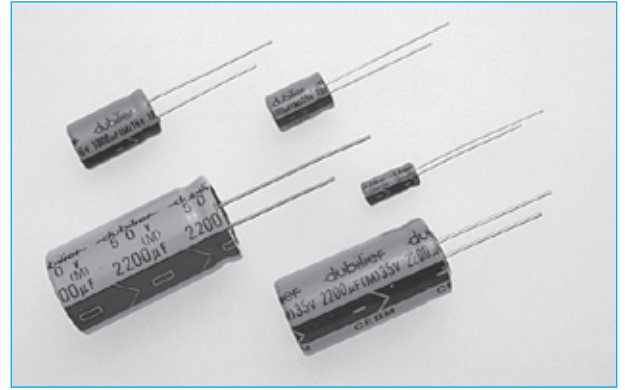


## CAPACITORS

- For general purpose
- Wide CV value range
- Life 2000 hours at +85°C
- Safety vent construction products

## ALUMINIUM ELECTROLYTIC STANDARD RADIAL CEBM



### RANGE

V	6.3	10	16	25	35	50	63	100	160	200	250	400	450
µF	øxl/mm	øxl/mm	øxl/mm	øxl/mm	øxl/mm	øxl/mm	øxl/mm	øxl/mm	øxl/mm	øxl/mm	øxl/mm	øxl/mm	øxl/mm
0.1											→	6.3x11	6.3x11
0.22										→	5x11	6.3x11	6.3x11
0.33										→	5x11	6.3x11	6.3x11
0.47							→	5x11	6.3x11	6.3x11	6.3x11	6.6.3x11	6.3x11
1.0							→	5x11	6.3x11	6.3x11	6.3x11	8x11.5	8x11
2.2							→	5x11	6.3x11	6.3x11	8x11	8x11.5	10x16
3.3							→	5x11	8x11.5	8x11.5	8x11	10x16	10x20
4.7							→	5x11	8x11.5	10x12.5	10x16	10x20	12.5x20
10						→	5x11	6.3x11	10x12.5	10x16	10x16	12.5x20	12.5x25
22				→	5x11	6.3x11	6.3x11	8x11.5	10x20	10x20	10x20	16x25	16x31.5
33			→	5x11	6.3x11	6.3x11	6.3x11	10x12.5	12.5x20	12.5x25	12.5x25	16x31.5	18x35.5
47		→	5x11	6.3x11	6.3x11	6.3x11	8x11.5	10x16	12.5x25	12.5x25	12.5x25	18x35.5	18x40
100	→	5x11	6.3x11	6.3x11	8x11.5	8x11.5	10x12.5	12.5x20	16x25	16x31.5	16x31.5		
220	→	6.3x11	8x11.5	8x11.5	10x12.5	10x16	10x20	16x25	18x35.5	22x35.5			
330	6.3x11	8x11.5	8x11.5	10x12.5	10x16	10x20	12.5x20	16x25					
470	8x11.5	8x11.5	10x12.5	10x16	10x20	12.5x20	12.5x25	16x31.5					
1000	10x12.5	10x16	10x20	12.5x20	12.5x25	16x25	16x31.5	18x40					
2200	12.5x20	12.5x20	12.5x25	16x25	16x31.5	16x34.5	22x40						
3300	12.5x20	12.5x25	16x25	16x31.5	18x35.5	18x35.5							
4700	16x25	16x25	16x31.5	18x35.5	18x35.5								
6800	16x25	16x31.5	18x32	18x35.5									
10000	16x31.5	18x35.5	18x35.5										
15000	18x35.5	18x35.5											

Sizes may reduce as technology continually improves.

### ORDERING INFORMATION

CEBM	100	16	TA
Range	Capacitance µF	Voltage V	Options: TA = Tape/Ammo-box Blank = Loose CRxx = Cropped to xxMM
TA = 5mm pitch, e.g. TA 2mm = 2mm pitch			

