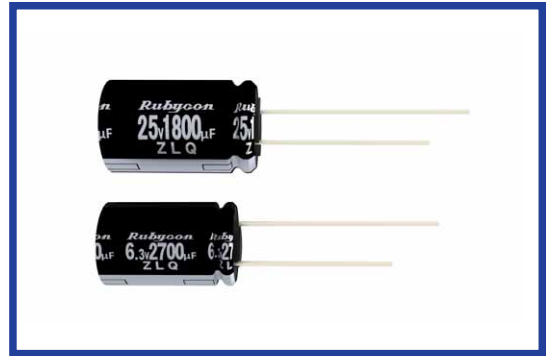


**ZLQ SERIES**
**105°C Ultra Miniaturized, Low Impedance**

\*Load Life : 105°C 3000~6000 hours.

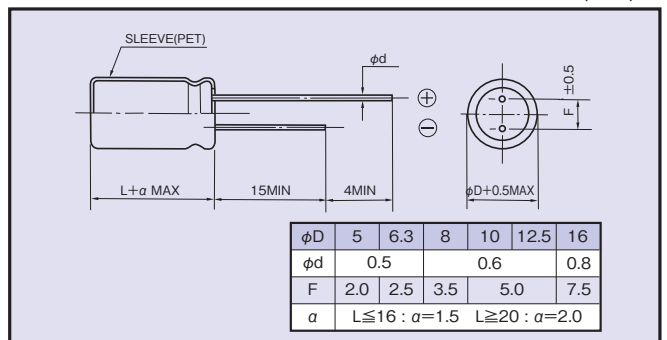
RoHS compliance


**◆ SPECIFICATIONS**

Items	Characteristics																				
Category Temperature Range	-40~+105°C																				
Rated Voltage Range	6.3~35Vdc																				
Capacitance Tolerance	±20% (20°C, 120Hz)																				
Leakage Current(MAX)	I=0.03CV or 3µA whichever is greater.(After 2 minutes) 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> </tr> <tr> <td>tanδ</td> <td>0.22</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> </tr> </table> (20°C, 120Hz) When capacitance is over 1000µF, tanδ shall be added 0.02 to the listed value with increase of every 1000µF.	Rated Voltage (Vdc)	6.3	10	16	25	35	tanδ	0.22	0.19	0.16	0.14	0.12								
Rated Voltage (Vdc)	6.3	10	16	25	35																
tanδ	0.22	0.19	0.16	0.14	0.12																
Endurance	After applying rated voltage with rated ripple current for specified time at 105°C, the capacitors shall meet the following requirements. <table border="1"> <tr> <td>Capacitance Change</td> <td>Within ±25% of the initial value.(6.3Vdc, 10Vdc:±30%)</td> <td>Case Size</td> <td>Life Time (hrs)</td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 200% of the specified value.</td> <td>φD ≤ 6.3</td> <td>3000</td> </tr> <tr> <td>Leakage Current</td> <td>Not more than the specified value.</td> <td>φD = 8</td> <td>4000</td> </tr> <tr> <td></td> <td></td> <td>φD = 10</td> <td>5000</td> </tr> <tr> <td></td> <td></td> <td>φD ≥ 12.5</td> <td>6000</td> </tr> </table>	Capacitance Change	Within ±25% of the initial value.(6.3Vdc, 10Vdc:±30%)	Case Size	Life Time (hrs)	Dissipation Factor	Not more than 200% of the specified value.	φD ≤ 6.3	3000	Leakage Current	Not more than the specified value.	φD = 8	4000			φD = 10	5000			φD ≥ 12.5	6000
Capacitance Change	Within ±25% of the initial value.(6.3Vdc, 10Vdc:±30%)	Case Size	Life Time (hrs)																		
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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> </tr> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>6</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> </tr> </table> (120Hz)	Rated Voltage (Vdc)	6.3	10	16	25	35	Z(-25°C)/Z(20°C)	3	2	2	2	2	Z(-40°C)/Z(20°C)	6	4	3	3	3		
Rated Voltage (Vdc)	6.3	10	16	25	35																
Z(-25°C)/Z(20°C)	3	2	2	2	2																
Z(-40°C)/Z(20°C)	6	4	3	3	3																

