

KZU Series

- Adoption of innovative high stability electrolyte
- High ripple current and long endurance
- Non solvent resistant type
- RoHS Compliant
- Specifically designed for Immersion cooling (prohibit use under normal atmosphere).

This Engineering bulletin is issued for Engineering sample.

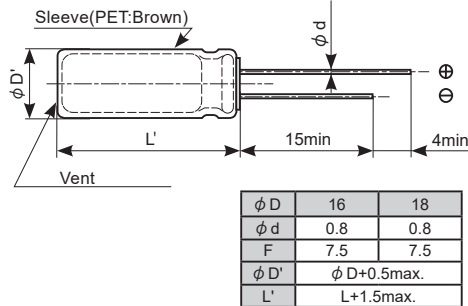
There is possibility to stop mass production due to market situation changed, and product specifications in this bulletin are subject to change without notice.

◆ SPECIFICATIONS

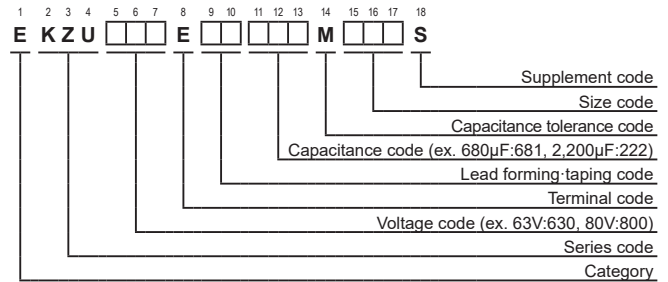
Items	Characteristics		
Category	-40 to +105°C		
Temperature Range	-40 to +105°C		
Rated Voltage Range	63 to 80V _{dc}		
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)		
Leakage Current	I=0.01CV or 3μA, whichever is greater. Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 2 minutes)		
Dissipation Factor (tan δ)	Rated voltage (V _{dc})	63V	80V
	tan δ (Max.)	0.09	0.09
	When nominal capacitance exceeds 1,000μF, add 0.02 to the value above for each 1,000μF increase. (at 20°C, 120Hz)		
Low Temperature Characteristics	Z(-25°C) / Z(+20°C)	2 max.	
	Z(-40°C) / Z(+20°C)	3 max.	(at 120Hz)
Endurance (In Immersion Cooling liquid)	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) for 6,000 hours at 105°C.		
	Capacitance change	≤ ±25% of the initial value	
	D.F. (tan δ)	≤ 200% of the initial specified value	
	Leakage current	≤ The initial specified value	

◆ DIMENSIONS [mm]

- Terminal Code : E



◆ PART NUMBERING SYSTEM



◆ STANDARD RATINGS

WV (Vdc)	Cap (μF)	Case size φ D×L (mm)	Impedance (Ωmax/100kHz)		Rated ripple current (mA _{rms} /105°C, 100kHz)	Part No.
			20°C	-10°C		
63	1,000	16 × 27	0.024	0.072	2,890	KZU630E□□102ML27S
	1,200	16 × 33.5	0.020	0.060	3,280	KZU630E□□122MLN7S
	1,200	18 × 27	0.022	0.066	2,930	KZU630E□□122MM27S
	1,500	16 × 37.5	0.018	0.054	3,440	KZU630E□□152MLP5S
	1,500	18 × 33.5	0.018	0.054	3,380	KZU630E□□152MMN7S
	1,800	16 × 42	0.016	0.048	3,690	KZU630E□□182ML42S
	1,800	18 × 37.5	0.017	0.051	3,550	KZU630E□□182MMP5S
	2,200	18 × 42	0.015	0.045	3,930	KZU630E□□222MM42S
80	680	16 × 27	0.028	0.084	2,620	KZU800E□□681ML27S
	820	16 × 33.5	0.022	0.066	2,900	KZU800E□□821MLN7S
	820	18 × 27	0.027	0.081	2,750	KZU800E□□821MM27S
	1,000	16 × 37.5	0.020	0.060	3,150	KZU800E□□102MLP5S
	1,000	18 × 27	0.027	0.081	2,750	KZU800E□□102MM27S
	1,200	16 × 42	0.018	0.054	3,710	KZU800E□□122ML42S
	1,200	18 × 33.5	0.020	0.060	3,150	KZU800E□□122MMN7S
	1,500	18 × 37.5	0.018	0.054	3,710	KZU800E□□152MMP5S
	1,800	18 × 42	0.017	0.051	4,060	KZU800E□□182MM42S

□□ :Enter the appropriate lead forming or taping code.

◆ RATED RIPPLE CURRENT MULTIPLIERS

- Frequency Multipliers

Capacitance (μF)	Frequency (Hz)			
	120	1k	10k	100k
680 to 1,800	0.60	0.87	0.95	1.00
2,200	0.75	0.90	0.95	1.00

The deterioration of aluminum electrolytic capacitors accelerates their life due to the internal heating produced by ripple current.

◆ About specified immersion cooling fluids

Evaluated and confirmed by the following fluids.

Please contact us for details.

Fluorine	3M FC-40
HydroCarbon	Shell S3X