

KHU Series New!

- Lineup of high withstand voltage products for server power supplies and solar power generation applications
- Endurance with ripple current : 3,000 hours at 105°C
- Rated voltage range: 475, 500V, Capacitance range: 120 to 950μF
- Non solvent resistant type
- RoHS2 Compliant

KHU

↑ Downsizing

KHS

↑ Downsizing

KMS

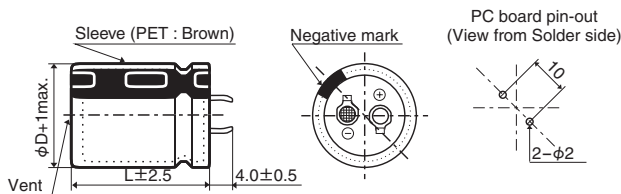


SPECIFICATIONS

Items	Characteristics		
Category	-40 to +105℃		
Temperature Range			
Rated Voltage Range	475, 500V _{dc}		
Capacitance Tolerance	±20% (M)		(at 20℃, 120Hz)
Leakage Current	I≤3√CV Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20℃ after 5 minutes)		
Dissipation Factor (tan δ)	Rated voltage (V _{ac})	475, 500V	(at 20℃, 120Hz)
	tan δ (Max.)	0.20	
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V _{ac})	475, 500V	(at 120Hz)
	Z(-25℃)/Z(+20℃)	8	
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjected to DC voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) for 3,000 hours at 105℃.		
	Capacitance change	≤ ±20% of the initial value	
	D.F. (tan δ)	≤200% of the initial specified value	
	Leakage current	≤The initial specified value	
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. Before the measurement, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JIS C 5101-4.		
	Capacitance change	≤ ±15% of the initial value	
	D.F. (tan δ)	≤150% of the initial specified value	
	Leakage current	≤The initial specified value	

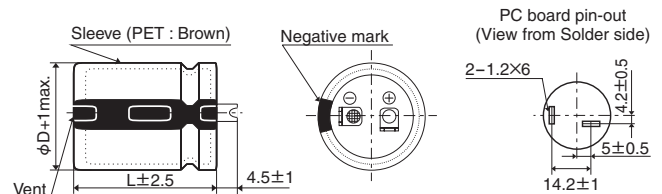
DIMENSIONS [mm]

- Terminal Code : VS (φ25.4 to φ35) : Standard

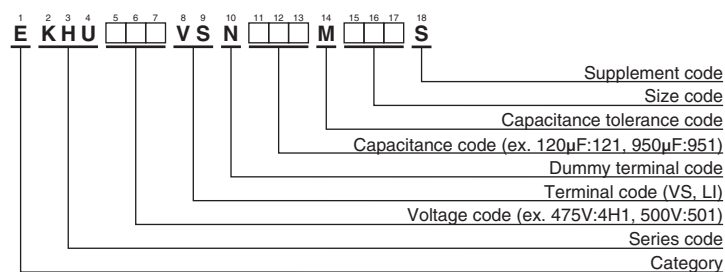


The standard design has no plastic disc.

- Terminal Code : LI (φ30, φ35)



PART NUMBERING SYSTEM



Please refer to "Product code guide (snap-in type)"

