

Part number: **BCE18-337M450VB**

Aluminium Electrolytic Capacitors  
Snap In 450volts 330uF Ultra Small Sz

### Features

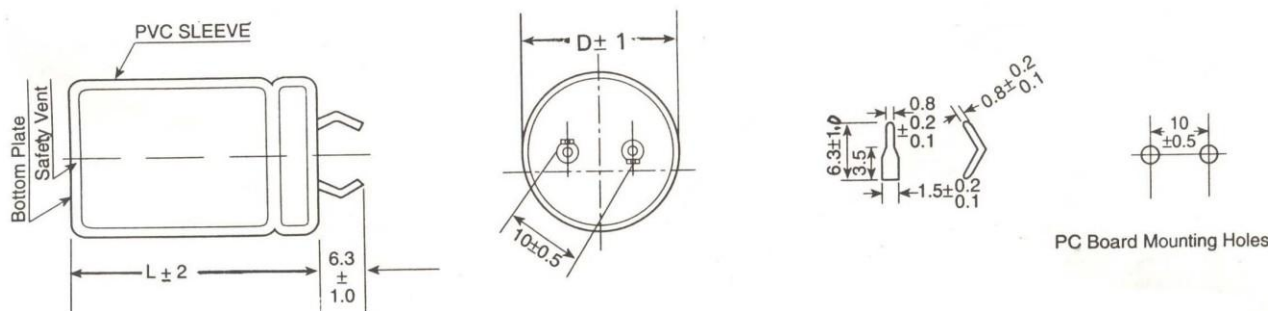
- Load life of 2,000 hours at 105 °C
- Snap-in terminal type, wide temperature range.
- Suitable for use in switching power supplies.
- Having safety vents.

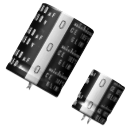


### Specifications

Item	Characteristics									
Operating temperature range	-40~+105 °C (for 10V to 250V) -25~+105 °C (for 315V to 400V)									
Rated voltage range	10~400V									
Capacitance range	39~ 82,000µF									
Capacitance tolerance (at 20°C, 120Hz)	±20%(M)									
Leakage current(I) (at 20°C)	After 1 minute application of rated voltage. I ≤ 0.02CV or 5mA, whichever is smaller. Where C: Nominal capacitance in F, V: Rated voltage in V.									
Dissipation factor(Tan δ) (at 20°C, 120Hz)	W.V.(V)	10	16	25	35	50	60 100	160 200	250 450	
	Tan (max.)	0.50	0.40	0.30	0.25	0.20	0.15	0.12	0.15	
For capacitance of more than 1,000 F, add 0.02 for every increase of 1,000 F.										
Low temperature characteristics (at 120Hz)	W.V.(v) δ		10 16	25	35	50 63	80 100	160 250	315 400	
	impedance ratio ZT/Z+20°C (max)	Z-25°C / Z+20°C	4	3	2	3	4			
Load life	Capacitance change		≤20% of the initial value							
	tan		≤200% of the initial specified value							
	I		≤The initial specified value							
Shelf life	Capacitance change		≤20% of the initial value							
	tan δ		≤150% of the initial specified value							
	I		≤200% of the initial specified value							
Others	Satisfies characteristic W of JIS C5141									

### Dimensions





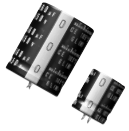
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**Case Size DxL(mm) and Maximun Ripple current(A rms/at 105°C,120Hz)**

W.V.(V) Cap.( F) D	10								16							
	22		25		30		35		22		25		30		35	
6,800									22x25	1.42						
8,200									22x30	1.69						
10,000	22x25	1.54							22x30	1.86	25x25	1.86				
12,000	22x30	1.82							22x35	2.18	25x30	2.20				
15,000	22x30	2.04	25x25	2.04					22x40	2.58	25x35	2.65	30x25	2.55		
18,000	22x35	2.39	25x30	2.41					22x50	3.12	25x35	2.87	30x30	3.00		
22,000	22x40	2.80	25x35	2.84	30x25	2.76					25x45	3.54	30x30	3.31	35x25	3.40
27,000	22x50	3.42	25x40	3.33	30x30	3.28					25x50	4.10	30x35	3.91	35x30	4.03
33,000			25x45	3.87	30x35	3.86	35x25	3.72					30x40	4.57	35x35	4.73
39,000			25x50	4.41	30x35	4.20	35x30	4.33					30x45	5.22	35x35	5.15
47,000					30x40	4.88	35x35	5.05							35x40	5.96
56,000					30x50	5.86	35x35	5.52							35x45	6.66
68,000							35x40	6.42								
82,000							35x45	7.74								

