

# Data Sheet

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Product: SMD Aluminum Electrolytic Capacitors – EZV Series

Size:  $4x5.5mm \sim 18x21.5mm$ 

Issued Date: 25-Dec.-2018

Edition: Ver. 3

### Record of change

Date	Ver.	Description	Page
15-May-2016	1		
07-Sep-2017	2	Added size G on some items	2
22-May-2018	3	Added new sizes	2

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Prepared by	Checked by	Approved by	Accepted by (customer)
22-May-2018	22-May-2018	22-May-2018	
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- SMD Low Impedance Type. Reflow Soldering is available.
- $4\sim18\phi$ ,  $105^{\circ}$ C,  $2000\sim5000$  hours load life., Rohs compliant
- Available For High Density Mounting

#### **Characteristics**

Voltage Range				6.3 to 10	00 VDC					
Capacitance Range		1.0 to 6800uF								
Temperature Range		-55 to +105°C								
Capacitance Tolerance		+/-20% (at 20°C, 120Hz)								
Leakage Current	I≤0.01	I≤0.01CV or 3uA, whichever is greater, 2 minutes after Rated Voltage applied, where C = Rated Capacitance, V = Rated DC working voltage								
Dissipation Factor	Rated Voltage (V)	6.3	10	16	25	35	50	63	100	
( tanδ) Max (at 20°C, 120Hz)	D.F.( tanδ)	0.30	0.26	0.22	0.16	0.13	0.10	0.08	0.07	
Stability at Low	Rated Voltage (V)	6.3	10	16	25	35	50	63	100	
Temperature (at 120Hz)	Z-25°C/Z 20°C	4	3	2	2	2	2	2	2	
(at 12011Z)	Z-55°C/Z 20°C	8	5	4	3	3	3	3	3	
Load Life	2000hrs for D $\leq$ 6.3m	nm,	Capacitano	e change		Within ±30	0% of initia	l value		
After the rated voltage has been applied for 2000~5000	$5000$ hrs for D $\geq 8$ mm	D.F. (tanδ)			300% or less of initial specified value					
hours at 105°C	Leakage current Less than initial specified value									
Shelf Life	After storage for 100			h no voltag	ge applied	and being	stabilized a	$t + 20^{\circ}C, C$	Capacitor	
	shall meet the limit s	pecified in	load life.							

**Diagram of dimensions** 

SIZE	Dφ	L	A	В	C	W	P±0.2
A	4	5.5±0.2	4.3	4.3	5.1	0.5~0.8	1.0
В	5	5.5±0.2	5.3	5.3	5.9	0.5~0.8	1.5
C	6.3	5.5±0.2	6.6	6.6	7.2	0.5~0.8	2.0
C8	6.3	7.7±0.3	6.6	6.6	7.2	0.5~0.8	2.0
D	8	6.5±0.3	8.4	8.4	9.0	0.5~0.8	2.3
E	8	10.5±0.3	8.4	8.4	9.0	0.7~1.1	3.1
F	10	10.5±0.3	10.4	10.4	11.0	0.7~1.3	4.5
G	12.5	14±0.3	13.5	13.5	15.0	1.1~1.4	4.5
Н	12.5	16±0.3	13.0	13.0	15.0	1.1~1.4	4.5
I	16	16.5±0.5	17.0	17.0	18.0	1.1~1.4	6.4
J	16	21.5±0.5	17.0	17.0	18.0	1.1~1.4	6.4
K	18	16.5±0.5	19.0	19.0	20.0	1.1~1.4	6.4
L	18	21.5±0.5	19.0	19.0	20.0	1.1~1.4	6.4

Size A~F refer to Fig. 1

Size G~L refer to Fig. 2

## **Multiplier for Ripple Current vs Frequency**

Frequency(Hz)	60(50)	120	1K	≥10K
Multiplier	0.60	0.70	0.85	1.00

## **Part Numbering System**



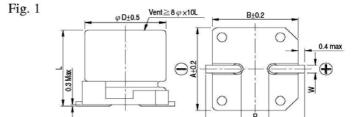
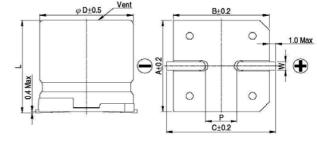


