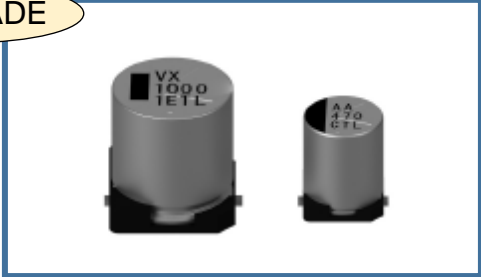


**Rubycon** **CHIP ALUMINUM ELECTROLYTIC CAPACITORS** **TLV**

**TLV SERIES**

UPGRADE



◆ FEATURES

- Low Impedance
- Life : 2000 ~ 5000 hours at 105°C
- Surface Mount Type
- AEC-Q200,RoHS Compliance

◆ SPECIFICATIONS

Item	Characteristics										
Temperature Range	-55~+105°C										
Rated Voltage Range	6.3~100Vdc										
Capacitance Tolerance	±20%(20°C, 120Hz)										
Leakage Current (MAX)	I=0.01CV after 2 minutes or 3 μ A (whichever is greater) I=( μ A) Leakage Current    C=( μ F) Capacitance    V=(Vdc) Rated Voltage										
Dissipation Factor (MAX)	(Vdc) Rated Voltage	6.3	10	16	25	35	50	63	80	100	(20°C,120Hz)
	tan δ	0.26	0.19	0.16	0.14	0.12	0.10	0.09	0.09	0.08	
	When capacitance is over 1000μF, tanδ shall be added 0.02 to the listed value with increase of every 1000μF.										
Endurance (Life)	After applying rated voltage for specified time at 105°C, the capacitors shall meet the following requirements.										
	Capacitance Change	Within ±30% of the initial value.									
	Dissipation Factor	Not more than 200% of the specified value.									
	Leakage Current	Not more than the specified value.									
	Case Size	Life Time (hrs)									
		6.3~50Vdc		63~100Vdc							
	φD ≤ 10	5000		2000							
	φD ≥ 12.5	5000									
Low Temperature Stability Impedance Ratio (MAX)	(Vdc) Rated Voltage	6.3	10	16	25	35	50	63	80	100	(120Hz)
	Z(-25°C)/Z(20°C)	2	2	2	2	2	2	2	2	2	
	Z(-40°C)/Z(20°C)	3	3	3	3	3	3	3	3	3	
	Z(-55°C)/Z(20°C)	4	4	4	3	3	3	3	3	3	

◆ MULTIPLIER FOR RIPPLE CURRENT

f (Hz) Frequency		120	1k	10k	100k≤
Coefficient	22 ~ 33μF	0.45	0.75	0.90	1.00
	47 ~ 180μF	0.50	0.80	0.95	1.00
	220 ~ 10000μF	0.60	0.85	0.95	1.00

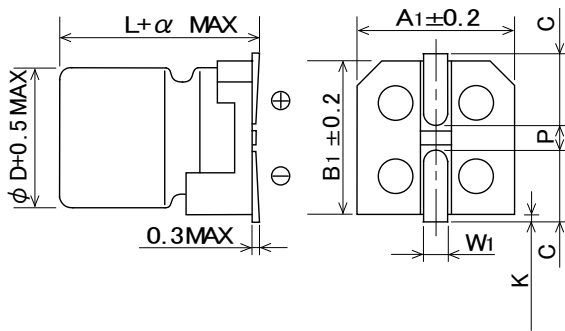
◆ PART NUMBER

□□□ TLV □□□ M □□□ φDxL  
 Rated Voltage Series Capacitance Capacitance Tolerance Option Case Size

\*Specifications subject to change without notice.

**Rubycon** **CHIP ALUMINUM ELECTROLYTIC CAPACITORS** **TLV**

◆ DIMENSIONS



Φd	L	A1	B1	C	W1	P	K	α
8	10.5	8.3	8.3	2.9	0.8~1.1	3.1	0.5Max.	0
10	10.5	10.3	10.3	3.2	0.8~1.1	4.5	0.5Max.	0
12.5	13.5	13	13	4.9	0.8~1.1	4.5	0.7±0.4	0.5
12.5	16	13	13	4.9	0.8~1.1	4.5	0.7±0.4	0.5
16	16.5	17	17	6	1.0~1.6	6.8	0.7±0.4	0.5
16	21.5	17	17	6	1.0~1.6	6.8	0.7±0.4	0.5
18	16.5	19	19	7	1.0~1.6	6.8	0.7±0.4	0.5
18	21.5	19	19	7	1.0~1.6	6.8	0.7±0.4	0.5

