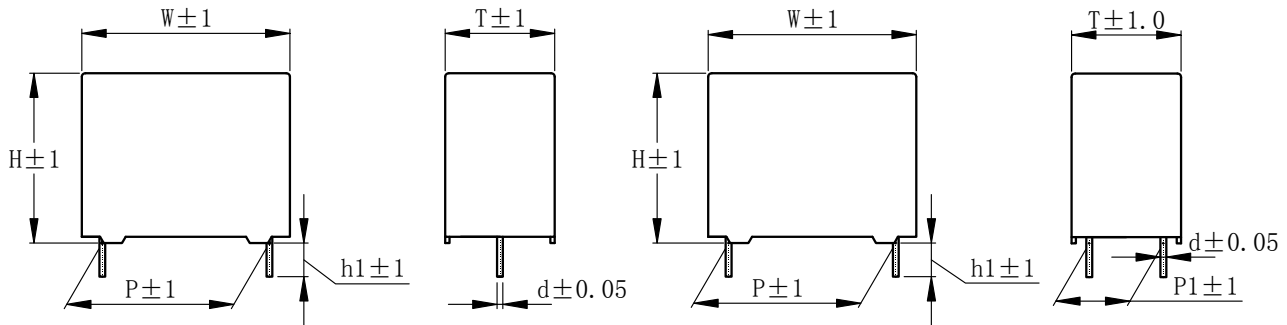


图 1: 2Pins

图 2: 4Pins

#### ◆ 特点及用途 Application and Feature

自感小，等效串联电阻小，大纹波电流承受能力，通常用于变频器、感应加热设备、UPS 等的直流母线滤波电路当中。

Low ESL, Low ESR, Support high ripple current, especially used in DC-Link circuit for UPS, inverter, induction heating equipment.

#### ◆ 技术要求 Specifications

参照标准 Reference Standard	GB/T 17702、IEC 61071	
气候类别 Climatic Category	40/85/56	
额定电压 Rated Voltage	500Vdc、600Vdc、800Vdc、900Vdc、1000Vdc、1100Vdc、1200Vdc	
工作温度范围(热点) Operation Temperature Range (Hot Spot)	-40°C~105°C (+85°C~+105°C: 1.35%/°C of U <sub>OP</sub> derating compared to U <sub>NDC</sub> at 85°C)	
电容量 Capacitance Range	1.0μF~110μF	
电容量偏差 Capacitance Tolerance	±5%(J)、±10%(K) (20±5°C,1kHz)	
耐电压 Voltage Proof	极间 Between Terminals	U=1.5U <sub>NDC</sub> (20°C, 10s)
	极壳 Between Terminals to Case	2000Vac (10s), 50Hz
绝缘电阻 Insulation Resistance	IR×C≥10 000s (20°C, 100Vdc, 1min)	
最大峰值电流 <sup>∧</sup> (A) Maximum Peak Current(A)	<sup>∧</sup> I = C <sub>R</sub> × dv/dt	
工作寿命 Operation Life Time	参照预期寿命曲线 Refer to Expected Lifetime Curves	
过电压 Over Voltage	一天之内的最长持续时间 Maximum Duration within Day	说明 Observation
	1.1 U <sub>NDC</sub> (30% of on-load-dur.)	系统调整 System Regulation
	1.15 U <sub>NDC</sub> (30min/day)	
	1.2 U <sub>NDC</sub> (5min/day)	
	1.3 U <sub>NDC</sub> (1min/day)	



# CBB60B

## CBB60B series

### ◆ 产品代码编写说明: Part number code system:

16 位产品代码如下: The 16 digits part number is formed as follow:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
C	6	0	B												

第 1~4 位	薄膜电容器系列代码 C60B=CBB60B	Digit 1~4	Series code of film capacitor C60B=CBB60B
第 5~7 位	标称容量代码 举例: 105=10×10 <sup>5</sup> pF=1μF	Digit 5~7	Rated capacitance value code For example: 105=10×10 <sup>5</sup> pF=1μF
第 8 位	容量等级代码 J=±5%K=±10%	Digit 8	Capacitance tolerance code J=±5%K=±10%
第 9~10 位	直流额定电压代码 2H=500V    1U=600V    1W=800V 1X=900V    3A=1000V 3K=1100V    3L=1200V	Digit 9~10	DC rated voltage code 2H=500V    1U=600V    1W=800V 1X=900V    3A=1000V 3K=1100V    3L=1200V
第 11 位	引线间距 B=27.5mm    E=37.5mm    G=52.5mm	Digit 11	Pitch B=27.5mm    E=37.5mm    G=52.5mm
第 12 位	内部特征码	Digit 12	Internal use
第 13~16 位	引出端代码 见表 1	Digit 13~16	Terminals code Referring to table 1
表 1	引线形式代码	Table 1	Lead form code

第13位 Digit13		第14~15位 Digit14~Digit15		第 16 位 Digit16	
引线形式及P1 Lead form and pitch P1		引线长度 Lead length		引线长度偏差 Length tolerance	
代码 Code	说明 explanation	代码 Code	说明 explanation	代码 Code	说明 explanation
0	2Pins P1=0mm	00	标准引线长度5.5mm standard lead length 5.5mm	0	引线长度偏差±1.0mm Length tolerance±1.0mm
1	4Pins P1=5.1mm				
2	4Pins P1=10.2mm				
3	4Pins P1=12.7mm				
4	4Pins P1=15.2mm				
5	4Pins P1=20.3mm				

◆ 产品尺寸及性能参数: Product Dimension and Characteristic Data:

U <sub>NDC</sub> (85℃): 500Vdc												
C (μF)	W	H	T	P	P1	d	dv/dt (V/μs)	tgδ×(10 <sup>-4</sup> )		ESR (mΩ)	I <sub>RMS</sub> (A)	产品代码 Part number
								1KHz	10KHz			
5	32	20	11	27.5	-	0.8	65	10	100	10.6	6	C60B505-2HB00000
10K	32	25	14	27.5	-	0.8	65	10	100	6.1	9	C60B106K2HB00000
15	32	33	18	27.8	-	0.8	65	10	100	5.0	12	C60B156-2HB00000
22	32	37	22	27.5	-	0.8	65	10	100	3.9	12	C60B226-2HB00000
20	42	30	18	37.5	-	1	30	15	150	7.0	10	C60B206-2HE00000
25	42	40	20	37.5	10.2	1	30	15	150	5.7	13.5	C60B256-2HE02000
30	42	40	20	37.5	10.2	1	30	15	150	4.8	14.5	C60B306-2HE02000
35	42	36	23	37.5	10.2	1	30	15	150	4.2	15.5	C60B356-2HE02000
40	42	37.5	27.5	37.5	10.2	1	30	15	150	3.8	17.5	C60B406-2HE02000
50	42	43	28	37.5	10.2	1	30	15	150	3.3	19	C60B506-2HE02000
50	42	43	28	37.5	12.7	1.2	30	15	150	3.0	20.5	C60B506-2HE03000
50	42	45	30	37.5	20.3	1.2	30	15	150	3.0	21	C60B506-2HE05000
60	42	45	30	37.5	20.3	1.2	30	15	150	2.6	23	C60B606-2HE05000
75	57	45	30	52.5	12.7	1.2	15	35	350	3.7	22	C60B756-2HG03000
75	57	45	30	52.5	20.3	1.2	15	35	350	3.7	22	C60B756-2HG05000
80	57	45	30	52.5	20.3	1.2	15	35	350	3.5	22.5	C60B806-2HG05000
100	57	50	35	52.5	20.3	1.2	15	35	350	2.9	26	C60B107-2HG05000
110	57	50	35	52.5	20.3	1.2	15	35	350	2.7	27	C60B117-2HG05000