Fig. 2



C±0.2





# Case size & Maximum Ripple Current (mA rms 105°C 100KHz) & Imp. (Ω 20°C 100KHZ)

Cap. WV	6.3			10			16			25		
uF	Size	RC	Imp.	Size	RC	Imp.	Size	RC	Imp.	Size	RC	Imp.
1												
2.2												
3.3												
4.7												
10							A	80	1.35	A	80	1.35
22				A	80	1.80	A, B	80/150	0.70/0.76	В	150	0.76
33	A	80	1.35	В	150	0.76	С	230	0.44	C	230	0.44
47	В	150	0.76	С	230	0.44	С	230	0.44	С	230	0.44
100	С	230	0.44	С	230	0.44	C, D	230/280	0.44/0.36	C8, E	280/450	0.34/0.17
150	С	230	0.44	С	230	0.44	C8	280	0.36	Е	450	0.17
220	C, C8	230/280	0.44/0.32	C8	280	0.34	C8, E	280/450	0.34/0.17	E, F	450/670	0.17/0.09
330	C8, E	280/450	0.34/0.17	E, F	450/510	0.17/0.15	E, F	450/510	0.17/0.15	E, F	450/670	0.17/0.09
470	E	450	0.17	E, F	450/670	0.17/0.09	E, F	450/670	0.17/0.09	F	670	0.09
680	E	450	0.17	F	670	0.09	F	670	0.09	G	820	0.07
1000	E, F	450/553	0.17/0.09	F	670	0.09	G	820	0.07	G, H	950/1150	0.066/0.06
1500	F	670	0.09	G	820	0.07	G, H	950/1150	0.066/0.06	I	1260	0.054
2200	G	820	0.07	G, H	950/1150	0.066/0.06	I	1260	0.054	I	1260	0.054
3300	G, H	950/1150	0.066/0.06	I	1260	0.054	I, J	1260/1630	0.054/0.038	J, K	1630/1500	0.038/0.048
4700	I	1260	0.054	I	1260	0.054	J, K	1630/1500	0.038/0.048			
6800	J, K	1630/1500	0.038/0.048	J, K	1630/1500	0.038/0.048						

Cap. WV		35		50		63			100			
uF	Size	RC	Imp.	Size	RC	Imp.	Size	RC	Imp.	Size	RC	Imp.
1				A	60	2.9						
2.2				A	60	2.9						
3.3				A	60	2.9						
4.7	A	80	1.35	В	85	1.52	В	70	1.90			
10	В	150	0.76	С	165	0.88	С	130	1.20			
22	B, C	150/230	0.76/0.44	С	165	0.88	C8	150	0.90	Е	130	1.30
33	С	230	0.44	C8, E	185/300	0.68/0.34	Е	280	0.50	F	200	0.70
47	C, D	230/280	0.44/0.32	C8, E	185/369	0.68/0.34	Е	280	0.50	F	200	0.70
100	E, F	450/670	0.17/0.14	E, F	369/553	0.34/0.18	F	450	0.25	G	450	0.32
150	E	450	0.17	F	553	0.18	G	700	0.15	Н	550	0.26
220	E, F	450/670	0.17/0.09	F	670	0.18	G	700	0.15	I	650	0.17
330	F	670	0.09	G	650	0.12	I	900	0.082	J	850	0.15
470	G, H	950/1150	0.066/0.06	I	1000	0.073	I	900	.0.082	L	950	0.15
680	G, H	950/1150	0.066/0.06	I	1000	0.073	J	1150	0.080			
1000	I	1260	0.054	K	1500	0.066	L	1250	0.06			
1500	J	1500	0.048	L	1750	0.038						
2200	L	1750	0.044								_	