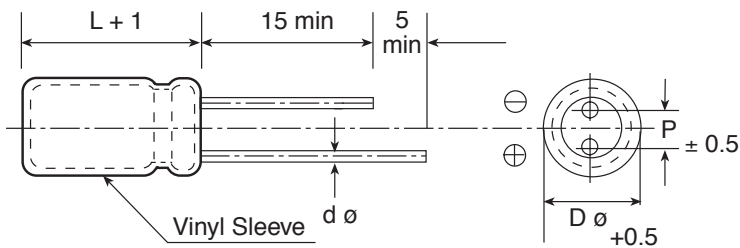
## SPECIFICATION

Item	Performance Characteristics								
Operating Temperature Range	-40 to +85°C				-25 to +85°C				
Rated Working Voltage Range	6.3 to 100V DC				160 to 450V DC				
Nominal Capacitance Range	0.47 to 15000µF				0.47 to 220µF				
Capacitance Tolerance	± 20% (120Hz, +20°C)								
Leakage Current	I ≤ 0.01CV or 3[µA] after 2 minutes whichever is greater measured with rated working voltage applied at +20°C				I ≤ 0.06CV [µA] after 2 minutes application of rated working voltage at +20°C				
tan δ	Working voltage [V]	6.3	10	16	25	35	50	63	100
	tan δ (max.)	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08
	Working voltage [V]	160	200	250		400	450		
	tan δ (max.)	0.16	0.18	0.18		0.20	0.20		
(120Hz, +20°C) For capacitance value > 1000µF, add 0.02 per extra 1000µF									
Ripple Current	Refer to standard products table (120Hz, +85°C) Correction factor for frequency								
	Frequency [Hz]		50/60	120	1K	10K			
	Correction factor (Multiplier)		0.7	1	1.3	1.7			
Low Temperature Characteristics	Impedance ratio max. at 120Hz								
	Working voltage [V]	6.3	10	16	25	35	50	63	100
	-25°C/+20°C	4	3	2	2	2	2	2	2
	-40°C/+20°C	8	6	4	4	3	3	3	3
	Working voltage [V]	160	200	250		400	450		
	-25°C/+20°C	2	2	3		15	15		
For capacitance value > 1000µF, Add 0.5 per extra 1000µF for -25°C/+25°C. Add 1.0 per extra 1000µF for -40°C/+20°C.									
Impedance	Maximum C-Z (rated cap-[µF] x Impedance [Ω]) value at 10KHz								
	Working voltage [V]	6.3	10	16	25	35	50	63	100
	C-Z max. at +20°C	220	160	125	90	80	60	55	50
	C-Z max. at -25°C	3000	1900	1300	800	650	560	500	450
	Working voltage [V]	160	200	250		450			
	C-Z max. at +20°C	100	140	150		270			
C-Z max. at -25°C	2400	2500	3100		12000				
High Temperature Loading	Test conditions								
	Duration	2000 hours							
	Ambient temperature	+85°C							
	Applied voltage	Rated DC working voltage							
	Post test requirements at +20°C								
	Leakage current	≤ Initial specified value							
	Capacitance change	≤ ± 20% of initial measured value							
tan δ	≤ 150% of initial specified value								
Shelf Life	Test conditions								
	Duration	500 hours							
	Ambient temperature	+85°C							
	Applied voltage	(None)							
	Post test requirements at +20°C.								
	Same limits for high temperature loading.								

**PERMISSIBLE RIPPLE CURRENT mA (rms) 85 °C/120Hz**

Volts	6.3	10	16	25	35	50	63	100	160	200	250	400	450
0.47						5	5	10	10	12	14	14	14
1.0						10	10	15	15	17	15	19	19
2.2						20	29	25	20	20	25	28	29
3.3						25	30	30	35	35	30	32	35
4.7					30	30	35	35	40	45	40	41	50
10					45	45	50	70	65	70	70	70	75
22			55	60	60	70	115	110	130	130	130	120	110
33		65	70	70	80	110	100	160	180	190	160	140	170
47		75	80	90	110	120	150	210	220	180	210	225	230
100	100	110	140	150	190	200	260	380	300	400	310		
220	170	190	240	260	330		460	600	640	660			
330	210	330	300	380	450	540	650	860					
470	300	330	420	500	510	740	850	1100					
1000	530	620	740	950	1050	1350	1550	1350					
2200	990	1050	1200	1500	1750	1850	2300						
3300	1150	1350	1200	1900	2220	2170							
4700	1700	1800	2100	2360	2400								
6800	1900	2150	2500	2500									
10000	2250	2500	2600										
15000	2680	2950											

**OUTLINE DRAWING**



<b>D<math>\varnothing</math></b>	5	6.3	8	10	13	16	18	22
<b>P</b>	2.0	2.5	3.5	5.0	5.0	7.5	7.5	10.0
<b>d<math>\varnothing</math></b>	0.5		0.6			0.8		

For smaller case size options refer to sales office and discuss CEBR.

Dimensions in mm