



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!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



ZT SERIES

125°C Low Impedance

*Load Life : 125°C 1000~4000 hours.

RoHS
compliance



◆SPECIFICATIONS

Items	Characteristics																				
Category Temperature Range	-40~+125℃																				
Rated Voltage Range	10~35Vdc																				
Capacitance Tolerance	±20% (20℃,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>10</td><td>16</td><td>25</td><td>35</td></tr><tr><td>tanδ</td><td>0.20</td><td>0.16</td><td>0.14</td><td>0.12</td></tr></table> (20℃,120Hz) When capacitance is over 1000μF, tanδ shall be added 0.02 to the listed value with increase of every 1000μF.					Rated Voltage (Vdc)	10	16	25	35	tanδ	0.20	0.16	0.14	0.12						
Rated Voltage (Vdc)	10	16	25	35																	
tanδ	0.20	0.16	0.14	0.12																	
Endurance	After applying rated voltage with rated ripple current for specified time at 125℃, the capacitors shall meet the following requirements. <table border="1"><tr><td>Capacitance Change</td><td>Within ±30% of the initial value.</td></tr><tr><td>Dissipation Factor</td><td>Not more than 300% of the specified value.</td></tr><tr><td>Leakage Current</td><td>Not more than the specified value.</td></tr></table> <table border="1"><tr><td>Case Size</td><td>Life Time (hrs)</td></tr><tr><td>φD≤ 6.3</td><td>1000</td></tr><tr><td>φD=8</td><td>2000</td></tr><tr><td>φD= 10</td><td>3000</td></tr><tr><td>φD= 12.5</td><td>4000</td></tr></table>					Capacitance Change	Within ±30% of the initial value.	Dissipation Factor	Not more than 300% of the specified value.	Leakage Current	Not more than the specified value.	Case Size	Life Time (hrs)	φD≤ 6.3	1000	φD=8	2000	φD= 10	3000	φD= 12.5	4000
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φD≤ 6.3	1000																				
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Low Temperature Stability Impedance Ratio(MAX)	<table border="1"><tr><td>Rated Voltage (Vdc)</td><td>10</td><td>16</td><td>25</td><td>35</td></tr><tr><td>Z(-25℃)/Z(20℃)</td><td>3</td><td>2</td><td>2</td><td>2</td></tr><tr><td>Z(-40℃)/Z(20℃)</td><td>6</td><td>4</td><td>3</td><td>3</td></tr></table> (120Hz)					Rated Voltage (Vdc)	10	16	25	35	Z(-25℃)/Z(20℃)	3	2	2	2	Z(-40℃)/Z(20℃)	6	4	3	3	
Rated Voltage (Vdc)	10	16	25	35																	
Z(-25℃)/Z(20℃)	3	2	2	2																	
Z(-40℃)/Z(20℃)	6	4	3	3																	

◆MULTIPLIER FOR RIPPLE CURRENT

Frequency (Hz)	120	1k	10k	100k≤
Coefficient				
22~33µF	0.20	0.50	0.80	1.00
39~100µF	0.25	0.60	0.90	1.00
120~270µF	0.35	0.70	0.92	1.00
330~680µF	0.45	0.75	0.95	1.00
820~1800µF	0.50	0.80	0.96	1.00
2200µF	0.55	0.85	0.98	1.00

◆DIMENSIONS

Technical drawing of a capacitor showing side and end views with dimensions.

Side View Dimensions:

- SLEEVE(PET):** Label for the top part of the capacitor.
- $L+a$ MAX:** Dimension for the length of the capacitor body.
- 15MIN:** Dimension for the length of the lead wire.
- 4MIN:** Dimension for the length of the lead wire at the end.
- ϕd :** Dimension for the diameter of the lead wire.

End View Dimensions:

- ϕD :** Dimension for the diameter of the capacitor body.
- $\phi D+0.5$ MAX:** Dimension for the diameter of the capacitor body at the end.
- $F \pm 0.5$:** Dimension for the thickness of the capacitor body.

ϕD	5	6.3	8	10	12.5
ϕd	0.5		0.6		
F	2.0	2.5	3.5	5.0	
a	$L \leq 16 : a = 1.5$		$L \geq 20 : a = 2.0$		

◆PART NUMBER

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

◆OPTION

	Code
PET Sleeve	Blank

◆STANDARD SIZE

Rated Voltage (Vdc)	Capacitance (μ F)	Size ϕ D×L(mm)	Rated ripple current (mA r.m.s./125°C, 100kHz)	Impedance (Ω MAX)	
				20°C, 100kHz	−10°C, 100kHz
10	56	5×11	250	0.40	1.3
	120	6.3×11	405	0.17	0.53
	330	8×11.5	760	0.094	0.29
	470	8×16	995	0.073	0.23
	470	10×12.5	1030	0.069	0.21
	680	8×20	1250	0.054	0.17
	680	10×16	1430	0.050	0.16
	1000	10×20	1500	0.030	0.090
	1200	10×23	1620	0.029	0.086
	1500	12.5×20	1720	0.028	0.069
	2200	12.5×25	1900	0.024	0.059
16	47	5×11	250	0.40	1.3
	100	6.3×11	405	0.17	0.53
	220	8×11.5	760	0.094	0.29
	330	8×16	995	0.073	0.23
	330	10×12.5	1030	0.069	0.21
	470	8×20	1250	0.054	0.17
	470	10×16	1430	0.050	0.16
	680	10×20	1500	0.030	0.090
	820	10×23	1620	0.029	0.086
	1000	12.5×20	1720	0.028	0.069
	1500	12.5×25	1900	0.024	0.059
25	33	5×11	250	0.40	1.3
	56	6.3×11	405	0.17	0.53
	150	8×11.5	760	0.094	0.29
	220	8×16	995	0.073	0.23
	220	10×12.5	1030	0.069	0.21
	270	8×20	1250	0.054	0.17
	330	10×16	1430	0.050	0.16
	470	10×20	1500	0.030	0.090
	560	10×23	1620	0.029	0.086
	680	12.5×20	1720	0.028	0.069
	1000	12.5×25	1900	0.024	0.059
35	22	5×11	250	0.40	1.3
	56	6.3×11	405	0.17	0.53
	100	8×11.5	760	0.094	0.29
	120	8×16	995	0.073	0.23
	150	10×12.5	1030	0.069	0.21
	180	8×20	1250	0.054	0.17
	220	10×16	1430	0.050	0.16
	270	10×20	1500	0.030	0.090
	330	10×23	1620	0.029	0.086
	470	12.5×20	1720	0.028	0.069
	560	12.5×25	1900	0.024	0.059