



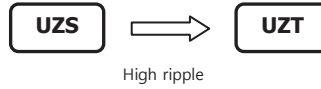
UZT series

- 105°C 6,000~10,000Hrs assured.
- Low impedance
- For SMPS, IP-Board, Adaptor, Charger
- RoHS compliant
- Halogen-free capacitors are also available.

Super Low ESR

High-Ripple current

RoHS compliant

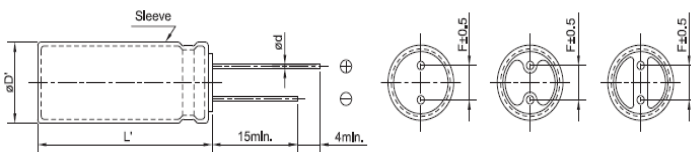


Specifications

Item	Characteristics																					
Rated Voltage Range	6.3 ~ 50 Vdc																					
Operating Temperature Range	-40 ~ +105°C																					
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)																					
Leakage Current	I=0.01CV(μA) or 3μA, whichever is greater. Where, I:Max. Leakage current(μA), C:Nominal capacitance(μF), V:Rated voltage(VDC) (at 20°C, 2 minutes)																					
Dissipation Factor(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> </tr> <tr> <td>Tanδ (max.)</td> <td>0.22</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> </tr> </table>	Rated voltage (Vdc)	6.3	10	16	25	35	50	Tanδ (max.)	0.22	0.19	0.16	0.14	0.12	0.10							
	Rated voltage (Vdc)	6.3	10	16	25	35	50															
Tanδ (max.)	0.22	0.19	0.16	0.14	0.12	0.10																
If the capacitance exceeds 1,000μF, then Tanδ will be added 0.02 every 1000μF increase.(at 20°C, 120Hz)																						
Temperature characteristics (Max,impedance ratio)	<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> </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>2</td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> </table>	Rated voltage (Vdc)	6.3	10	16	25	35	50	Z(-25°C)/Z(20°C)	3	2	2	2	2	2	Z(-40°C)/Z(20°C)	4	3	3	3	3	3
	Rated voltage (Vdc)	6.3	10	16	25	35	50															
	Z(-25°C)/Z(20°C)	3	2	2	2	2	2															
Z(-40°C)/Z(20°C)	4	3	3	3	3	3																
(at 120Hz)																						
Load life	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for specified life times at 105°C.																					
	<table border="1"> <tr> <td>Capacitance change</td> <td>≤±35% (6.3~10V)</td> <td>∅D</td> <td>5~6.3∅</td> <td>8∅</td> <td>10∅ ~</td> </tr> <tr> <td>Tan δ</td> <td>≤±25% (16~50)of the initial value</td> <td>Life Time</td> <td>6,000hrs</td> <td>8,000hrs</td> <td>10,000hrs</td> </tr> <tr> <td>Leakage current</td> <td>≤200% of the initial specified value</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Capacitance change	≤±35% (6.3~10V)	∅D	5~6.3∅	8∅	10∅ ~	Tan δ	≤±25% (16~50)of the initial value	Life Time	6,000hrs	8,000hrs	10,000hrs	Leakage current	≤200% of the initial specified value							
Capacitance change	≤±35% (6.3~10V)	∅D	5~6.3∅	8∅	10∅ ~																	
Tan δ	≤±25% (16~50)of the initial value	Life Time	6,000hrs	8,000hrs	10,000hrs																	
Leakage current	≤200% of the initial specified value																					
Shelf life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 105°C without voltage applied. The rated voltage shall be applied to the capacitors for a minimum of 30 minutes at least 24 hours and not more than 48 hours before the measurements.																					
	<table border="1"> <tr> <td>Capacitance change</td> <td>≤±30%(6.3~10), ≤±25%(16~50) of the initial value</td> </tr> <tr> <td>Tanδ</td> <td>≤200% of the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>≤200%The initial specified value</td> </tr> </table>	Capacitance change	≤±30%(6.3~10), ≤±25%(16~50) of the initial value	Tanδ	≤200% of the initial specified value	Leakage current	≤200%The initial specified value															
Capacitance change	≤±30%(6.3~10), ≤±25%(16~50) of the initial value																					
Tanδ	≤200% of the initial specified value																					
Leakage current	≤200%The initial specified value																					