W.V.(V) Cap.( F) D	25								35							
	22		25		30		35		22		25		30		35	
3,300									22x25	1.25						
3,900									22x30	1.47						
4,700	22x25	1.37							22x35	1.72	25x25	1.61				
5,600	22x30	1.61							22x35	1.88	25x30	1.90				
6,800	22x30	1.77	25x25	1.77					22x40	2.20	25x35	2.23	30x25	2.17		
8,200	22x35	2.08	25x30	2.10					22x50	2.67	25x40	2.59	30x30	2.56		
10,000	22x40	2.43	25x35	2.47	30x25	2.40					30x45	3.01	30x35	3.10	35x25	2.90
12,000	22x45	2.81	25x40	2.86	30x30	2.83					25x50	3.46	30x35	3.30	35x30	3.40
15,000			25x45	3.37	30x35	3.36	35x25	3.24					30x45	4.10	35x35	4.04
18,000			25x50	3.87	30x35	3.68	35x30	3.80					30x50	4.69	35x40	4.67
22,000					30x45	4.53	35x35	4.46							35x45	5.42
27,000					30x50	5.25	35x40	5.22							35x50	6.28
33,000							35x45	6.06								
39,000							35x50	6.89								

W.V.(V) Cap.( F) D	50								63							
	22		25		30		35		22		25		30		35	
1,200									22x25	0.98						
1,500									22x30	1.18						
1,800	22x25	1.04							22x30	1.29	25x25	1.29				
2,200	22x30	1.23							22x35	1.52	25x30	1.54				
2,700	22x35	1.46	25x25	1.37					22x40	1.79	25x35	1.81	30x25	1.76		
3,300	22x35	1.62	25x30	1.63					22x50	2.18	25x40	2.12	30x30	2.10		
3,900	22x40	1.86	25x35	1.89	30x25	1.84					25x45	2.43	30x35	2.43	35x25	2.33
4,700			22x50	2.26	30x30	2.20					25x50	2.80	30x35	2.66	35x30	2.75
5,600	22x50	2.26	22x45	2.40	30x30	2.30	25x25	2.42					30x40	3.07	35x35	3.18
6,800			25x50	2.91	30x35	2.77	35x30	2.86					30x50	3.73	35x35	3.51
8,200					30x40	3.22	35x35	3.34							35x40	4.07
10,000					30x50	3.92	35x35	3.69							35x50	4.93
12,000							35x40	4.26								
15,000							35x50	5.23								



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W.V.(V) Cap.( F) D	80								100							
	22		25		30		35		22		25		30		35	
560									22x25	0.67						
680									22x30	0.79						
820	22x25	0.81							22x30	0.87	25x25	0.87				
1,000	22x30	0.96							22x35	1.03	25x30	1.04				
1,200	22x30	1.05	25x25	1.05					22x40	1.19	25x30	1.13	30x25	1.18		
1,500	22x35	1.26	25x30	1.18					22x45	1.40	25x35	1.35	30x30	1.41		
1,800	22x40	1.46	25x30	1.48	30x25	1.44					25x40	1.57	30x30	1.55	35x25	1.59
2,200	22x45	1.70	25x35	1.64	30x30	1.71					25x50	1.91	30x35	1.82	35x30	1.88
2,700			25x40	2.02	30x30	1.90	35x25	1.94					30x40	2.13	35x35	2.21
3,300			25x45	2.34	30x35	2.30	35x30	2.86					30x45	2.48	35x35	2.44
3,900					30x40	2.56	35x35	2.66							35x40	2.81
4,700					30x45	2.96	35x35	2.92							35x45	3.23
5,600							35x40	3.36								
6,800							35x45	3.89								

W.V.(V) Cap.( F) D	160								180							
	22		25		30		35		22		25		30		35	
150									22x25	0.39						
180	22x25	0.42							22x30	0.46						
220	22x30	0.50	25x25	0.50					22x30	0.50	25x25	0.50				
270	22x35	0.60	25x30	0.56					22x35	0.60	25x30	0.60				
330	22x40	0.70	25x30	0.62					22x40	0.70	25x35	0.71	30x25	0.69		
390	22x45	0.80	25x35	0.77	30x25	0.75			22x50	0.84	25x40	0.82	30x30	0.81		
470	22x50	0.92	25x40	0.90	30x30	0.88					25x45	0.91	30x35	0.94	35x25	0.91
560			25x45	1.03	30x30	1.03	35x25	0.99			25x50	1.08	30x35	1.03	35x30	1.06
680			25x50	1.19	30x40	1.20	35x30	1.17					30x40	1.20	35x35	1.24
820					30x45	1.38	35x35	1.36					30x45	1.38	35x35	1.36
1,000					30x50	1.60	35x40	1.59							35x40	1.59
1,200							35x45	1.83							35x50	1.91
1,500							35x50	2.14								