◆STANDARD RATINGS

WV (V _{dc})	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/ 105°C, 120Hz)	Part No.	WV (V _{dc})	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/ 105°C, 120Hz)	Part No.
475	160	25.4 × 25	0.20	1.07	EKHU4H1VSN161MQ25S	500	120	25.4 × 25	0.20	0.93	EKHU501VSN121MQ25S
	200	25.4 × 30	0.20	1.23	EKHU4H1VSN201MQ30S		170	25.4 × 30	0.20	1.13	EKHU501VSN171MQ30S
	240	30 × 25	0.20	1.38	EKHU4H1VSN241MR25S		190	30 × 25	0.20	1.23	EKHU501VSN191MR25S
	250	25.4 × 35	0.20	1.43	EKHU4H1VSN251MQ35S		210	25.4 × 35	0.20	1.31	EKHU501VSN211MQ35S
	280	35 × 25	0.20	1.48	EKHU4H1VSN281MA25S		250	25.4 × 40	0.20	1.46	EKHU501VSN251MQ40S
	300	25.4 × 40	0.20	1.60	EKHU4H1VSN301MQ40S		250	30 × 30	0.20	1.43	EKHU501VSN251MR30S
	310	30 × 30	0.20	1.59	EKHU4H1VSN311MR30S		260	35 × 25	0.20	1.43	EKHU501VSN261MA25S
	350	25.4 × 45	0.20	1.76	EKHU4H1VSN351MQ45S		300	25.4 × 45	0.20	1.63	EKHU501VSN301MQ45S
	380	30 × 35	0.20	1.80	EKHU4H1VSN381MR35S		320	30 × 35	0.20	1.65	EKHU501VSN321MR35S
	380	35 × 30	0.20	1.75	EKHU4H1VSN381MA30S		340	25.4 × 50	0.20	1.76	EKHU501VSN341MQ50S
	390	25.4 × 50	0.20	1.89	EKHU4H1VSN391MQ50S		340	35 × 30	0.20	1.66	EKHU501VSN341MA30S
	440	25.4 × 55	0.20	2.04	EKHU4H1VSN441MQ55S		380	25.4 × 55	0.20	1.89	EKHU501VSN381MQ55S
	450	30 × 40	0.20	2.01	EKHU4H1VSN451MR40S		380	30 × 40	0.20	1.85	EKHU501VSN381MR40S
	480	35 × 35	0.20	2.00	EKHU4H1VSN481MA35S		430	25.4 × 60	0.20	2.05	EKHU501VSN431MQ60S
	490	25.4 × 60	0.20	2.19	EKHU4H1VSN491MQ60S		430	35 × 35	0.20	1.89	EKHU501VSN431MA35S
	520	30 × 45	0.20	2.22	EKHU4H1VSN521MR45S		450	30 × 45	0.20	2.07	EKHU501VSN451MR45S
	570	35 × 40	0.20	2.26	EKHU4H1VSN571MA40S		510	30 × 50	0.20	2.24	EKHU501VSN511MR50S
	590	30 × 50	0.20	2.41	EKHU4H1VSN591MR50S		520	35 × 40	0.20	2.16	EKHU501VSN521MA40S
	660	30 × 55	0.20	2.59	EKHU4H1VSN661MR55S		580	30 × 55	0.20	2.43	EKHU501VSN581MR55S
	660	35 × 45	0.20	2.49	EKHU4H1VSN661MA45S		600	35 × 45	0.20	2.37	EKHU501VSN601MA45S
	730	30 × 60	0.20	2.78	EKHU4H1VSN731MR60S		640	30 × 60	0.20	2.60	EKHU501VSN641MR60S
	760	35 × 50	0.20	2.72	EKHU4H1VSN761MA50S		690	35 × 50	0.20	2.59	EKHU501VSN691MA50S
	860	35 × 55	0.20	2.96	EKHU4H1VSN861MA55S		780	35 × 55	0.20	2.82	EKHU501VSN781MA55S
	950	35 × 60	0.20	3.16	EKHU4H1VSN951MA60S		860	35 × 60	0.20	3.01	EKHU501VSN861MA60S

◆RATED RIPPLE CURRENT MULTIPLIERS

● Frequency Multipliers

Frequency(Hz)	50	120	300	1k	10k	50k
475, 500V _{dc}	0.77	1.00	1.11	1.20	1.25	1.33

The deterioration of aluminum electrolytic capacitors accelerates their life due to the internal heating produced by ripple current. For details, refer to Section "5-3 Ripple Current Effect on Lifetime" in the catalog, Technical Note.