



**RoHS Compliant ALUMINIUM ELECTROLYTIC CAPACITOR**

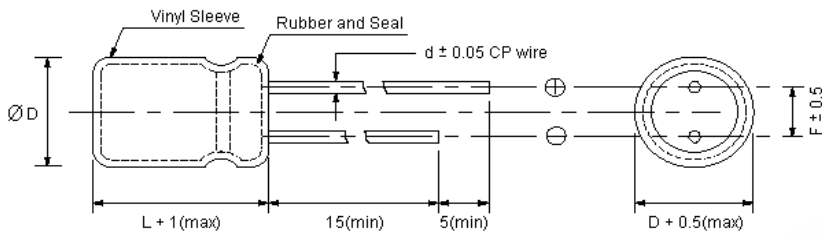
**ZS Series**

■ **FEATURES**

- ◆ High ripple current, low impedance series with 7mm height
- ◆ Load life of 1000 hours at 105°C



■ **OUTLINE**



	mm			
D	4	5	6.3	8
F	1.5	2.0	2.5	3.5
d	0.45		0.50	

■ **SPECIFICATIONS**

Items	Characteristics					
Capacitance Tolerance (120Hz, 25°C)	± 20% (M)					
Rated Working Voltage Range	6.3 ~ 50Vdc					
Operation Temperature	-40°C ~ +105°C					
Leakage Current (25°C)	(After 3 minutes applying the DC working voltage)					
	$I \leq 0.01CV$ or 3 (uA)					
	◆ I : Leakage Current (uA)		◆ C : Rated Capacitance (uF)		◆ V : Working Voltage (V)	
Surge Voltage (25°C)	W.V.	6.3	10	16	25	35
	S.V.	8	13	20	32	44
Dissipation Factor (120Hz, 25°C)	W.V.	6.3	10	16	25	35
	$\tan \delta$	0.22	0.19	0.16	0.14	0.12
Temperature Characteristics	W.V.	6.3	10	16	25	35
	- 25°C / + 25°C	3	3	3	2	2
	- 40°C / + 25°C	6	6	6	4	4
	◆ Impedance ratio at 120Hz					
Load Test	After 1000 hours application of WV at +105°C, the capacitor shall meet the following limits:					
	Capacitance Change	≤ ± 20% of initial value				
	$\tan \delta$	≤ 200% of initial specified value				
Shelf Test	After 500 hours, no voltage applied at + 105°C for 500 hours, the capacitor shall meet the following limits:					
	Capacitance Change	≤ ± 20% of initial value				
	$\tan \delta$	≤ 200% of initial specified value				
	Leakage Current	≤ 200% of initial specified value				

# DB LECTRO<sup>U</sup><sub>Z</sub>

## ■ DIMENSIONS

D x L (mm)

uF \ WV	6.3	10	16	25	35	
4.7				]	4 x 7	
6.8				]	4 x 7	
10			]	4 x 7	5 x 7	
22	]	4 x 7	5 x 7	5 x 7	6.3 x 7	
33	4 x 7	5 x 7	6.3 x 7	6.3 x 7	8 x 7	
47	5 x 7	5 x 7	6.3 x 7	8 x 7	8 x 7	
68	5 x 7	6.3 x 7	8 x 7	8 x 7		
100	6.3 x 7	8 x 7	8 x 7			
220	8 x 7					

## ■ RIPPLE CURRENT & IMPEDANCE

RC: mA (rms) at 100KHz 105°C

Imp: Ω (ohm) at 100KHz 25°C

uF \ WV	Item	6.3		10		16		25		35			
		R.C	Imp	RC	Imp	RC	Imp	RC	Imp	RC	Imp		
4.7								]	48	4.05			
6.8								]	65	3.39			
10						]	70	3.27	110	2.43			
22	]		60	2.13	85	1.76	105	1.73	130	1.26			
33	65	1.62	95	1.55	130	1.12	135	1.08	155	0.92			
47	100	1.45	110	1.02	140	0.85	160	0.8	165	0.74			
68	115	0.97	150	0.88	170	0.67	175	0.64					
100	155	0.8	185	0.63	190	0.6							
220	200	0.46											

## ■ RIPPLE CURRENT COEFFICIENTS

Temperature(°C)	45	65	85	105
Multiplier	2.40	2.15	1.70	1.00

uF \ Hz	60(50)	120	1K	10K	100K
4.7 ~ 33	0.35	0.45	0.75	0.90	1.00
47 ~ 220	0.60	0.70	0.85	0.95	1.00