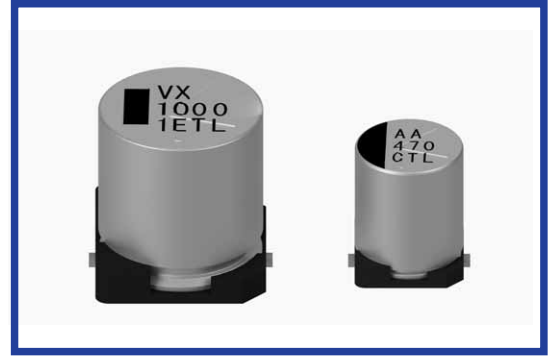


TLV SERIES

UPGRADE

Load Life : 105°C 2000~5000 hours, Low Impedance

•AEC-Q200.



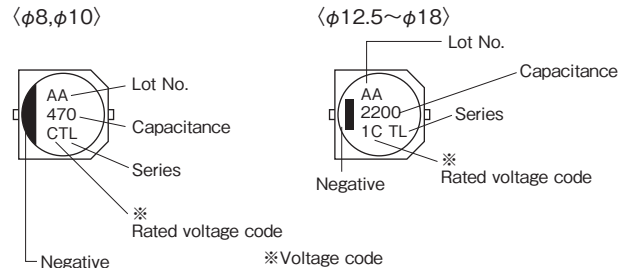
◆SPECIFICATIONS

Items	Characteristics																																				
Category Temperature Range	-55~+105°C																																				
Rated Voltage Range	6.3~63Vdc																																				
Capacitance Tolerance	±20% (20°C, 120Hz)																																				
Leakage Current(MAX)	I=0.01CV or 3μA whichever is greater.(After 2 minutes application of rated voltage) I=Leakage Current(μA)      C=Capacitance (μF)      V=Rated Voltage(Vdc)																																				
Dissipation Factor(MAX) (tanδ)	<table border="1"> <tr> <td>Rated Voltage (Vdc)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>(20°C, 120Hz)</td> </tr> <tr> <td>tanδ</td> <td>0.26</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.09</td> <td></td> </tr> </table> <p>When rated capacitance is over 1000μF, tanδ shall be added 0.02 to the listed value with increase of every 1000μF.</p>	Rated Voltage (Vdc)	6.3	10	16	25	35	50	63	(20°C, 120Hz)	tanδ	0.26	0.19	0.16	0.14	0.12	0.10	0.09																			
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Endurance	<p>After applying rated voltage for specified time at 105°C, the capacitor shall meet the following requirements.</p> <table border="1"> <tr> <td>Capacitance Change</td> <td>Within ±30% of the initially measured value.</td> <td rowspan="3"> <table border="1"> <tr> <td>Case Size</td> <td colspan="2">Life Time (hrs)</td> </tr> <tr> <td></td> <td>6.3~50Vdc</td> <td>63Vdc</td> </tr> <tr> <td>φD≤10</td> <td>5000</td> <td>2000</td> </tr> <tr> <td>φD≥12.5</td> <td colspan="2">5000</td> </tr> </table> </td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 200% of the specified value. (φ8,φ10:300%)</td> </tr> <tr> <td>Leakage Current</td> <td>Not more than the specified value.</td> </tr> </table>	Capacitance Change	Within ±30% of the initially measured value.	<table border="1"> <tr> <td>Case Size</td> <td colspan="2">Life Time (hrs)</td> </tr> <tr> <td></td> <td>6.3~50Vdc</td> <td>63Vdc</td> </tr> <tr> <td>φD≤10</td> <td>5000</td> <td>2000</td> </tr> <tr> <td>φD≥12.5</td> <td colspan="2">5000</td> </tr> </table>	Case Size	Life Time (hrs)			6.3~50Vdc	63Vdc	φD≤10	5000	2000	φD≥12.5	5000		Dissipation Factor	Not more than 200% of the specified value. (φ8,φ10:300%)	Leakage Current	Not more than the specified value.																	
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Low Temperature Stability Impedance Ratio(MAX)	<table border="1"> <tr> <td>Rated Voltage (Vdc)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>(120Hz)</td> </tr> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td></td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td></td> </tr> <tr> <td>Z(-55°C)/Z(20°C)</td> <td>4</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td></td> </tr> </table>	Rated Voltage (Vdc)	6.3	10	16	25	35	50	63	(120Hz)	Z(-25°C)/Z(20°C)	2	2	2	2	2	2	2		Z(-40°C)/Z(20°C)	3	3	3	3	3	3	3		Z(-55°C)/Z(20°C)	4	4	4	3	3	3	3	
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Z(-25°C)/Z(20°C)	2	2	2	2	2	2	2																														
Z(-40°C)/Z(20°C)	3	3	3	3	3	3	3																														
Z(-55°C)/Z(20°C)	4	4	4	3	3	3	3																														

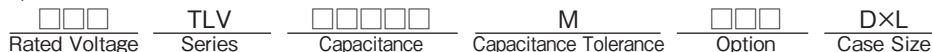
◆MULTIPLIER FOR RIPPLE CURRENT

Frequency (Hz)		120	1k	10k	100k≤
Coefficient	33μF	0.45	0.75	0.90	1.00
	47~150μF	0.50	0.80	0.95	1.00
	220~10000μF	0.60	0.85	0.95	1.00

