



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

TZV SERIES

105°C Low Impedance, Lead Free Reflow Soldering.

◆FEATURES

- Load Life : 105°C 2000 hours.
- RoHS compliance.
- Lead free reflow soldering is available.
- Available for high density mounting.
- Prescribe Impedance value at 100 kHz.



◆SPECIFICATIONS

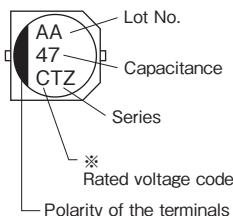
Items	Characteristics																																							
Category Temperature Range	-55~+105°C																																							
Rated Voltage Range	6.3~50V.DC																																							
Capacitance Tolerance	$\pm 20\%$ (20°C,120Hz)																																							
Leakage Current(MAX)	I=0.01CV or $3\mu A$ whichever is greater.(After 2 minutes application of rated voltage) I=Leakage Current(μA) C=Capacitance(μF) V=Rated Voltage(V)																																							
(tanδ) Dissipation Factor(MAX)	<table border="1"> <tr> <td>Rated Voltage (V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</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></td> </tr> </table>								Rated Voltage (V)	6.3	10	16	25	35	50	(20°C,120Hz)	tanδ	0.26	0.19	0.16	0.14	0.12	0.10																	
Rated Voltage (V)	6.3	10	16	25	35	50	(20°C,120Hz)																																	
tanδ	0.26	0.19	0.16	0.14	0.12	0.10																																		
Endurance	After applying rated voltage with rated ripple current for 2000 hours at 105°C, the capacitors shall meet the following requirements. <table border="1"> <tr> <td>Capacitance Change</td> <td>Within $\pm 30\%$ of the initial value.</td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 200% of the specified value.</td> </tr> <tr> <td>Leakage Current</td> <td>Not more than the specified value.</td> </tr> </table>								Capacitance Change	Within $\pm 30\%$ of the initial value.	Dissipation Factor	Not more than 200% of the specified value.	Leakage Current	Not more than the specified value.																										
Capacitance Change	Within $\pm 30\%$ of the initial value.																																							
Dissipation Factor	Not more than 200% of the specified value.																																							
Leakage Current	Not more than the specified value.																																							
Low Temperature Stability Impedance Ratio(MAX)	<table border="1"> <tr> <td>Rated Voltage (V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</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></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></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></td> </tr> </table>								Rated Voltage (V)	6.3	10	16	25	35	50	(120Hz)	Z(-25°C)/Z(20°C)	2	2	2	2	2	2		Z(-40°C)/Z(20°C)	3	3	3	3	3	3		Z(-55°C)/Z(20°C)	4	4	4	3	3	3	
Rated Voltage (V)	6.3	10	16	25	35	50	(120Hz)																																	
Z(-25°C)/Z(20°C)	2	2	2	2	2	2																																		
Z(-40°C)/Z(20°C)	3	3	3	3	3	3																																		
Z(-55°C)/Z(20°C)	4	4	4	3	3	3																																		

◆MULTIPLIER FOR RIPPLE CURRENT

Frequency Coefficient

Frequency (Hz)	120	1k	10k	100k
Coefficient	4.7μF	0.42	0.60	0.80
	10~33μF	0.45	0.75	0.90
	47~100μF	0.50	0.80	0.95
	220~1000μF	0.60	0.85	0.95

◆MARKING



※Voltage Code

Rated Voltage (V)	6.3	10	16	25	35	50
Rated Voltage code	j	A	C	E	V	H

◆PART NUMBER

□□□ TZV □□□□□
 Rated Voltage Series Capacitance M Capacitance Tolerance □□□ D×L
 Option Case Size

◆DIMENSIONS

(mm)

ϕD	L	A1	B1	C	W1	P
4	6.1	4.3	4.3	1.8	0.5~0.8	1.0
5	6.1	5.3	5.3	2.2	0.5~0.8	1.3
6.3	6.1	6.6	6.6	2.7	0.5~0.8	1.8
6.3	8	6.6	6.6	2.7	0.5~0.8	1.8
8	10.5	8.3	8.3	2.9	0.8~1.1	3.1
10	10.5	10.3	10.3	3.2	0.8~1.1	4.5

◆STANDARD SIZE

Size $\phi D \times L$ (mm), Ripple Current (mA r.m.s./105°C, 100kHz), Impedance(Ω MAX/20°C, 100kHz)

Cap(μF)	6.3 (0J)			10 (1A)			16 (1C)		
	Size	Ripple	Impedance	Size	Ripple	Impedance	Size	Ripple	Impedance
10							4×6.1	90	1.35
22	4×6.1	90	1.35				4×6.1	90	1.35
							5×6.1	170	0.70
				4×6.1	90	1.35	5×6.1	170	0.70
33	4×6.1	90	1.35				5×6.1	170	0.70
							6.3×6.1	250	0.36
47	5×6.1	170	0.70				6.3×6.1	250	0.36
							6.3×8	300	0.34
	5×6.1	170	0.70						
100	6.3×6.1	250	0.36						
220	6.3×6.1	250	0.36	6.3×8	300	0.34	6.3×8	300	0.34
330	6.3×8	300	0.34				8×10.5	600	0.16
470				8×10.5	600	0.16	8×10.5	600	0.16
680				8×10.5	600	0.16	10×10.5	850	0.08
1000	8×10.5	600	0.16	10×10.5	850	0.08			

Cap(μF)	25 (1E)			35 (1V)			50 (1H)		
	Size	Ripple	Impedance	Size	Ripple	Impedance	Size	Ripple	Impedance
4.7				4×6.1	90	1.45	4×6.1	60	2.90
10				4×6.1	90	1.45	5×6.1	85	1.52
				5×6.1	170	0.70	6.3×6.1	165	0.88
				5×6.1	170	0.70	6.3×6.1	165	0.88
22				6.3×6.1	250	0.36			
33	5×6.1	170	0.70	6.3×6.1	250	0.36	6.3×8	195	0.68
	6.3×6.1	250	0.36						
47	6.3×6.1	250	0.36	6.3×6.1	250	0.36	6.3×8	195	0.68
				6.3×8	300	0.34			
100	6.3×8	300	0.34	6.3×8	300	0.34	8×10.5	350	0.34
				8×10.5	600	0.16			
220	8×10.5	600	0.16	8×10.5	600	0.16	10×10.5	670	0.18
330	8×10.5	600	0.16	10×10.5	850	0.09			
470	10×10.5	850	0.09						