**◆ MULTIPLIER FOR RIPPLE CURRENT**

Frequency (Hz)		120	1k	10k	100k≤
Coefficient	56~270µF	0.50	0.73	0.92	1.00
	330~680µF	0.55	0.77	0.94	1.00
	820~1800µF	0.60	0.80	0.96	1.00
	2200~12000µF	0.70	0.85	0.98	1.00

**◆ DIMENSIONS**

**◆ PART NUMBER**

□□□	ZLQ	□□□□□	M	□□□	□□	DXL
Rated Voltage	Series	Capacitance	Capacitance Tolerance	Option	Lead Forming	Case Size

**◆ OPTION**

PET Sleeve	Code
	EFC

**◆STANDARD SIZE**

Rated Voltage (Vdc)	Capacitance (μF)	Size φD×L(mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	Impedance (Ω MAX)	
				20°C, 100kHz	-10°C, 100kHz
6.3	270	5×11	400	0.21	0.77
	680	6.3×11	620	0.092	0.34
	1200	8×11.5	1060	0.049	0.15
	1500	8×16	1390	0.038	0.12
	1800	10×12.5	1470	0.035	0.11
	2200	8×20	1660	0.027	0.081
	2700	10×16	1930	0.025	0.075
	3900	10×20	2130	0.018	0.054
	4700	10×25	2500	0.015	0.045
	5600	12.5×20	2690	0.016	0.041
	8200	12.5×25	3140	0.013	0.033
	8200	12.5×30	3680	0.012	0.030
	10000	16×20	3500	0.014	0.035
	10000	12.5×35	3800	0.010	0.025
12000	16×25	3880	0.011	0.028	
10	220	5×11	400	0.21	0.77
	470	6.3×11	620	0.092	0.34
	820	8×11.5	1060	0.049	0.15
	1200	8×16	1390	0.038	0.12
	1200	10×12.5	1470	0.035	0.11
	1800	8×20	1660	0.027	0.081
	1800	10×16	1930	0.025	0.075
	2700	10×20	2130	0.018	0.054
	3300	10×25	2500	0.015	0.045
	3900	12.5×20	2690	0.016	0.041
	5600	12.5×25	3140	0.013	0.033
	6800	12.5×30	3680	0.012	0.030
	6800	16×20	3500	0.014	0.035
	8200	12.5×35	3800	0.010	0.025
8200	16×25	3880	0.011	0.028	
16	150	5×11	400	0.21	0.77
	330	6.3×11	620	0.092	0.34
	560	8×11.5	1060	0.049	0.15
	820	8×16	1390	0.038	0.12
	820	10×12.5	1470	0.035	0.11
	1200	8×20	1660	0.027	0.081
	1200	10×16	1930	0.025	0.075
	1800	10×20	2130	0.018	0.054
	2200	10×25	2500	0.015	0.045
	2700	12.5×20	2690	0.016	0.041
	3900	12.5×25	3140	0.013	0.033
	3900	12.5×30	3680	0.012	0.030
	4700	16×20	3500	0.014	0.035
	5600	12.5×35	3800	0.010	0.025
5600	16×25	3880	0.011	0.028	
25	82	5×11	400	0.21	0.77
	180	6.3×11	620	0.092	0.34
	330	8×11.5	1060	0.049	0.15
	470	8×16	1390	0.038	0.12
	560	10×12.5	1470	0.035	0.11
	680	8×20	1660	0.027	0.081
	820	10×16	1930	0.025	0.075
	1200	10×20	2130	0.018	0.054
	1500	10×25	2500	0.015	0.045
	1800	12.5×20	2690	0.016	0.041
	2200	12.5×25	3140	0.013	0.033
	2700	12.5×30	3680	0.012	0.030
	2700	16×20	3500	0.014	0.035
	3300	12.5×35	3800	0.010	0.025
3900	16×25	3880	0.011	0.028	
35	56	5×11	400	0.21	0.77
	120	6.3×11	620	0.092	0.34
	220	8×11.5	1060	0.049	0.15
	270	8×16	1390	0.038	0.12
	330	10×12.5	1470	0.035	0.11
	390	8×20	1660	0.027	0.081
	470	10×16	1930	0.025	0.075
	680	10×20	2130	0.018	0.054
	820	10×25	2500	0.015	0.045
	1000	12.5×20	2690	0.016	0.041
	1500	12.5×25	3140	0.013	0.033
	1500	12.5×30	3680	0.012	0.030
	1800	16×20	3500	0.014	0.035
	2200	12.5×35	3800	0.010	0.025
2200	16×25	3880	0.011	0.028	