



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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ZLQ SERIES
105°C Ultra Miniaturized, Low Impedance

*Load Life : 105°C 3000~6000 hours.

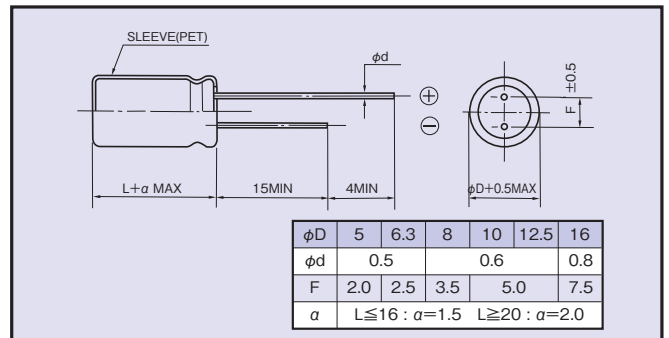
RoHS compliance


◆ 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> <td>(20°C, 120Hz)</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> <td></td> </tr> </table> <p>When 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	(20°C, 120Hz)	tanδ	0.22	0.19	0.16	0.14	0.12								
Rated Voltage (Vdc)	6.3	10	16	25	35	(20°C, 120Hz)																
tanδ	0.22	0.19	0.16	0.14	0.12																	
Endurance	<p>After applying rated voltage with rated ripple current for specified time at 105°C, the capacitors shall meet the following requirements.</p> <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)																			
Dissipation Factor	Not more than 200% of the specified value.	φD ≤ 6.3	3000																			
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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>(120Hz)</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> <td></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> <td></td> </tr> </table>	Rated Voltage (Vdc)	6.3	10	16	25	35	(120Hz)	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	(120Hz)																
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
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	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	

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
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	