◆ Standard size

Size φDXL(mm), Rated Ripple Current(mAr.m.s./105°C,100kHz), Impedance(Ω MAX./20°C, 100kHz)

Vdc	Cap (μF)	Size (φD×L)	Ripple	Impedance
6.3	2200	12.5×13.5	1100	0.065
	3300	12.5×16	1400	0.055
	4700	16×16.5	1800	0.045
	6800	16×21.5	2330	0.029
	10000	18×21.5	2640	0.028
10	1000	10×10.5	850	0.08
	2200	12.5×16	1400	0.055
	3300	16×16.5	1800	0.045
	4700	18×16.5	2060	0.044
	6800	18×21.5	2640	0.028
16	470	8×10.5	600	0.16
	680	10×10.5	850	0.08
	1500	12.5×13.5	1100	0.065
	2200	16×16.5	1800	0.045
	3300	18×16.5	2060	0.044
	4700	16×21.5	2330	0.029
25	220	8×10.5	600	0.16
	330	8×10.5	600	0.16
	470	10×10.5	850	0.08
	1000	12.5×13.5	1100	0.065
	1500	16×16.5	1800	0.045
	2200	18×16.5	2060	0.044
	3300	18×21.5	2640	0.028
35	100	8×10.5	600	0.16
	100	10×10.5	850	0.08
	150	8×10.5	600	0.16
	220	8×10.5	600	0.16
	330	10×10.5	850	0.08
	470	12.5×13.5	1100	0.065
	680	12.5×13.5	1100	0.065
	1000	16×16.5	1800	0.045
	1500	18×16.5	2060	0.044
	2200	16×21.5	2330	0.029

Vdc	Cap (μF)	Size (φD×L)	Ripple	Impedance
50	100	8×10.5	350	0.34
	150	10×10.5	670	0.18
	220	10×10.5	670	0.18
	330	12.5×13.5	900	0.12
	390	12.5×13.5	900	0.12
	470	12.5×16	1200	0.1
	470	16×16.5	1610	0.075
	560	16×16.5	1610	0.075
	680	16×16.5	1610	0.075
	820	18×16.5	1700	0.07
	1000	18×16.5	1700	0.07
	1000	16×21.5	2000	0.05
	1300	16×21.5	2000	0.05
	1500	18×21.5	2200	0.045
	63	33	8×10.5	250
47		8×10.5	250	0.65
68		8×10.5	250	0.65
68		10×10.5	400	0.35
100		10×10.5	400	0.35
150		12.5×13.5	800	0.17
220		12.5×13.5	800	0.17
330		12.5×16	1000	0.14
470		16×16.5	1410	0.12
680		18×16.5	1690	0.11
680	16×21.5	1790	0.08	
1000	18×21.5	1960	0.07	

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**Rubycon** CHIP ALUMINUM ELECTROLYTIC CAPACITORS **TLV**

◆ Standard size

Size ϕDXL(mm), Rated Ripple Current(mAr.m.s./105 °C,100kHz), Impedance(Ω MAX./20°C, 100kHz)

Vdc	Cap (μF)	Size (ϕD×L)	Ripple	Impedance
NEW 80	22	8×10.5	200	0.80
	33	8×10.5	200	0.80
	47	10×10.5	300	0.51
	56	10×10.5	300	0.51
	68	12.5×13.5	740	0.28
	100	12.5×13.5	740	0.28
	150	12.5×13.5	740	0.28
	220	12.5×16	900	0.21
	330	16×16.5	1090	0.17
	470	18×16.5	1280	0.15
	560	16×21.5	1580	0.11
	680	18×21.5	1690	0.091

Vdc	Cap (μF)	Size (ϕD×L)	Ripple	Impedance
NEW 100	22	8×10.5	200	0.80
	33	10×10.5	300	0.51
	47	12.5×13.5	740	0.28
	100	16×16.5	1090	0.17
	110	12.5×13.5	740	0.28
	150	12.5×16	900	0.21
	200	16×16.5	1090	0.17
	220	18×16.5	1280	0.15
	270	18×16.5	1280	0.15
	330	16×21.5	1580	0.11
	470	18×21.5	1690	0.091

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