

CONDUCTIVE POLYMER HYBRID CAPACITORS

- CCBV SERIES -

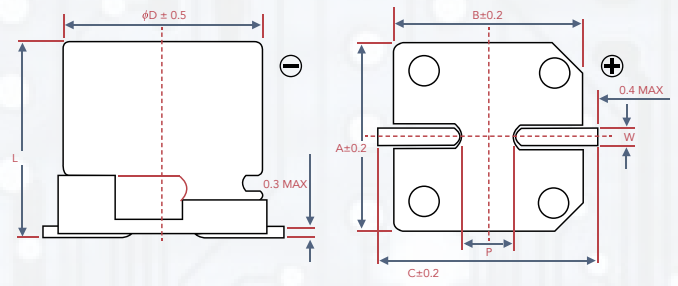
FEATURES

- 105°C, 10,000 hours assured
- Low ESR, High ripple current
- RoHS Compliance



CONSTRUCTION AND DIMENSIONS

LEAD SPACING AND DIAMETER



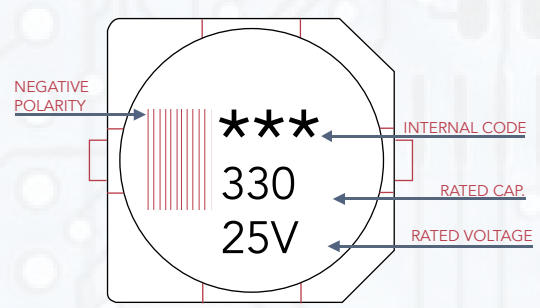
UNIT : MM

ϕD	L	A	B	C	W	P ± 0.2
6.3	5.8 \pm 0.3	6.6	6.6	7.2	0.5-0.8	2.0
6.3	7.7 \pm 0.3	6.6	6.6	7.2	0.5-0.8	2.0
8	10.0 \pm 0.5	8.4	8.4	9.0	0.7-1.1	3.1
8	12.0 \pm 0.5	8.4	8.4	9.0	0.7-1.1	3.1
10	10.0 \pm 0.5	10.4	10.4	11.0	0.7-1.3	4.7
10	12.5 \pm 0.5	10.4	10.4	11.0	0.7-1.3	4.7

PART NUMBERS

CCBV	1C	471	M	H10	R	
SERIES NAME	RATED VOLTAGE	CAPACITANCE	TOLERANCE	CASE SIZE	PACKAGE TYPE	
Series is represented by a three/four digit code	OE - 2.5V OG - 4V OJ - 6.3V 1A - 10V 1C - 16V 1E - 25V 1V - 35V 1H - 50V	1J - 63V 1K - 80V 2A - 100V 2C - 160V 2D - 200V 2E - 250V 2G - 400V 2W - 450V	100 - 10 μ F 470 - 47 μ F 101 - 100 μ F 471 - 470 μ F	M: -20% ~+20%	3x5.3 8x6.78x7.0 4x5.3 8x10.0 4x5.7 8x12.0 5x5.3 10x7.7 5x5.7 10x8.0 6.3x5.3 10x9.9 6.3x5.7 10x10.0 6.3x5.8 10x12.5 6.3x5.9 10x12.7 6.3x6.0 10x13.0 6.3x7.0 12.5x13.5 6.3x7.7 12.5x16.0 8x6.5 16x16.5	R - Tape and reel

MARKING





SPECIFICATIONS

ITEMS	PERFORMANCE				
Category Temperature Range	-55°C ~ +105°C				
Capacitance Tolerance	±20% (at 120Hz, 20°C)				
Leakage Current (at 20°C)	I = 0.01CV or 3 (µA) whichever is greater (after 2 minutes) Where, C = rated capacitance µF, V = rated DC working voltage in V				
Tan δ at 120Hz, 20°C	See Standard Ratings				
Endurance	TEST TIME	10,000 Hrs			
	CAPACITANCE CHANGE	Within ±30% of initial value			
	TAN δ	Less than 200% of specified value			
	ESR	Less than 200% of specified value			
	LEAKAGE CURRENT	Within specified value			
*The above specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage applied with rated ripple current for 10,000 hrs at 105°C.					
Shelf Life Test	After storage for 1,000 hours at 105 ± 2°C with no voltage applied and then being stabilized at 20°C, capacitors shall meet the limits specified in Endurance (with voltage treatment)				
Resistance to Soldering Heat*	CAPACITANCE CHANGE	Within ±10% of initial value			
	TAN δ	Within specified value			
	ESR	Within specified value			
	LEAKAGE CURRENT	Within specified value			
Ripple Current & Frequency Multipliers	FREQUENCY (Hz)	120 ≤ f < 1k	1k ≤ f < 10k	10k ≤ f, < 100k	100k ≤ f < 500k
	MULTIPLIER	0.05	0.3	0.6	1.0



STANDARD RATINGS

Dimension: ØDxL (mm)
Ripple Current: mA/rms at 100k Hz, 105°C

W. V. (V)	SURGE VOLTAGE (V)	CAPACITANCE (µF)	SIZE ØDxL (mm)	TAN δ (120Hz, 20°C)	L C (µA)	ESR (MΩ/AT 100K HZ, 20°C MAX)	RATED R.C. (mA/rms at 100k Hz, 105°C)
16V (1C)	18.4	82	6.3 x 5.8	0.16	13.1	50	1,300
		150	6.3 x 7.7	0.16	24	30	2,000
		270	8 x 10	0.16	43.2	27	2,300
		470	10 x 10	0.16	75.2	20	2,500
25V (1E)	28.8	56	6.3 x 5.8	0.14	14	50	1,300
		100	6.3 x 7.7	0.14	25	30	2,000
		220	8 x 10	0.14	55	27	2,300
		330	10 x 10	0.14	82.5	20	2,500
		330	10 x 12.5	0.14	82.5	16	2,900
35V (1V)	40.3	27	6.3 x 5.8	0.12	9.5	60	1,300
		68	6.3 x 7.7	0.12	23.8	35	2,000
		150	8 x 10	0.12	52.5	27	2,300
		270	10 x 10	0.12	94.5	20	2,500
50V (1H)	57.5	22	6.3 x 5.8	0.10	11	80	1,100
		33	6.3 x 7.7	0.10	16.5	40	1,600
		68	8 x 10	0.10	34	30	1,800
		100	10 X 10	0.10	50	28	2,000
6.3V (0J)	7.2	10	6.3 x 5.8	0.08	6.3	120	1,000
		22	6.3 x 7.7	0.08	13.9	80	1,500
		27	8 x 12	0.08	17	40	1,700
		33	8 x 10	0.08	20.8	40	1,700
		56	10 x 10	0.08	35.3	30	1,800
		22	8 x 10	0.08	17.6	45	1,550
		33	10 x 10	0.08	26.4	36	1,700