U <sub>NDC</sub> (85℃): 600Vdc												
C (μF)	W	H	T	P	P1	d	dv/dt (V/μs)	tgδ×(10 <sup>-4</sup> )		ESR (mΩ)	I <sub>RMS</sub> (A)	产品代码 Part number
								1KHz	10KHz			
2	32	18	9	27.5	-	0.8	65	11	100	20.6	4	C60B205-1UB00000
3	32	20	11	27.5	-	0.8	65	11	100	14.2	5	C60B305-1UB00000
4	32	20	11	27.5	-	0.8	65	11	100	10.9	6	C60B405-1UB00000
5	32	22	13	27.5	-	0.8	65	11	100	9.0	7	C60B505-1UB00000
6	32	25	13	27.5	-	0.8	65	11	100	7.8	7.5	C60B605-1UB00000
7	32	25	14	27.5	-	0.8	65	11	100	6.9	8.5	C60B705-1UB00000
8	32	28	14	27.5	-	0.8	65	11	100	6.3	9	C60B805-1UB00000
9	32	28	17	27.5	-	0.8	65	11	100	5.8	10	C60B905-1UB00000
10	32	28	17	27.5	-	0.8	65	11	100	5.4	10.5	C60B106-1UB00000
12	32	33	18	27.5	-	0.8	65	11	100	4.9	11.5	C60B126-1UB00000
12	32	33	18	27.5	10.2	0.8	65	11	100	4.1	13	C60B126-1UB02000
15	32	37	22	27.5	-	0.8	65	11	100	4.4	12	C60B156-1UB00000
15	32	37	22	27.5	10.2	0.8	65	11	100	3.5	15	C60B156-1UB02000
18	32	37	22	27.5	-	0.8	65	11	100	4.0	12	C60B186-1UB00000
18	32	37	22	27.5	12.7	0.8	65	11	100	3.1	16	C60B186-1UB03000
10	42	26	15	37.5	-	1	30	20	175	11.5	7.5	C60B106-1UE00000
12	42	30	16	37.5	-	1	30	20	175	9.8	8.5	C60B126-1UE00000
15K	42	30	16	37.5	-	1	30	20	175	8.0	9.5	C60B156K1UE00000
20	42	40	20	37.5	10.2	1	30	20	175	5.9	13	C60B206-1UE02000
22	42	40	20	37.5	10.2	1	30	20	175	5.4	13.5	C60B226-1UE02000
25	42	40	20	37.5	12.7	1	30	20	175	4.9	14.5	C60B256-1UE03000
30	42	44	24	37.5	12.7	1	30	20	175	4.2	17	C60B306-1UE03000
35	42	45	30	37.5	12.7	1.2	30	20	175	3.5	19.5	C60B356-1UE03000
35	42	45	30	37.5	20.3	1.2	30	20	175	3.5	19.5	C60B356-1UE05000
40	42	45	30	37.5	12.7	1.2	30	20	175	3.1	20.5	C60B406-1UE03000
40	42	45	30	37.5	20.3	1.2	30	20	175	3.1	20.5	C60B406-1UE05000



# CBB60B

CBB60B series

◆ 产品尺寸及性能参数: Product Dimension and Characteristic Data:

U <sub>NDC</sub> (85°C): 600Vdc												
C (μF)	W	H	T	P	P1	d	dv/dt (V/μs)	tgδ×(10 <sup>-4</sup> )		ESR (mΩ)	I <sub>RMS</sub> (A)	产品代码 Part number
								1KHz	10KHz			
45	42	50	35	37.5	12.7	1.2	30	20	175	2.9	23.5	C60B456-1UE03000
45	42	50	35	37.5	20.3	1.2	30	20	175	2.9	23.5	C60B456-1UE05000
50	42	50	35	37.5	20.3	1.2	30	20	175	2.6	24.5	C60B506-1UE05000
55	42	50	35	37.5	20.3	1.2	30	20	175	2.5	25.5	C60B556-1UE05000
56	42	50	35	37.5	20.3	1.2	30	20	175	2.5	25.5	C60B566-1UE05000
60	42	55	40	37.5	20.3	1.2	30	20	175	2.3	28	C60B606-1UE05000
65	42	55	40	37.5	20.3	1.2	30	20	175	2.2	28.5	C60B656-1UE05000
70	42	55	40	37.5	20.3	1.2	30	20	175	2.1	29.5	C60B706-1UE05000
75	42	60	45	37.5	20.3	1.2	30	20	175	2.0	31.5	C60B756-1UE05000
80	42	60	45	37.5	20.3	1.2	30	20	175	1.9	32.5	C60B806-1UE05000
85	42	60	45	37.5	20.3	1.2	30	20	175	1.9	33	C60B856-1UE05000
40	57	45	25	52.5	12.7	1.2	15	36	350	5.5	17	C60B406-1UG03000
45	57	45	25	52.5	12.7	1.2	15	36	350	4.9	18	C60B456-1UG03000
50	57	45	25	52.5	12.7	1.2	15	36	350	4.5	19	C60B506-1UG03000
55	57	45	30	52.5	12.7	1.2	15	36	350	4.1	20.5	C60B556-1UG03000
55	57	45	30	52.5	20.3	1.2	15	36	350	4.1	20.5	C60B556-1UG05000
60	57	45	30	52.5	12.7	1.2	15	36	350	3.8	21.5	C60B606-1UG03000
60	57	45	30	52.5	20.3	1.2	15	36	350	3.8	21.5	C60B606-1UG05000
65	57	50	35	52.5	12.7	1.2	15	36	350	3.6	23.5	C60B656-1UG03000
65	57	50	35	52.5	20.3	1.2	15	36	350	3.6	23.5	C60B656-1UG05000
70	57	50	35	52.5	20.3	1.2	15	36	350	3.4	24.5	C60B706-1UG05000
75	57	50	35	52.5	20.3	1.2	15	36	350	3.2	25	C60B756-1UG05000
80	57	50	35	52.5	20.3	1.2	15	36	350	3.0	25.5	C60B806-1UG05000
85	57	50	35	52.5	20.3	1.2	15	36	350	2.9	26.5	C60B856-1UG05000
90	57	55	40	52.5	20.3	1.2	15	36	350	2.8	28.5	C60B906-1UG05000
95	57	55	40	52.5	20.3	1.2	15	36	350	2.7	29	C60B956-1UG05000
100	57	55	40	52.5	20.3	1.2	15	36	350	2.6	30	C60B107-1UG05000
110	57	55	45	52.5	20.3	1.2	15	36	350	2.4	32	C60B117-1UG05000
120	57	65	45	52.5	20.3	1.2	15	36	350	2.4	34	C60B127-1UG05000
130	57	65	45	52.5	20.3	1.2	15	36	350	2.2	35	C60B137-1UG05000
140	57	65	45	52.5	20.3	1.2	15	36	350	2.1	36	C60B147-1UG05000

U <sub>NDC</sub> (85°C): 800Vdc												
C (μF)	W	H	T	P	P1	d	dv/dt (V/μs)	tgδ×(10 <sup>-4</sup> )		ESR (mΩ)	I <sub>RMS</sub> (A)	产品代码 Part number
								1KHz	10KHz			
2K	32	18	9	27.5	-	0.8	65	10	95	18.4	4	C60B205K1WB00000
3K	32	20	11	27.5	-	0.8	65	10	95	12.7	5.5	C60B305K1WB00000
3.3	32	22	13	27.5	-	0.8	65	10	95	11.1	6	C60B335-1WB00000
4	32	25	13	27.5	-	0.8	65	10	95	10.0	7	C60B405-1WB00000
5	32	25	14	27.5	-	0.8	65	10	95	8.3	7.5	C60B505-1WB00000
6	32	28	17	27.5	-	0.8	65	10	95	7.2	9	C60B605-1WB00000
7	32	28	17	27.5	-	0.8	65	10	95	6.4	9.5	C60B705-1WB00000
8	32	33	18	27.5	-	0.8	65	10	95	6.0	10.5	C60B805-1WB00000
8	32	33	18	27.5	10.2	0.8	65	10	95	5.2	11.5	C60B805-1WB02000
9	32	33	18	27.5	-	0.8	65	10	95	5.5	11	C60B905-1WB00000
9	32	33	18	27.5	10.2	0.8	65	10	95	4.7	12	C60B905-1WB02000

