UZT series

Super Low ESR | High-Ripple current | RoHS compliant

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

UZS ⇨ UZT

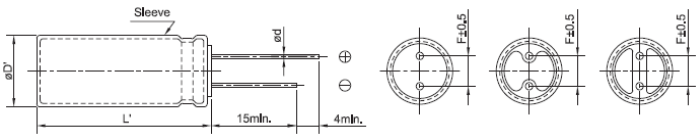
High ripple

■ Specifications

Item	Characteristics
Rated Voltage Range	6.3 ~ 100 Vdc
Operating Temperature Range	-40 ~ +105℃
Capacitance Tolerance	±20% (M) (at 20℃, 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℃, 2 minutes)
Dissipation Factor(Tanδ)	Rated voltage (Vdc): 6.3 / 10 / 16 / 25 / 35 / 50 / 63 / 80 / 100 Tanδ (max.): 0.22 / 0.19 / 0.16 / 0.14 / 0.12 / 0.10 / 0.09 / 0.08 / 0.08 If the capacitance exceeds 1,000uF, then Tanδ will be added 0.02 every 1000uF increase.(at 20℃, 120Hz)
Temperature characteristics (Max,impedance ratio)	Rated voltage (Vdc): 6.3 / 10 / 16 / 25 / 35 / 50~100 Z(-25℃)/Z(20℃): 3 / 2 / 2 / 2 / 2 / 2 Z(-40℃)/Z(20℃): 4 / 3 / 3 / 3 / 3 / 3 (at 120Hz)
Load life	The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage is applied for specified life times at 105℃. Capacitance change ≤±30% (6.3~10V) ≤±25% (16~100)of the initial value Tan δ ≤200% of the initial specified value Leakage current ≤The initial specified value ∅D: 5~6.3Ø / 8Ø / 10 Ø ~ Life Time: 6,000hrs / 8,000hrs / 10,000hrs
Shelf life	The following specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1,000 hours at 105℃ 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. 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	0.5	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

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

U Z T □ □ □ M □ □ □ □ □ □ □ □ □ □ □ □

- Taping, Cutting
- Terminal type
- Size (5X11: D11)
- Capacitance
- Capacitance tolerance(M:±20%, K:±10%, V :-10~20%)
- Working voltage(ex. 6.3V→6R3, 10V→010,50V→050)
- Series name

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

UZT series

■Standard Ratings

Note1) Imp. = Ωmax./20℃,100kHz 2) Ripple current = mArms/105℃,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□□□
	5,600	12.5 x 30	0.013	3,450	UZT6R3□562X30CS□□□
	6,800	12.5 x 35	0.012	3,570	UZT6R3□682X35CS□□□
		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□□□
	150	5 x 15	0.13	480	UZT025□151D15CS□□□
		6.3 x 11	0.094	540	UZT025□151E11CS□□□
	220	6.3 x 15	0.084	620	UZT025□221E15CS□□□
	330	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□□□
		12.5 x 20	0.018	2,500	UZT025□102X20CS□□□
	1,200	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□221F11CS□□□
	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□□□