◆MARKING



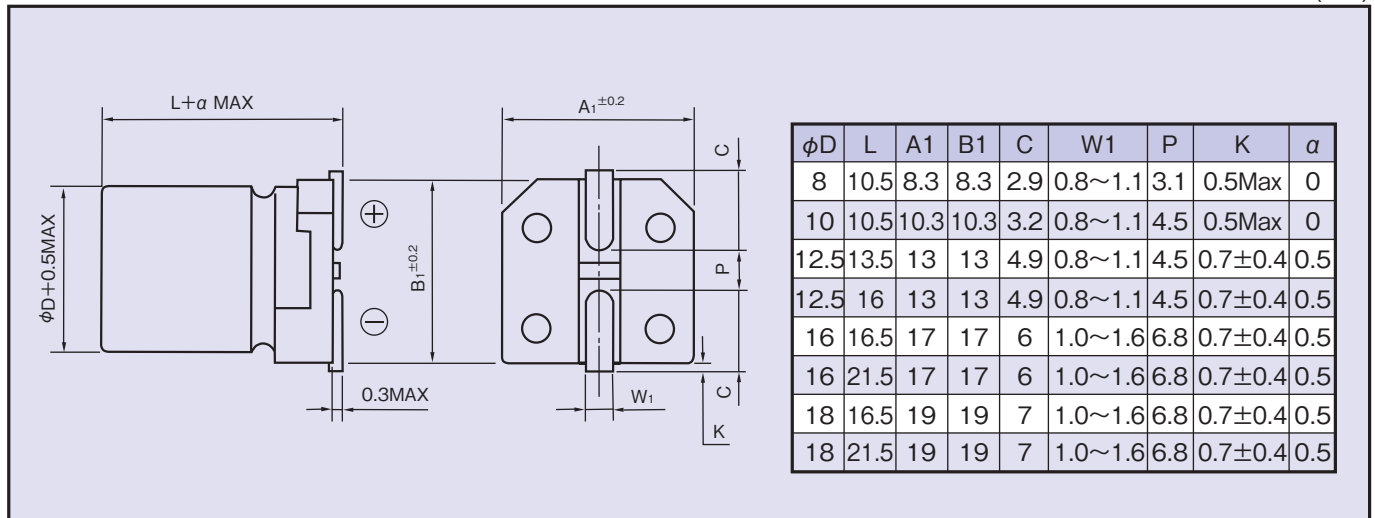
◆PART NUMBER



Rated Voltage (Vdc)	6.3	10	16	25	35	50	63
φD≤10	j	A	C	E	V	H	J
φD≥12.5	0J	1A	1C	1E	1V	1H	1J

**◆ DIMENSIONS**

(mm)


**◆ STANDARD SIZE**

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

Vdc	Cap (μF)	Size (φDXL)	Ripple	Impedance	Vdc	Cap (μF)	Size (φDXL)	Ripple	Impedance
6.3	2200	12.5×13.5	1100	0.065	50	100	8×10.5	350	0.34
	3300	12.5×16	1400	0.055		150	10×10.5	670	0.18
	4700	16×16.5	1800	0.045		220	10×10.5	670	0.18
	6800	16×21.5	2330	0.029		330	12.5×13.5	900	0.12
	10000	18×21.5	2640	0.028		390	12.5×13.5	900	0.12
10	1000	10×10.5	850	0.08		470	12.5×16	1200	0.1
	2200	12.5×16	1400	0.055		470	16×16.5	1610	0.075
	3300	16×16.5	1800	0.045		560	16×16.5	1610	0.075
	4700	18×16.5	2060	0.044		680	16×16.5	1610	0.075
	6800	18×21.5	2640	0.028		820	18×16.5	1700	0.07
16	470	8×10.5	600	0.16		1000	18×16.5	1700	0.07
	680	10×10.5	850	0.08		1000	16×21.5	2000	0.05
	1500	12.5×13.5	1100	0.065		1300	16×21.5	2000	0.05
	2200	16×16.5	1800	0.045		1500	18×21.5	2200	0.045
	3300	18×16.5	2060	0.044		63	33	8×10.5	250
	4700	16×21.5	2330	0.029	47		8×10.5	250	0.65
25	220	8×10.5	600	0.16	68		8×10.5	250	0.65
	330	8×10.5	600	0.16	68		10×10.5	400	0.35
	470	10×10.5	850	0.08	100		10×10.5	400	0.35
	1000	12.5×13.5	1100	0.065	150		12.5×13.5	800	0.17
	1500	16×16.5	1800	0.045	220		12.5×13.5	800	0.17
	2200	18×16.5	2060	0.044	330		12.5×16	1000	0.14
	3300	18×21.5	2640	0.028	470		16×16.5	1410	0.12
35	100	8×10.5	600	0.16	680		18×16.5	1690	0.11
	100	10×10.5	850	0.08	680		16×21.5	1790	0.08
	150	8×10.5	600	0.16	1000		18×21.5	1960	0.07
	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						