◆ 产品尺寸及性能参数: Product Dimension and Characteristic Data:

U <sub>NDC</sub> (85℃): 800Vdc												
C (μF)	W	H	T	P	P1	d	dv/dt (V/μs)	tgδ×(10 <sup>-4</sup> )		ESR (mΩ)	I <sub>RMS</sub> (A)	产品代码 Part number
								1KHz	10KHz			
10	32	37	22	27.5	-	0.8	65	10	95	5.3	12	C60B106-1WB00000
10	32	37	22	27.5	10.2	0.8	65	10	95	4.4	13.5	C60B106-1WB02000
11	32	37	22	27.5	-	0.8	65	10	95	4.9	12	C60B116-1WB00000
11	32	37	22	27.5	10.2	0.8	65	10	95	4.0	14	C60B116-1WB02000
12	32	37	22	27.5	-	0.8	65	10	95	4.7	12	C60B126-1WB00000
12	32	37	22	27.5	10.2	0.8	65	10	95	3.8	14.5	C60B126-1WB02000
13	32	37	22	27.5	-	0.8	65	10	95	4.5	12	C60B136-1WB00000
13	32	37	22	27.5	12.7	0.8	65	10	95	3.6	15	C60B136-1WB03000
14K	32	37	22	27.5	-	0.8	65	10	95	4.3	12	C60B146K1WB00000
14K	32	37	22	27.5	12.7	0.8	65	10	95	3.5	15	C60B146K1WB03000
8	42	26	15	37.5	-	1	30	18	160	12.5	7	C60B805-1WE00000
9	42	30	16	37.5	-	1	30	18	160	11.3	8	C60B905-1WE00000
10	42	30	16	37.5	-	1	30	18	160	10.3	8.5	C60B106-1WE00000
12	42	30	18	37.5	-	1	30	18	160	8.7	9.5	C60B126-1WE00000
14	42	33.5	18.5	37.5	-	1	30	18	160	7.5	10	C60B146-1WE00000
15	42	40	20	37.5	10.2	1	30	18	160	6.8	12	C60B156-1WE02000
20	42	44	24	37.5	12.7	1	30	18	160	5.3	15	C60B206-1WE03000
25	42	44	24	37.5	12.7	1	30	18	160	4.4	16.5	C60B256-1WE03000
30	42	45	30	37.5	12.7	1.2	30	18	160	3.6	19.5	C60B306-1WE03000
30	42	45	30	37.5	20.3	1.2	30	18	160	3.6	19.5	C60B306-1WE05000
35	42	50	35	37.5	20.3	1.2	30	18	160	3.2	22	C60B356-1WE05000
40	42	50	35	37.5	20.3	1.2	30	18	160	2.9	23.5	C60B406-1WE05000
45	42	55	40	37.5	20.3	1.2	30	18	160	2.6	26	C60B456-1WE05000
50	42	55	40	37.5	20.3	1.2	30	18	160	2.4	27	C60B506-1WE05000
55	42	55	40	37.5	20.3	1.2	30	18	160	2.3	28	C60B556-1WE05000
60	42	60	45	37.5	20.3	1.2	30	18	160	2.2	30.5	C60B606-1WE05000
65	42	60	45	37.5	20.3	1.2	30	18	160	2.1	31.5	C60B656-1WE05000
25	57	45	25	52.5	12.7	1.2	15	33	320	7.5	14.5	C60B256-1WG03000
30	57	45	25	52.5	12.7	1.2	15	33	320	6.4	16	C60B306-1WG03000
35	57	45	25	52.5	12.7	1.2	15	33	320	5.5	17	C60B356-1WG03000
40	57	45	30	52.5	12.7	1.2	15	33	320	4.9	19	C60B406-1WG03000
40	57	45	30	52.5	20.3	1.2	15	33	320	4.9	19	C60B406-1WG05000
45	57	45	30	52.5	12.7	1.2	15	33	320	4.4	20	C60B456-1WG03000
45	57	45	30	52.5	20.3	1.2	15	33	320	4.4	20	C60B456-1WG05000
50	57	50	35	52.5	12.7	1.2	15	33	320	4.1	22.5	C60B506-1WG03000
50	57	50	35	52.5	20.3	1.2	15	33	320	4.1	22.5	C60B506-1WG05000
55	57	50	35	52.5	20.3	1.2	15	33	320	3.7	23	C60B556-1WG05000
60	57	50	35	52.5	20.3	1.2	15	33	320	3.5	24	C60B606-1WG05000
65	57	55	40	52.5	20.3	1.2	15	33	320	3.3	26.5	C60B656-1WG05000
70	57	55	40	52.5	20.3	1.2	15	33	320	3.1	27	C60B706-1WG05000
75	57	55	40	52.5	20.3	1.2	15	33	320	2.9	28	C60B756-1WG05000
80	57	55	40	52.5	20.3	1.2	15	33	320	2.8	28.5	C60B806-1WG05000
85	57	55	45	52.5	20.3	1.2	15	33	320	2.7	30.5	C60B856-1WG05000
90	57	55	45	52.5	20.3	1.2	15	33	320	2.6	31	C60B906-1WG05000
95	57	65	45	52.5	20.3	1.2	15	33	320	2.5	33	C60B956-1WG05000
100	57	65	45	52.5	20.3	1.2	15	33	320	2.4	33.5	C60B107-1WG05000
110	57	65	45	52.5	20.3	1.2	15	33	320	2.3	34.5	C60B117-1WG05000



# CBB60B

CBB60B series

◆ 产品尺寸及性能参数: Product Dimension and Characteristic Data:

U <sub>NDC</sub> (85℃): 900Vdc												
C (μF)	W	H	T	P	PI	d	dv/dt (V/μs)	tgδ×(10 <sup>-4</sup> )		ESR (mΩ)	I <sub>RMS</sub> (A)	产品代码 Part number
								1KHz	10KHz			
1	32	18	9	27.5	-	0.8	70	9	90	32.2	3	C60B105-1XB00000
2	32	20	11	27.5	-	0.8	70	9	90	16.7	4.5	C60B205-1XB00000
3	32	22	13	27.5	-	0.8	70	9	90	11.6	6	C60B305-1XB00000
4K	32	25	13	27.5	-	0.8	70	9	90	9.1	7	C60B405K1XB00000
5	32	28	17	27.5	-	0.8	70	9	90	7.7	8.5	C60B505-1XB00000
6	32	33	18	27.5	-	0.8	70	9	90	6.8	10	C60B605-1XB00000
6	32	33	18	27.5	10.2	0.8	70	9	90	6.0	10.5	C60B605-1XB02000
7	32	33	18	27.5	-	0.8	70	9	90	6.1	10.5	C60B705-1XB00000
7	32	33	18	27.5	10.2	0.8	70	9	90	5.3	11	C60B705-1XB02000
8	32	37	22	27.5	-	0.8	70	9	90	5.7	12	C60B805-1XB00000
8	32	37	22	27.5	10.2	0.8	70	9	90	4.8	13	C60B805-1XB02000
9	32	37	22	27.5	-	0.8	70	9	90	5.3	12	C60B905-1XB00000
9	32	37	22	27.5	12.7	0.8	70	9	90	4.4	13.5	C60B905-1XB03000
10	32	37	22	27.5	-	0.8	70	9	90	4.9	12	C60B106-1XB00000
10	32	37	22	27.5	12.7	0.8	70	9	90	4.0	14	C60B106-1XB03000
4.7	42	26	15	37.5	-	1	35	17	150	18.6	6	C60B475-1XE00000
5	42	26	15	37.5	-	1	35	17	150	17.5	6	C60B505-1XE00000
6	42	26	15	37.5	-	1	35	17	150	14.8	6.5	C60B605-1XE00000
7	42	30	16	37.5	-	1	35	17	150	12.9	7.5	C60B705-1XE00000
8	42	30	16	37.5	-	1	35	17	150	11.4	8	C60B805-1XE00000
10	42	33.5	18.5	37.5	10.2	1	35	17	150	8.9	9.5	C60B106-1XE02000
12	42	37	22	37.5	10.2	1	35	17	150	7.5	11.5	C60B126-1XE02000
15	42	37	22	37.5	12.7	1	35	17	150	6.1	13	C60B156-1XE03000
18	42	44	24	37.5	12.7	1	35	17	150	5.3	15	C60B186-1XE03000
20	42	44	24	37.5	12.7	1	35	17	150	4.8	15.5	C60B206-1XE03000
25	42	45	30	37.5	12.7	1.2	35	17	150	3.8	19	C60B256-1XE03000
25	42	45	30	37.5	20.3	1.2	35	17	150	3.8	19	C60B256-1XE05000
30	42	50	35	37.5	20.3	1.2	35	17	150	3.3	22	C60B306-1XE05000
35	42	50	35	37.5	20.3	1.2	35	17	150	2.9	23	C60B356-1XE05000
40	42	55	40	37.5	20.3	1.2	35	17	150	2.7	26	C60B406-1XE05000
45	42	60	45	37.5	20.3	1.2	35	17	150	2.5	29	C60B456-1XE05000
50	42	60	45	37.5	20.3	1.2	35	17	150	2.3	30	C60B506-1XE05000
15	57	45	25	52.5	10.2	1.2	15	31	300	11.0	12	C60B156-1XG02000
20	57	45	25	52.5	12.7	1.2	15	31	300	8.3	14	C60B206-1XG03000
25	57	45	25	52.5	12.7	1.2	15	31	300	6.8	15.5	C60B256-1XG03000
30	57	45	30	52.5	12.7	1.2	15	31	300	5.7	17.5	C60B306-1XG03000
30	57	45	30	52.5	20.3	1.2	15	31	300	5.7	17.5	C60B306-1XG05000
35	57	45	30	52.5	12.7	1.2	15	31	300	5.0	18.5	C60B356-1XG03000
35	57	45	30	52.5	20.3	1.2	15	31	300	5.0	18.5	C60B356-1XG05000
40	57	50	35	52.5	20.3	1.2	15	31	300	4.5	21	C60B406-1XG05000
45	57	50	35	52.5	20.3	1.2	15	31	300	4.0	22.5	C60B456-1XG05000
50	57	50	35	52.5	20.3	1.2	15	31	300	3.7	23.5	C60B506-1XG05000
55	57	55	40	52.5	20.3	1.2	15	31	300	3.4	26	C60B556-1XG05000
60	57	55	40	52.5	20.3	1.2	15	31	300	3.2	27	C60B606-1XG05000
65	57	55	45	52.5	20.3	1.2	15	31	300	3.0	28.5	C60B656-1XG05000
70	57	65	45	52.5	20.3	1.2	15	31	300	2.9	30.5	C60B706-1XG05000
75	57	65	45	52.5	20.3	1.2	15	31	300	2.8	31.5	C60B756-1XG05000
80	57	65	45	52.5	20.3	1.2	15	31	300	2.6	32	C60B806-1XG05000
85	57	65	45	52.5	20.3	1.2	15	31	300	2.5	32	C60B856-1XG05000

◆ 产品尺寸及性能参数: Product Dimension and Characteristic Data:

U <sub>NDC</sub> (85°C): 1000Vdc												
C (μF)	W	H	T	P	P1	d	dv/dt (V/μs)	tgδ×(10 <sup>-4</sup> )		ESR (mΩ)	I <sub>RMS</sub> (A)	产品代码 Part number
								1KHz	10KHz			
1	32	18	9	27.5	-	0.8	75	8	80	29.4	3	C60B105-3AB00000
2	32	22	13	27.5	-	0.8	75	8	80	15.4	5	C60B205-3AB00000
3	32	25	14	27.5	-	0.8	75	8	80	10.8	6.5	C60B305-3AB00000
4	32	28	17	27.5	-	0.8	75	8	80	8.5	8	C60B405-3AB00000
5	32	33	18	27.5	-	0.8	75	8	80	7.3	9.5	C60B505-3AB00000
6	32	33	18	27.5	-	0.8	75	8	80	6.4	10	C60B605-3AB00000
6	32	33	18	27.5	10.2	0.8	75	8	80	5.5	11	C60B605-3AB02000
7	32	37	22	27.5	-	0.8	75	8	80	5.9	11.5	C60B705-3AB00000
7	32	37	22	27.5	12.7	0.8	75	8	80	4.9	12.5	C60B705-3AB03000
8	32	37	22	27.5	-	0.8	75	8	80	5.3	12	C60B805-3AB00000
8	32	37	22	27.5	12.7	0.8	75	8	80	4.4	13.5	C60B805-3AB03000
5	42	26	15	37.5	-	1	37	15	140	16.0	6.5	C60B505-3AE00000
6	42	30	16	37.5	-	1	37	15	140	13.5	7.5	C60B605-3AE00000
7	42	33.5	18.5	37.5	-	1	37	15	140	11.8	8.5	C60B705-3AE00000
8	42	33.5	18.5	37.5	-	1	37	15	140	10.5	9	C60B805-3AE00000
10	42	40	20	37.5	10.2	1	37	15	140	8.2	11	C60B106-3AE02000
12	42	37	22	37.5	12.7	1	37	15	140	6.9	12	C60B126-3AE03000
12	42	37	22	37.5	-	1	37	15	140	7.4	11.5	C60B126-3AE00000
15	42	44	24	37.5	12.7	1	37	15	140	5.7	14.5	C60B156-3AE03000
18	42	45	30	37.5	12.7	1.2	37	15	140	4.7	17	C60B186-3AE03000
18	42	45	30	37.5	20.3	1.2	37	15	140	4.7	17	C60B186-3AE05000
20	42	45	30	37.5	12.7	1.2	37	15	140	4.2	18	C60B206-3AE03000
20	42	45	30	37.5	20.3	1.2	37	15	140	4.2	18	C60B206-3AE05000
25	42	50	35	37.5	20.3	1.2	37	15	140	3.5	21	C60B256-3AE05000
30	42	55	40	37.5	20.3	1.2	37	15	140	3.1	24	C60B306-3AE05000
35	42	55	40	37.5	20.3	1.2	37	15	140	2.7	25.5	C60B356-3AE05000
40	42	60	45	37.5	20.3	1.2	37	15	140	2.5	28.5	C60B406-3AE05000
15	57	45	25	52.5	12.7	1.2	17	28	280	10.0	12.5	C60B156-3AG03000
20	57	45	25	52.5	12.7	1.2	17	28	280	7.6	14.5	C60B206-3AG03000
25	57	45	25	52.5	12.7	1.2	17	28	280	6.2	16	C60B256-3AG03000
30	57	45	30	52.5	12.7	1.2	17	28	280	5.2	18	C60B306-3AG03000
30	57	45	30	52.5	20.3	1.2	17	28	280	5.2	18	C60B306-3AG05000
35	57	50	35	52.5	20.3	1.2	17	28	280	4.6	21	C60B356-3AG05000
40	57	50	35	52.5	20.3	1.2	17	28	280	4.1	22	C60B406-3AG05000
45	57	55	40	52.5	20.3	1.2	17	28	280	3.7	25	C60B456-3AG05000
50	57	55	45	52.5	20.3	1.2	17	28	280	3.4	27	C60B506-3AG05000
55	57	55	45	52.5	20.3	1.2	17	28	280	3.2	28	C60B556-3AG05000
60	57	65	45	52.5	20.3	1.2	17	28	280	3.0	30	C60B606-3AG05000
65	57	65	45	52.5	20.3	1.2	17	28	280	2.9	31	C60B656-3AG05000
70	57	65	45	52.5	20.3	1.2	17	28	280	2.7	32	C60B706-3AG05000