Dimensions

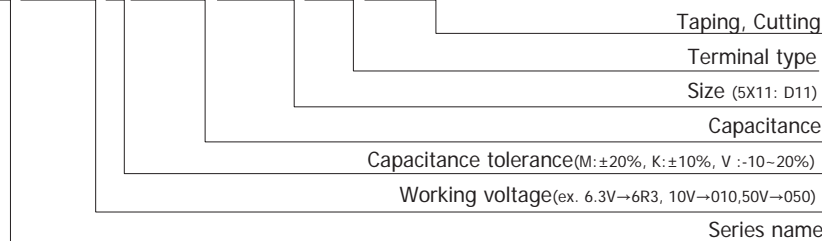
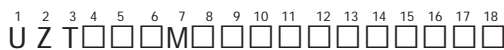
Unit(mm)



ØD	5	6.3	8	10	12.5	16	18
Ød	0.5	0.5	0.6	0.6	0.6	0.8	0.8
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5
ØD'	ØD+0.5 max.						
L'	L+1.5 max			L+2.0 max			

- Printed black color letter on PET sky blue sleeve

Code numbering system



Ø5	D
Ø6.3	E
Ø8	F
Ø10	G
Ø12.5	X
Ø16	J
Ø18	K



UZT series

Standard Ratings

Note1) Imp. = $\Omega_{max}/20^{\circ}C, 100kHz$ 2) Ripple current = mArms/105°C, 100kHz

WV (Vdc)	Cap (uF)	Size ØxL(mm)	Imp. ¹⁾	Ripple ²⁾	Code No
6.3	220	5 x 11	0.22	345	UZT6R3□221D11CS□□□
	330	6.3 x 11	0.18	410	UZT6R3□331E11CS□□□
	470	5 x 15	0.13	480	UZT6R3□471D15CS□□□
		6.3 x 11	0.094	540	UZT6R3□471E11CS□□□
	560	6.3 x 15	0.084	620	UZT6R3□561E15CS□□□
	820	8 x 11.5	0.056	945	UZT6R3□821F12CS□□□
	1,000	8 x 15	0.051	1,050	UZT6R3□102F15CS□□□
	1,200	8 x 15	0.045	1,250	UZT6R3□122F15CS□□□
		10 x 12.5	0.039	1,330	UZT6R3□122G13CS□□□
	1,500	8 x 20	0.029	1,500	UZT6R3□152F20CS□□□
	1,800	10 x 16	0.028	1,760	UZT6R3□182G16CS□□□
	2,200	10 x 20	0.020	1,960	UZT6R3□222G20CS□□□
	2,700	10 x 25	0.018	2,250	UZT6R3□272G25CS□□□
	3,300	10 x 33	0.015	2,550	UZT6R3□332G33CS□□□
	3,900	12.5 x 20	0.016	2,480	UZT6R3□392X20CS□□□
	4,700	12.5 x 25	0.015	2,900	UZT6R3□472X25CS□□□
		12.5 x 30	0.013	3,450	UZT6R3□562X30CS□□□
	6,800	12.5 x 35	0.012	3,570	UZT6R3□682J25CS□□□
		16 x 20	0.015	3,250	UZT6R3□682J20CS□□□
	8,200	16 x 25	0.013	3,630	UZT6R3□822J25CS□□□
10,000	18 x 25	0.012	3,650	UZT6R3□103K25CS□□□	
10	150	5 x 11	0.22	345	UZT010□151D11CS□□□
	330	5 x 15	0.13	480	UZT010□331D15CS□□□
		6.3 x 11	0.094	540	UZT010□331E11CS□□□
	470	6.3 x 15	0.084	620	UZT010□471E15CS□□□
	680	8 x 11.5	0.056	945	UZT010□681F12CS□□□
	1,000	8 x 15	0.045	1,250	UZT010□102F15CS□□□
		10 x 12.5	0.039	1,330	UZT010□102G13CS□□□
	1,500	8 x 20	0.029	1,500	UZT010□152F20CS□□□
		10 x 16	0.028	1,760	UZT010□152G16CS□□□
	1,800	10 x 20	0.020	1,960	UZT010□182G20CS□□□
	2,200	10 x 25	0.018	2,250	UZT010□222G25CS□□□
	2,700	10 x 33	0.015	2,550	UZT010□272G33CS□□□
	3,300	12.5 x 20	0.017	2,480	UZT010□332X20CS□□□
	3,900	12.5 x 25	0.015	2,900	UZT010□392X25CS□□□
4,700	12.5 x 30	0.013	3,450	UZT010□472X30CS□□□	
	16 x 20	0.015	3,250	UZT010□472J20CS□□□	
5,600	12.5 x 35	0.012	3,570	UZT010□562X35CS□□□	
6,800	16 x 25	0.013	3,630	UZT010□682J25CS□□□	
8,200	18 x 25	0.012	3,650	UZT010□822K25CS□□□	
16	100	5 x 11	0.22	345	UZT016□151D11CS□□□
	220	5 x 15	0.13	480	UZT016□331D15CS□□□
		6.3 x 11	0.094	540	UZT016□331E11CS□□□
	330	6.3 x 15	0.084	620	UZT016□471E15CS□□□
	470	8 x 11.5	0.056	945	UZT016□681F12CS□□□
	680	8 x 15	0.045	1,250	UZT016□102F15CS□□□
		10 x 12.5	0.039	1,330	UZT016□102G13CS□□□
	1,000	8 x 20	0.029	1,500	UZT016□152F20CS□□□
		10 x 16	0.028	1,760	UZT016□152G16CS□□□
	1,500	10 x 20	0.020	1,960	UZT016□182G20CS□□□
	1,800	10 x 25	0.018	2,250	UZT016□222G25CS□□□
	2,200	10 x 33	0.015	2,550	UZT016□272G33CS□□□
		12.5 x 20	0.017	2,480	UZT016□332X20CS□□□
	2,700	12.5 x 25	0.015	2,900	UZT016□392X25CS□□□
	3,300	12.5 x 30	0.013	3,450	UZT016□472X30CS□□□
		16 x 20	0.015	3,250	UZT016□472J20CS□□□
	3,900	12.5 x 35	0.012	3,570	UZT016□562X35CS□□□
	4,700	16 x 25	0.013	3,630	UZT016□682J25CS□□□
5,600	18 x 25	0.012	3,650	UZT016□822K25CS□□□	