UZT series

■Standard Ratings

Note1) Imp. = Ωmax./20℃,100kHz 2) Ripple current = mArms/105℃,100kHz

WV (Vdc)	Cap (uF)	Size ØxL(mm)	Imp.[1]	Ripple[2]	Code No
50	270	10 x 20	0.030	1,580	UZT050□271G20CS□□□
	330	10 x 25	0.028	1,870	UZT050□331G25CS□□□
	470	10 x 30	0.025	2,110	UZT050□471G30CS□□□
		12.5 x 20	0.027	2,050	UZT050□471X20CS□□□
	560	12.5 x 25	0.023	2,410	UZT050□561X25CS□□□
	680	12.5 x 30	0.021	2,860	UZT050□681X30CS□□□
	820	12.5 x 35	0.019	2,960	UZT050□821X35CS□□□
		16 x 20	0.023	2,730	UZT050□821J20CS□□□
	1,000	16 x 20	0.023	2,730	UZT050□102J20CS□□□
		16 x 25	0.021	3,010	UZT050□102J25CS□□□
	1,500	18 x 25	0.019	3,290	UZT050□152K25CS□□□
63	18	5 x 11	0.45	173	UZT063□180D11CS□□□
	47	6.3 x 11	0.30	278	UZT063□470E11CS□□□
	82	8 x 11.5	0.20	525	UZT063□820F12CS□□□
	100	8 x 11.5	0.18	688	UZT063□101F12CS□□□
	120	10 x 12	0.16	725	UZT063□121G12CS□□□
		10 x 12.5	0.16	725	UZT063□121G13CS□□□
	150	8 x 20	0.16	861	UZT063□151F20CS□□□
	180	10 x 16	0.10	998	UZT063□181G16CS□□□
	270	10 x 20	0.080	1,200	UZT063□271G20CS□□□
	330	10 x 25	0.070	1,410	UZT063□331G25CS□□□
	390	12.5 x 20	0.050	1,570	UZT063□391X20CS□□□
	470	12.5 x 25	0.037	1,990	UZT063□471X25CS□□□
	560	12.5 x 30	0.032	2,410	UZT063□561X30CS□□□
		16 x 20	0.035	2,100	UZT063□561J20CS□□□
	680	12.5 x 35	0.030	2,620	UZT063□681X35CS□□□
	820	16 x 25	0.030	2,430	UZT063□821J25CS□□□
80	12	5 x 11	1.2	163	UZT080□120D11CS□□□
	33	6.3 x 11	0.46	267	UZT080□330E11CS□□□
	56	8 x 11.5	0.29	462	UZT080□560F12CS□□□
	68	8 x 15	0.20	585	UZT080□680F15CS□□□
	82	10 x 12	0.17	624	UZT080□820G12CS□□□
		10 x 12.5	0.17	624	UZT080□820G13CS□□□
	100	8 x 20	0.16	735	UZT080□101F20CS□□□
	120	10 x 16	0.11	780	UZT080□121G16CS□□□
	180	10 x 20	0.084	1,040	UZT080□181G20CS□□□
		12.5 x 16	0.11	975	UZT080□181X16CS□□□
	220	10 x 25	0.069	1,170	UZT080□221G25CS□□□
	270	12.5 x 20	0.062	1,430	UZT080□271X20CS□□□
	330	12.5 x 25	0.047	1,620	UZT080□331X25CS□□□
	390	12.5 x 30	0.042	1,950	UZT080□391X30CS□□□
		16 x 20	0.015	1,750	UZT080□391J20CS□□□
	470	12.5 x 35	0.036	2,140	UZT080□471X35CS□□□
	560	12.5 x 40	0.032	2,340	UZT080□561X40CS□□□
		16 x 25	0.038	2,210	UZT080□561J25CS□□□
		18 x 20	0.045	1,950	UZT080□561K20CS□□□
	680	16 x 31.5	0.032	2,400	UZT080□681J32CS□□□
	820	16 x 35.5	0.029	2,600	UZT080□821J36CS□□□
		18 x 25	0.036	2,270	UZT080□821K25CS□□□
	1,000	16 x 40	0.027	2,860	UZT080□102J40CS□□□
		18 x 31.5	0.030	2,470	UZT080□102K32CS□□□
	1,200	18 x 35.5	0.027	2,860	UZT080□122K36CS□□□
	1,500	18 x 40	0.026	3,510	UZT080□152K40CS□□□

WV (Vdc)	Cap (uF)	Size ØxL(mm)	Imp.[1]	Ripple[2]	Code No
100	8.2	5 x 11	1.20	163	UZT100□8R2D11CS□□□
	18	6.3 x 11	0.46	267	UZT100□180E11CS□□□
	33	8 x 11.5	0.29	462	UZT100□330F12CS□□□
	47	8 x 15	0.20	585	UZT100□470F15CS□□□
		10 x 12	0.17	624	UZT100□470G12CS□□□
		10 x 12.5	0.17	624	UZT100□470G13CS□□□
	68	8 x 20	0.16	735	UZT100□680F20CS□□□
		10 x 16	0.11	780	UZT100□680G16CS□□□
	100	10 x 20	0.084	1,040	UZT100□101G20CS□□□
		12.5 x 16	0.110	975	UZT100□101X16CS□□□
	120	10 x 25	0.069	1,170	UZT100□121G25CS□□□
	150	12.5 x 20	0.062	1,430	UZT100□151X20CS□□□
	220	12.5 x 25	0.047	1,620	UZT100□221X25CS□□□
	270	12.5 x 30	0.042	1,950	UZT100□271X30CS□□□
		16 x 20	0.048	1,750	UZT100□271J20CS□□□
	330	12.5 x 35	0.036	2,140	UZT100□331X35CS□□□
	390	12.5 x 40	0.032	2,340	UZT100□391X40CS□□□
		16 x 25	0.038	2,210	UZT100□391J25CS□□□
		18 x 20	0.045	1,950	UZT100□391K20CS□□□
	470	16 x 31.5	0.032	2,400	UZT100□471J32CS□□□
		18 x 25	0.036	2,270	UZT100□471K25CS□□□
	560	16 x 35.5	0.029	2,600	UZT100□561J36CS□□□
		18 x 31.5	0.030	2,470	UZT100□561K40CS□□□
	680	16 x 40	0.027	2,860	UZT100□681J40CS□□□
		18 x 35.5	0.027	2,860	UZT100□681K36CS□□□
	820	18 x 40	0.026	3,510	UZT100□821K40CS□□□

■ 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