W.V.(V) Cap.( F) D	200								250							
	22		25		30		35		22		25		30		35	
100									22x25	0.28						
120	22x25	0.35							22x30	0.33						
150	22x30	0.42							22x30	0.37	25x25	0.37				
180	22x30	0.46	25x25	0.46					22x35	0.44	25x30	0.44				
220	22x35	0.54	25x30	0.54					22x40	0.51	25x35	0.52	30x25	0.50		
270	22x40	0.63	25x30	0.60	25x30	0.63			22x50	0.62	25x40	0.61	30x30	0.60		
330	22x45	0.74	25x35	0.71	25x30	0.74					25x45	0.71	30x30	0.71	35x25	0.68
390	22x50	0.84	25x40	0.82	25x30	0.81	35x25	0.83			25x50	0.81	30x35	0.77	35x30	0.79
470			25x45	0.94	25x35	0.94	35x30	0.97					30x40	0.89	35x35	0.92
560					25x30	1.09	35x30	1.06					30x45	1.02	35x35	1.01
680					30x45	1.26	35x35	1.24							35x40	1.17
820					30x50	1.45	35x35	1.44							35x45	1.41
1,000							35x45	1.67								
1,200							35x50	1.91								



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W.V.(V)	315						350									
	22		25		30		35		22		25		30		35	
47									22 25	0.19						
56									22 30	0.23						
68	22x25	0.23							22 30	0.25	25 25	0.25				
82	22x30	0.28							22 35	0.29	25 30	0.30				
100	22x30	0.30	25x25	0.30					22 40	0.34	25 30	0.33	30x25	0.34		
120	22x35	0.36	25x30	0.36					22 45	0.40	25 35	0.38	30x30	0.40		
150	22x40	0.42	25x35	0.43	30 25	0.42					25 40	0.45	30x30	0.45	35x25	0.46
180	22x45	0.49	25x40	0.47	30 30	0.49					25 45	0.52	30x35	0.52	35x30	0.54
220			25x45	0.55	30 30	0.54	35x25	0.55					30x40	0.61	35x30	0.59
270			25x50	0.67	30 35	0.64	35x30	0.66					30x45	0.71	35x35	0.70
330					30 40	0.75	35x35	0.77							35x40	0.82
390					30 45	0.85	35x35	0.84							35x45	0.93
470							35x40	0.97								
560							35x45	1.12								

W.V.(V)	400						450									
	22		25		30		35		22		25		30		35	
39									22 25	0.18						
47	22 25	0.19							22 30	0.21	25 25	0.21				
56	22 30	0.23							22 35	0.24	25 30	0.25				
68	22 30	0.25	25 25	0.25					22 40	0.28	25 30	0.27				
82	22 35	0.29	25 30	0.30					22 45	0.33	25 35	0.32	30 25	0.31		
100	22 40	0.34	25 30	0.33	30 25	0.34			22 50	0.38	25 40	0.37	30 30	0.36		
120	22 45	0.40	25 35	0.38	30 30	0.40					25 45	0.43	30 35	0.43	35 25	0.41
150			25 40	0.45	30 30	0.45	35 25	0.46					30 40	0.50	35 30	0.49
180			25 45	0.52	30 35	0.52	35 30	0.54					30 45	0.58	35 35	0.57
220					30 40	0.61	35 30	0.59					30 50	0.67	35 40	0.67
270					30 45	0.71	35 35	0.70							35 45	0.78
330							35 40	0.82							35 25	0.90
390							35 45	0.93								
470							35 50	1.07								

## Ripple Current Multipliers

Frequency multiplying factor

Freq(Hz)	50	60	120	1k	10 15K
16 100	0.88	0.90	1.00	1.15	1.15
160 250	0.85	0.88	1.00	1.15	1.20
315 450	0.88	0.90	1.00	1.10	1.15

Temperature multiplying factor

Temperature(°C)	45	60	70	85	105
Factor	2.47	2.37	2.17	1.67	1.00