WV (Vdc)	Cap (uF)	Size ØxL(mm)	Imp. ¹⁾	Ripple ²⁾	Code No
25	68	5 x 11	0.22	345	UZT025□680D11CS□□□
		5 x 15	0.13	480	UZT025□151D15CS□□□
	150	6.3 x 11	0.094	540	UZT025□151E11CS□□□
		6.3 x 15	0.084	620	UZT025□221E15CS□□□
	220	8 x 11.5	0.056	945	UZT025□331F12CS□□□
	390	8 x 15	0.045	1,250	UZT025□391F15CS□□□
	470	8 x 15	0.045	1,330	UZT025□471F15CS□□□
		10 x 12.5	0.039	1,330	UZT025□471G13CS□□□
	560	8 x 20	0.029	1,500	UZT025□561F20CS□□□
	680	10 x 16	0.028	1,760	UZT025□681G16CS□□□
	820	10 x 20	0.020	1,960	UZT025□821G20CS□□□
	1,000	10 x 20	0.020	1,960	UZT025□102G20CS□□□
		10 x 25	0.018	2,250	UZT025□102G25CS□□□
	1,200	12.5 x 20	0.018	2,500	UZT025□102X20CS□□□
		10 x 33	0.015	2,550	UZT025□122G33CS□□□
	1,500	12.5 x 20	0.017	2,550	UZT025□152X20CS□□□
	1,800	12.5 x 25	0.015	2,900	UZT025□182X25CS□□□
	2,200	12.5 x 30	0.013	3,450	UZT025□222X30CS□□□
		16 x 20	0.015	3,250	UZT025□222J20CS□□□
	2,700	12.5 x 35	0.012	3,570	UZT025□272X35CS□□□
16 x 20		0.015	3,250	UZT025□272J20CS□□□	
3,300	16 x 25	0.013	3,630	UZT025□332J25CS□□□	
3,900	18 x 25	0.012	3,650	UZT025□392K25CS□□□	
35	47	5 x 11	0.22	345	UZT035□470D11CS□□□
	100	5 x 15	0.13	480	UZT035□101D15CS□□□
		6.3 x 11	0.094	540	UZT035□101E11CS□□□
	150	6.3 x 15	0.084	620	UZT035□151E15CS□□□
	220	8 x 11.5	0.056	945	UZT035□221F15CS□□□
	270	8 x 15	0.045	1,250	UZT035□271F15CS□□□
	330	10 x 12.5	0.039	1,210	UZT035□331G13CS□□□
	390	8 x 20	0.029	1,500	UZT035□391F20CS□□□
	470	8 x 20	0.029	1,600	UZT035□471F20CS□□□
		10 x 16	0.028	1,760	UZT035□471G16CS□□□
	560	10 x 20	0.020	1,960	UZT035□561G20CS□□□
	680	10 x 20	0.025	1,850	UZT035□681G20CS□□□
		10 x 25	0.018	2,250	UZT035□681G25CS□□□
	1,000	10 x 33	0.015	2,550	UZT035□102G33CS□□□
12.5 x 20		0.017	2,480	UZT035□102X20CS□□□	
1,200	12.5 x 25	0.015	2,900	UZT035□122X25CS□□□	
1,500	12.5 x 30	0.013	3,450	UZT035□152X30CS□□□	
	16 x 20	0.015	3,250	UZT035□152J20CS□□□	
1,800	12.5 x 35	0.012	3,570	UZT035□182X35CS□□□	
2,200	16 x 25	0.013	3,630	UZT035□222J25CS□□□	
2,700	18 x 25	0.012	3,650	UZT035□272K25CS□□□	
50	2.2	5 x 11	2.5	120	UZT050□2R2D11CS□□□
	4.7	5 x 11	2.5	120	UZT050□4R7D11CS□□□
	10	5 x 11	1.0	145	UZT050□100D11CS□□□
	22	5 x 11	0.40	195	UZT050□220D11CS□□□
	27	5 x 11	0.34	238	UZT050□270D11CS□□□
	33	6.3 x 11	0.20	320	UZT050□330E11CS□□□
	47	6.3 x 11	0.14	450	UZT050□470E11CS□□□
	56	5 x 15	0.16	350	UZT050□560D15CS□□□
		6.3 x 11	0.14	450	UZT050□560E11CS□□□
	100	6.3 x 15	0.12	586	UZT050□101E15CS□□□
		8 x 11.5	0.074	724	UZT050□101F12CS□□□
	120	8 x 15	0.061	950	UZT050□121F15CS□□□
	150	10 x 12.5	0.061	979	UZT050□151G13CS□□□
	180	8 x 20	0.046	1,190	UZT050□181F20CS□□□
220	10 x 16	0.042	1,370	UZT050□221G16CS□□□	