# CBB60B

CBB60B series

◆ 产品尺寸及性能参数: Product Dimension and Characteristic Data:

U <sub>NDC</sub> (85℃): 1100Vdc												
C (μF)	W	H	T	P	P1	d	dv/dt (V/μs)	tgδ×(10 <sup>-4</sup> )		ESR (mΩ)	I <sub>RMS</sub> (A)	产品代码 Part number
								1KHz	10KHz			
1	32	20	11	27.5	-	0.8	80	8	70	26.0	3.5	C60B105-3KB00000
1.5	32	22	13	27.5	-	0.8	80	8	70	17.8	5	C60B155-3KB00000
2	32	25	13	27.5	-	0.8	80	8	70	13.8	6	C60B205-3KB00000
3	32	28	17	27.5	-	0.8	80	8	70	9.7	7.5	C60B305-3KB00000
4	32	33	18	27.5	-	0.8	80	8	70	7.9	9	C60B405-3KB00000
5	32	37	22	27.5	-	0.8	80	8	70	6.8	11	C60B505-3KB00000
5	32	37	22	27.5	10.2	0.8	80	8	70	5.9	11.5	C60B505-3KB02000
6	32	37	22	27.5	-	0.8	80	8	70	5.9	11.5	C60B605-3KB00000
6	32	37	22	27.5	10.2	0.8	80	8	70	5.0	12.5	C60B605-3KB02000
3	42	26	15	37.5	-	1	40	15	130	23.1	5	C60B305-3KE00000
4	42	26	15	37.5	-	1	40	15	130	17.5	6	C60B405-3KE00000
4.7	42	33.5	18.5	37.5	10.2	1	40	15	130	14.7	7.5	C60B475-3KE02000
5	42	33.5	18.5	37.5	-	1	40	15	130	14.4	7.5	C60B505-3KE00000
6	42	33.5	18.5	37.5	-	1	40	15	130	12.1	8.5	C60B605-3KE00000
7	42	40	20	37.5	10.2	1	40	15	130	10.1	10	C60B705-3KE02000
8	42	37	22	37.5	10.2	1	40	15	130	8.9	10.5	C60B805-3KE02000
9	42	37	22	37.5	12.7	1	40	15	130	8.0	11	C60B905-3KE03000
10	42	44	24	37.5	12.7	1	40	15	130	7.3	12.5	C60B106-3KE03000
12	42	44	24	37.5	12.7	1	40	15	130	6.2	14	C60B126-3KE03000
12	42	44	24	37.5	-	1	40	15	130	6.9	13	C60B126-3KE00000
15	42	45	30	37.5	12.7	1.2	40	15	130	4.9	16.5	C60B156-3KE03000
15	42	45	30	37.5	20.3	1.2	40	15	130	4.9	16.5	C60B156-3KE05000
18	42	50	35	37.5	20.3	1.2	40	15	130	4.2	19	C60B186-3KE05000
20	42	50	35	37.5	20.3	1.2	40	15	130	3.8	20	C60B206-3KE05000
25	42	55	40	37.5	20.3	1.2	40	15	130	3.2	23.5	C60B256-3KE05000
30	42	60	45	37.5	20.3	1.2	40	15	130	2.8	27	C60B306-3KE05000
15	57	45	25	52.5	12.7	1.2	20	27	260	8.9	13.5	C60B156-3KG03000
20	57	45	30	52.5	12.7	1.2	20	27	260	6.8	16	C60B206-3KG03000
20	57	45	30	52.5	20.3	1.2	20	27	260	6.8	16	C60B206-3KG05000
25	57	50	35	52.5	20.3	1.2	20	27	260	5.6	19	C60B256-3KG05000
30	57	50	35	52.5	20.3	1.2	20	27	260	4.7	20.5	C60B306-3KG05000
35	57	55	40	52.5	20.3	1.2	20	27	260	4.2	23.5	C60B356-3KG05000
40	57	55	40	52.5	20.3	1.2	20	27	260	3.7	25	C60B406-3KG05000
45	57	55	45	52.5	20.3	1.2	20	27	260	3.4	27	C60B456-3KG05000
50	57	65	45	52.5	20.3	1.2	20	27	260	3.2	29.5	C60B506-3KG05000
55	57	65	45	52.5	20.3	1.2	20	27	260	3.0	30.5	C60B556-3KG05000



◆ 产品尺寸及性能参数: Product Dimension and Characteristic Data:

U <sub>NDC</sub> (85℃): 1200Vdc												
C (μF)	W	H	T	P	P1	d	dv/dt (V/μs)	tgδ×(10 <sup>-4</sup> )		ESR (mΩ)	I <sub>RMS</sub> (A)	产品代码 Part number
								1KHz	10KHz			
1	32	20	11	27.5	-	0.8	90	7	55	24.2	4	C60B105-3LB00000
2	32	25	14	27.5	-	0.8	90	7	55	12.8	6	C60B205-3LB00000
3	32	28	17	27.5	-	0.8	90	7	55	9.1	8	C60B305-3LB00000
4	32	33	18	27.5	-	0.8	90	7	55	7.4	9.5	C60B405-3LB00000
5	32	37	22	27.5	-	0.8	90	7	55	6.4	11	C60B505-3LB00000
5	32	37	22	27.5	10.2	0.8	90	7	55	5.5	12	C60B505-3LB02000
3	42	26	15	37.5	-	1	45	13	100	21.3	5.5	C60B305-3LE00000
4	42	30	16	37.5	-	1	45	13	100	16.3	6.5	C60B405-3LE00000
5	42	33.5	18.5	37.5	-	1	45	13	100	13.3	8	C60B505-3LE00000
6	42	40	20	37.5	-	1	45	13	100	11.4	9.5	C60B605-3LE00000
7	42	37	22	37.5	10.2	1	45	13	100	9.3	10.5	C60B705-3LE02000
8	42	44	24	37.5	12.7	1	45	13	100	8.3	12	C60B805-3LE03000
9	42	44	24	37.5	12.7	1	45	13	100	7.5	12.5	C60B905-3LE03000
10	42	44	24	37.5	12.7	1	45	13	100	6.8	13	C60B106-3LE03000
12	42	45	30	37.5	12.7	1.2	45	13	100	5.6	15.5	C60B126-3LE03000
12	42	45	30	37.5	20.3	1.2	45	13	100	5.6	15.5	C60B126-3LE05000
15	42	50	35	37.5	20.3	1.2	45	13	100	4.6	18.5	C60B156-3LE05000
18	42	50	35	37.5	20.3	1.2	45	13	100	3.9	20	C60B186-3LE05000
20	42	55	40	37.5	20.3	1.2	45	13	100	3.6	22	C60B206-3LE05000
25	42	60	45	37.5	20.3	1.2	45	13	100	3.1	26	C60B256-3LE05000
12	57	45	25	52.5	12.7	1.2	23	24	200	10.2	12.5	C60B126-3LG03000
15	57	45	25	52.5	12.7	1.2	23	24	200	8.2	14	C60B156-3LG03000
20	57	45	30	52.5	12.7	1.2	23	24	200	6.3	16.5	C60B206-3LG03000
20	57	45	30	52.5	20.3	1.2	23	24	200	6.3	16.5	C60B206-3LG05000
25	57	50	35	52.5	20.3	1.2	23	24	200	5.2	19.5	C60B256-3LG05000
30	57	55	40	52.5	20.3	1.2	23	24	200	4.4	22.5	C60B306-3LG05000
35	57	55	45	52.5	20.3	1.2	23	24	200	3.9	25	C60B356-3LG05000
40	57	65	45	52.5	20.3	1.2	23	24	200	3.6	27.5	C60B406-3LG05000
45	57	65	45	52.5	20.3	1.2	23	24	200	3.2	29	C60B456-3LG05000

