

SMD ALUMINUM ELECTROLYTIC CAPACITORS

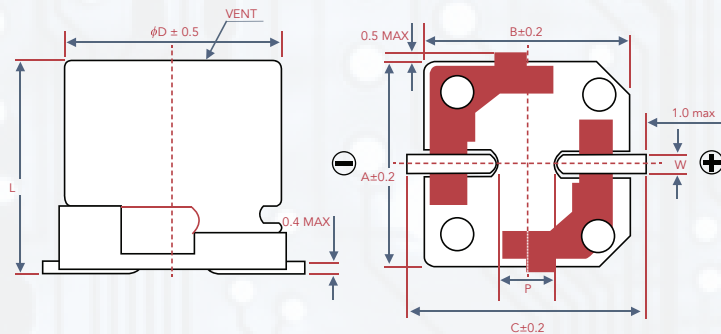
- CVV SERIES -

FEATURES

- 12.5Ø~16Ø, 105°C, 5,000 hours assured
- Suitable for automotive application
- Peak acceleration: 50G
- RoHS Compliance



CONSTRUCTION AND DIMENSIONS



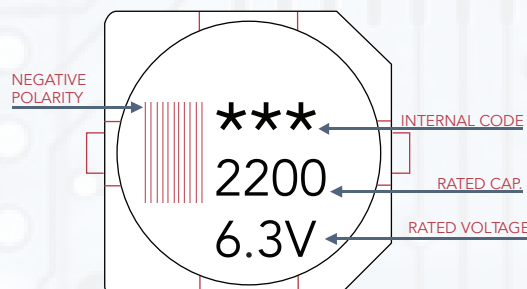
LEAD SPACING AND DIAMETER

ϕD	L	A	B	C	W	$P \pm 0.2$
12.5	13.5±0.5	13.0	13.4	15.4	1.1~1.4	4.4
12.5	16±0.5	13.0	13.4	15.4	1.1~1.4	4.4
16	16.5±0.5	16.5	16.9	18.9	1.1~1.4	6.4

PART NUMBERING

CVV	1C	102	M	K14	R
SERIES NAME	RATED VOLTAGE	CAPACITANCE	TOLERANCE	CASE SIZE	PACKAGE TYPE
Series is represented by a three/four digit code	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	330 - 331 μ F 102 - 1000 μ F	M: -20% ~ +20% K: -10% ~ +10% J: -5% ~ +5%	B55 - 3x5.3 D55 - 4x5.3 D60 - 4x5.7 E55 - 5x5.3 E60 - 5x5.7 F55 - 6.3x5.3 F60 - 6.3x5.7 F62 - 6.3x6.0 F72 - 6.3x7.0 F80 - 6.3x7.7 G68 - 8x6.5 G72 - 8x7.0 G10 - 8x10.0 G12 - 8x12.0 H82 - 10x8.0 H10 - 10x10.0 H13 - 10x13.0 K14 - 12.5x13.5 K16 - 12.5x16.0 L17 - 16x16.5	R - Taping polarity with reel package in 380mm

MARKING



SPECIFICATIONS

ITEM	SPECIFICATION									
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 in µF. V= rated DC working voltage in V									
Dissipation Factor Tan δ at 120Hz, 20°C	RATED VOLTAGE	6.3	10	16	25	35	50	63	80	100
	TAN δ (MAX)	0.30	0.26	0.22	0.16	0.13	0.10	0.08	0.08	0.07
When the capacitance exceeds 1,000µF, 0.002 shall be added every 1,000µF increase										
Low Temperature Characteristics (at 120Hz)	Impedance ratio shall not exceed the values given in the table below.									
	RATED VOLTAGE	6.3	10	16	25	35	50	63	80	100
	IMPEDANCE RATIO	Z(-25°C) / Z(+20°C)	4	3	2	2	2	2	2	2
		Z(-40°C) / Z(+20°C)	8	5	4	3	3	3	3	3
Endurance	TEST TIME	5,000 Hrs								
	CAPACITANCE CHANGE	Within ±30% of initial value								
	DISSIPATION FACTOR	Less than 300% 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 for 5,000 hrs at 105°C.										
Shelf Life Test	TEST TIME	1,000 Hrs								
	CAPACITANCE CHANGE	Within ±30% of initial value								
	TAN δ	Less than 300% 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 for 1,000 hrs at 105°C without voltage applied.										
Ripple Current & Frequency Multipliers	FREQUENCY (Hz)	50, 60	120	1K	10K up					
	MULTIPLIERS	0.60	0.70	0.85	1.0					
Vibration	Peak Acceleration	50G								
	Peak to Peak Amplitude	1.5mm								
	Frequency	5 to 2,000 Hz reciprocation for 20 min								
	Direction and Duration of Vibration	3 orthogonal directions mutually each for 4 Hrs.								

DIMENSION & PERMISSIBLE RIPPLE CURRENT

Dimension: ØDxL (mm)
Ripple Current: mA/rms at 100 Hz, 105°C
Impedance: Ω / at 100k Hz, 20°C

VDC	6.3V (OJ)			10V (1A)			16V (1C)			25V (1E)			35V (1V)			
	CONTENTS µF	ØDxL	Imp.	mA	ØDxL	Imp.	mA	ØDxL	Imp.	mA	ØDxL	Imp.	mA	ØDxL	Imp.	mA
100	101															
150	151															
220	221															
330	331												12.5x13.5	0.066	850	
470	471												12.5x16	0.058	950	
680	681										12.5x13.5	0.066	850	12.5x16	0.058	950
1,000	102						12.5x13.5	0.066	850	12.5x16	0.058	950	16x16.5	0.052	1,300	
1,500	152				12.5x13.5	0.066	850	12.5x16	0.058	950	16x16.5	0.052	1,300			
2,200	222	12.5x13.5	0.066	850	12.5x16	0.058	950	16x16.5	0.052	1,300	16x16.5	0.052	1,300			
3,300	332	12.5x16	0.058	950	16x16.5	0.052	1,300	16x16.5	0.052	1,300						
4,700	472	16x16.5	0.052	1,300	16x16.5	0.052	1,300									

VDC	50V (1H)			63V (1J)			80V (1K)			100V (2A)			
	CONTENTS µF	ØDxL	Imp.	mA	ØDxL	Imp.	mA	ØDxL	Imp.	mA	ØDxL	Imp.	mA
100	101										12.5x13.5	0.32	450
150	151				12.5x13.5	0.140	700	12.5x13.5	0.32	450	12.5x16	0.26	550
220	221				12.5x13.5	0.140	700	12.5x16	0.26	550	16x16.5	0.17	650
330	331	12.5x13.5	0.11	700	16x16.5	0.080	900	16x16.5	0.17	650			
470	471	16x16.5	0.070	1,100	16x16.5	0.080	900						
680	681	16x16.5	0.070	1,100									
1,000	102												
1,500	152												
2,200	222												
3,300	332												
4,700	472												