UZZ series

Standard Ratings

Note1) Imp. = $\Omega_{max} / 20^{\circ}C, 100kHz$ 2) Ripple current = $mArms / 105^{\circ}C, 100kHz$

WV (Vdc)	Cap (uF)	Size $\varnothing \times L$ (mm)	Imp. ¹⁾	Ripple ²⁾	Code No
50	270	10 x 20	0.030	1,580	UZZ050□271G20CS□□□
	330	10 x 25	0.028	1,870	UZZ050□331G25CS□□□
	470	10 x 30	0.025	2,110	UZZ050□471G30CS□□□
		12.5 x 20	0.027	2,050	UZZ050□471X20CS□□□
	560	12.5 x 25	0.023	2,410	UZZ050□561X25CS□□□
	680	12.5 x 30	0.021	2,860	UZZ050□681X30CS□□□
	820	12.5 x 35	0.019	2,960	UZZ050□821X35CS□□□
		16 x 20	0.023	2,730	UZZ050□821J20CS□□□
	1,000	16 x 20	0.023	2,730	UZZ050□102J20CS□□□
		16 x 25	0.021	3,010	UZZ050□102J25CS□□□
	1,500	18 x 25	0.019	3,290	UZZ050□152K25CS□□□

Rated ripple current multipliers

Rated voltage (Vdc)	Frequency (Hz)				
	120	1K	10K	50K	100K
2.2 ~ 22	0.40	0.66	0.85	0.90	1.00
27 ~ 33	0.42	0.70	0.90	0.93	1.00
39 ~ 270	0.50	0.73	0.92	0.95	1.00
330 ~ 680	0.55	0.77	0.94	0.96	1.00
820 ~ 1,800	0.60	0.80	0.96	0.97	1.00
2,200 ~ 10,000	0.70	0.85	0.98	0.99	1.00