备注:

“-” : 客户要求的容量偏差

ESR 值为 f=10KHz 下的典型值

I<sub>RMS</sub> 值为 f=10KHz、T<sub>amb</sub>=70℃、散热条件 10W/m<sup>2</sup>/℃、  
ΔT<sub>case</sub>≤20℃的最大电流有效值。

“-”=custom's capacitor tolerance code, J=±5%, K=±10%

ESR typical values at 10KHz

I<sub>RMS</sub> is the maximum R.M.S current at 10KHz、T<sub>amb</sub>=70℃、  
ΔT<sub>case</sub>≤20℃.( Coefficient of heat dissipation: 10W/m<sup>2</sup>/℃)

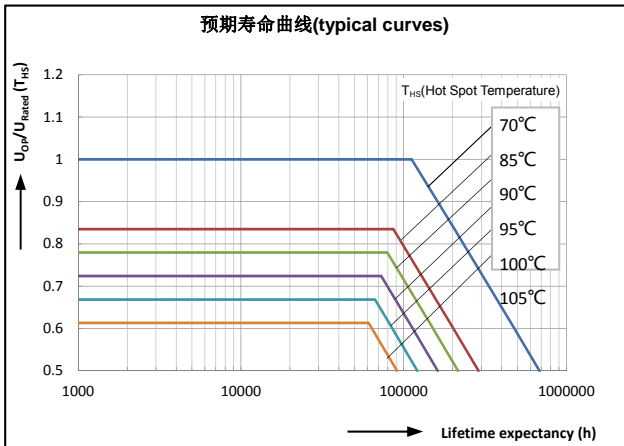


# CBB60B

## CBB60B series

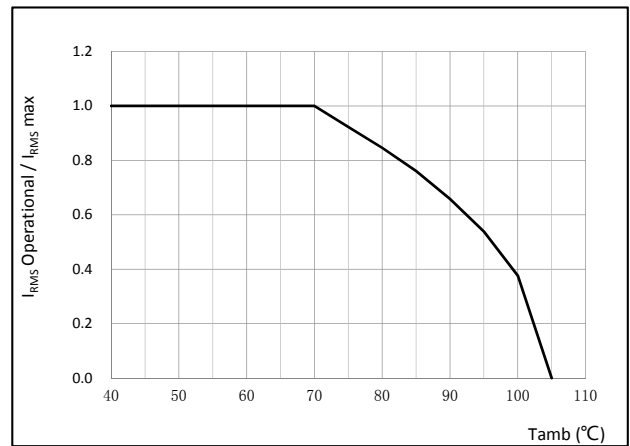
### ◆ 预期寿命曲线

Expected Lifetime Curves:



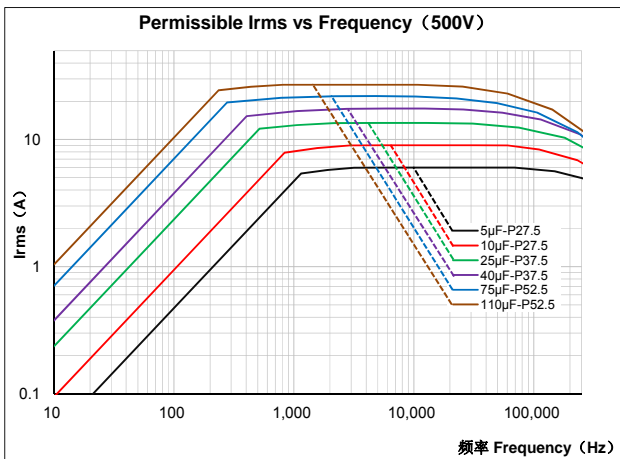
### ◆ 纹波电流降额曲线

Irms Derating vs Ambient Temperature:

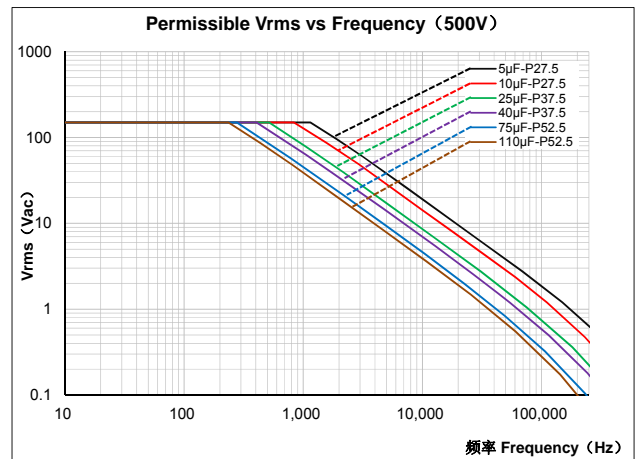


### ◆ 有效值电流频率曲线 Permissible Vrms & Irms vs Frequency

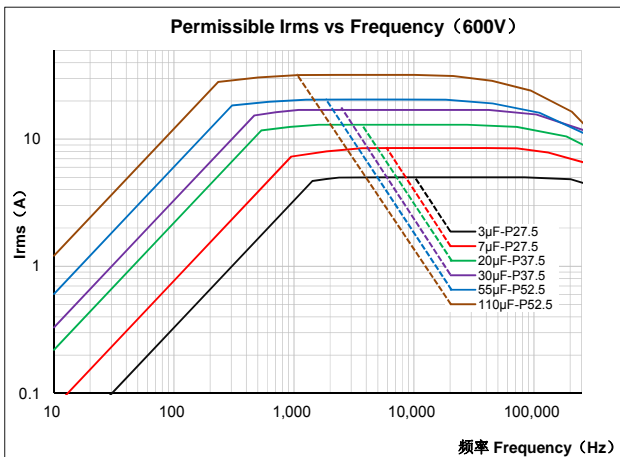
500V<sub>NDC</sub> P27.5~P52.5(Irms)



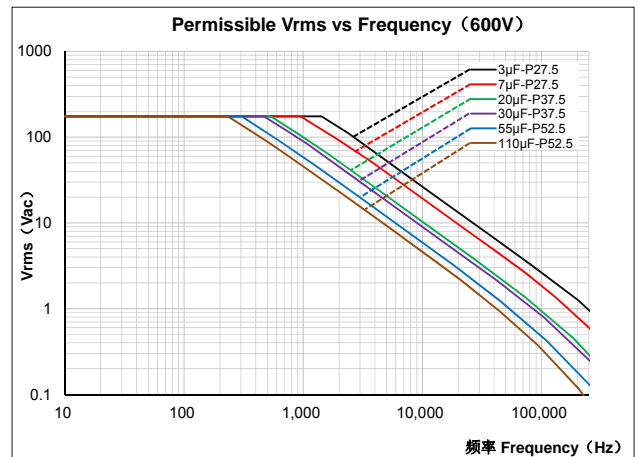
500V<sub>NDC</sub> P27.5~P52.5(Vrms)



600V<sub>NDC</sub> P27.5~P52.5(Irms)



600V<sub>NDC</sub> P27.5~P52.5(Vrms)



注:

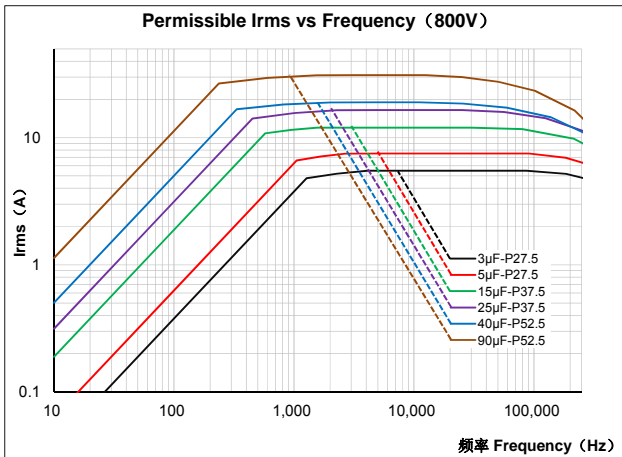
纹波电流或纹波电压值基于  $T_{amb}=70^{\circ}\text{C}$  条件下;  
产品散热系数:  $10\text{W}/\text{m}^2/^{\circ}\text{C}$ ;  
当  $f \geq 100\text{KHz}$ ,  $I_{rms}$  和  $V_{rms}$  仅供参考。

Note:

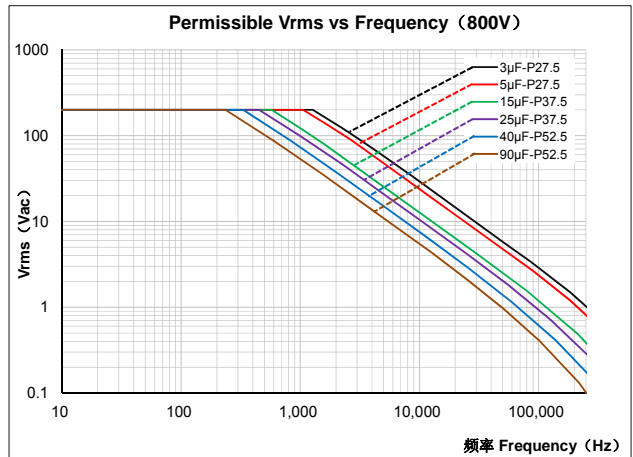
Permissible Vrms & Irms curves frequency  $f$  at  $T_{amb}=70^{\circ}\text{C}$  ;  
Coefficient of heat dissipation:  $10\text{W}/\text{m}^2/^{\circ}\text{C}$  ;  
At  $f \geq 100\text{KHz}$ ,  $I_{rms}$  &  $V_{rms}$  are only for reference.

◆有效值电流频率曲线 Permissible Vrms & Irms vs Frequency

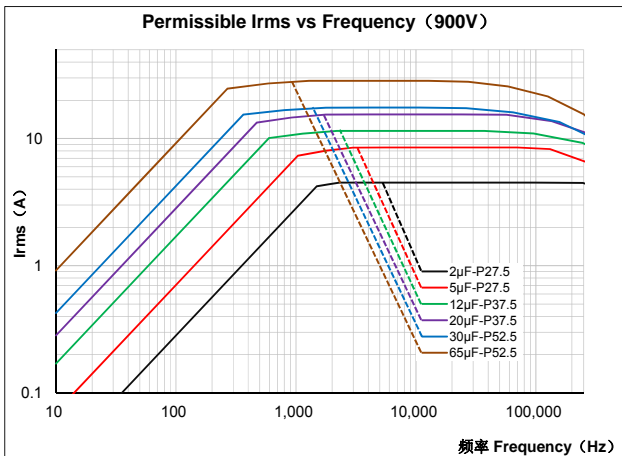
**800V<sub>NDC</sub> P27.5~P52.5(Irms)**



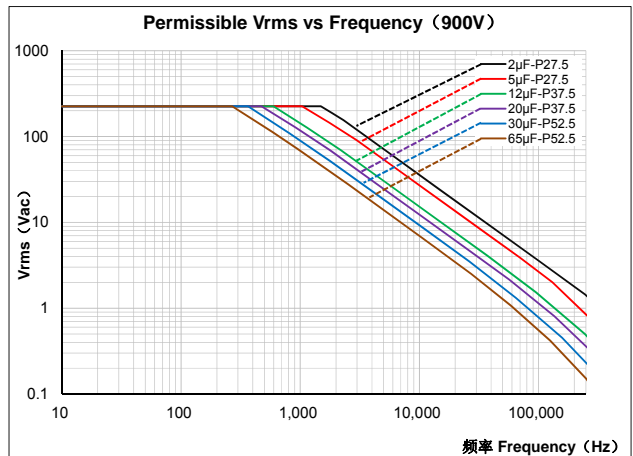
**800V<sub>NDC</sub> P27.5~P52.5(Vrms)**



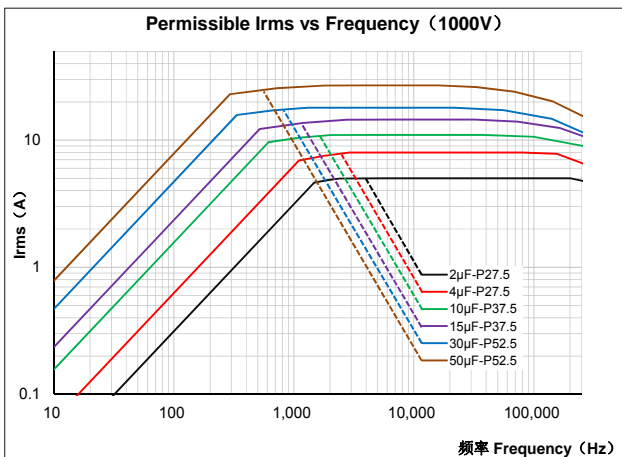
**900V<sub>NDC</sub> P27.5~P52.5(Irms)**



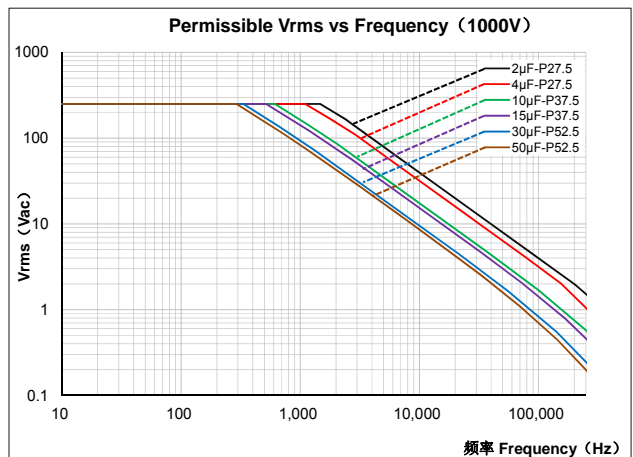
**900V<sub>NDC</sub> P27.5~P52.5(Vrms)**



**1000V<sub>NDC</sub> P27.5~P52.5(Irms)**



**1000V<sub>NDC</sub> P27.5~P52.5(Vrms)**



注:

纹波电流或纹波电压值基于  $T_{amb}=70^{\circ}\text{C}$  条件下;  
 产品散热系数:  $10\text{W}/\text{m}^2/^{\circ}\text{C}$ ;  
 当  $f \geq 100\text{KHz}$ ,  $I_{rms}$  和  $V_{rms}$  仅供参考。

Note:

Permissible Vrms & Irms curves frequency  $f$  at  $T_{amb}=70^{\circ}\text{C}$  ;  
 Coefficient of heat dissipation:  $10\text{W}/\text{m}^2/^{\circ}\text{C}$  ;  
 At  $f \geq 100\text{KHz}$ ,  $I_{rms}$  &  $V_{rms}$  are only for reference.

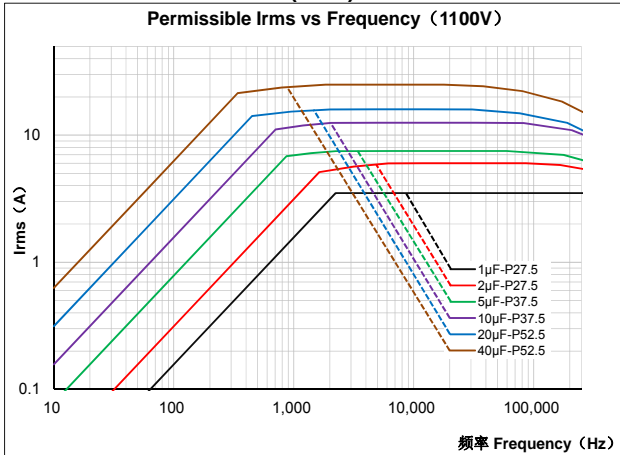


# CBB60B

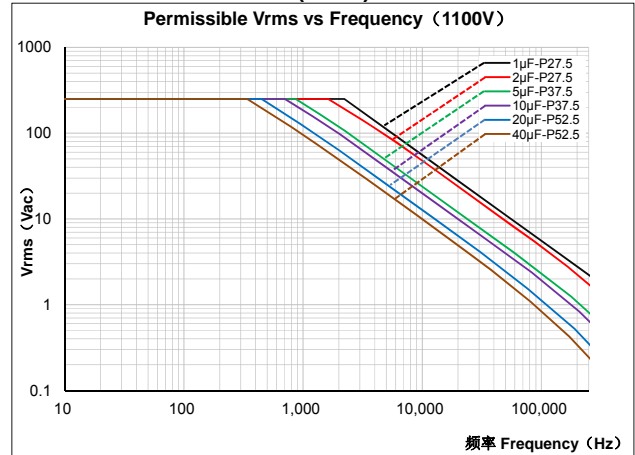
## CBB60B series

### ◆有效值电流频率曲线 Permissible Vrms & Irms vs Frequency

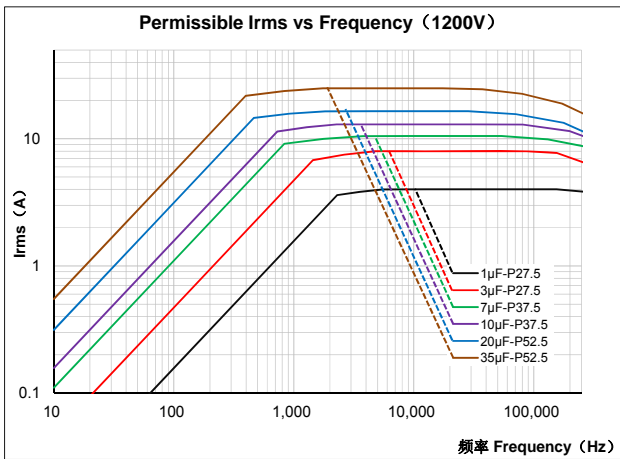
1100V<sub>NDC</sub> P27.5~P52.5(Irms)



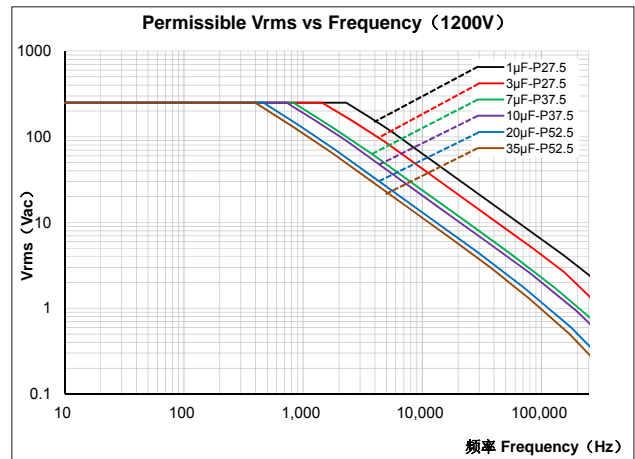
1100V<sub>NDC</sub> P27.5~P52.5(Vrms)



1200V<sub>NDC</sub> P27.5~P52.5(Irms)



1200V<sub>NDC</sub> P27.5~P52.5(Vrms)



注:

纹波电流或纹波电压值基于  $T_{amb}=70^{\circ}C$  条件下;  
 产品散热系数:  $10W/m^2/^{\circ}C$ ;  
 当  $f \geq 100KHz$ ,  $I_{rms}$  和  $V_{rms}$  仅供参考。

Note:

Permissible Vrms & Irms curves frequency  $f$  at  $T_{amb}=70^{\circ}C$  ;  
 Coefficient of heat dissipation:  $10W/m^2/^{\circ}C$  ;  
 At  $f \geq 100KHz$ ,  $I_{rms}$  &  $V_{rms}$  are only for reference.

◆可靠性: Reliability.

Test description	Reference	Test conditions	Determine criteria
极间耐压 Voltage test between terminals	IEC 61071	1.5 x U <sub>NDC</sub> at Tamb Duration: 60 s	No visible damage  ΔC/C : ≤0.5% tanδ: ≤1.2 initial tanδ+ 1×10 <sup>-4</sup> at10KHz R <sub>ins</sub> : ≥ 50% of IR limit
耐焊接热 Resistance to soldering heat	IEC 60068-2-20	Solder bath temperature at 260°C±5°C, Immersion time: 10s±1s	No visible damage  ΔC/C : ≤0.5% Increase of tan δ: ≤ 50 ×10 <sup>-4</sup> at10KHz
引出端强度 Robustness of terminations	IEC 60068-2-21	Wire diameter & Tensile force	No visible damage
		0.5 < d ≤ 0.8mm 10N	
		0.8 < d ≤ 1.25mm 20N	
放电实验 Surge discharge test	IEC 61071	1.1 x U <sub>NDC</sub> Number of discharges: 5(within 10 minutes)	No visible damage  ΔC/C : ≤1.0% tanδ: ≤1.2 initial tanδ+ 1×10 <sup>-4</sup> at10KHz R <sub>ins</sub> : ≥ 50% of IR limit
温度变化 Change of temperature	IEC 60068-2-14	Tmax. =85 °C Tmin. = - 40 °C Transition time: 1 h, equivalent to 1°C/min 5 cycles	No visible damage  ΔC/C : ≤2.0% Increase of tan δ: ≤ 150 ×10 <sup>-4</sup> at10KHz R <sub>ins</sub> : 50% of IR limit
耐湿性 Damp heat steady	IEC 60068-2-78	Tmax. = 40 °C RH = 93 % Duration 56 days	No visible damage  ΔC/C : ≤2.0% Increase of tan δ: ≤ 150 ×10 <sup>-4</sup> at10KHz R <sub>ins</sub> : 50% of IR limit
耐湿负荷 Biased humidity	AEC-Q200	T =40 °C RH = 93 % at U <sub>NDC</sub> Duration: 1000h	NO visible damage  ΔC/C : ≤ 5 %  Δtan δ / tan δ : ≤ 200% at 10KHz R <sub>ins</sub> : ≥ 200MΩ
		T =60 °C RH = 93 % at U <sub>NDC</sub> Duration: 1000h	NO visible damage  ΔC/C : ≤ 5 %  Δtan δ / tan δ : ≤ 200% at 10KHz R <sub>ins</sub> : ≥ 200MΩ
耐久性 Endurance test between terminals	IEC 61071	1.3 ×U <sub>NDC</sub> at Tmax. = 85 °C, Duration 500 h 1000 × discharge at 1.4 × I (repetitive peak current in continuous operation) 1.3× U <sub>NDC</sub> at Tmax. = 85 °C Duration 500 h	No visible damage  ΔC/C : ≤3.0% Increase of tan δ: ≤ 150 ×10 <sup>-4</sup> at10KHz R <sub>ins</sub> : 50% of IR limit
自愈性测试 Self healing test	IEC 61071	1.5 ×U <sub>NDC</sub> Duration 10 sec , Number of Self healing ≤ 5, increase the voltage at 100 V/s till 5, with a max. of 2.5×U <sub>NDC</sub> for a duration of 10 sec	No visible damage  ΔC/C : ≤ 0.5 % tan δ: ≤ 1.1 initial tan δ + 1×10 <sup>-4</sup> at10KHz
振动 Vibration	IEC60068	f=10 Hz to 55 Hz a=±0.35mm Test duration per axis = 10 frequency cycles (3 axes offset from each other by 90°)。 1 octave/min, the total times are 135 min for 3axes	No visible damage