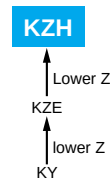


New!

KZH Series

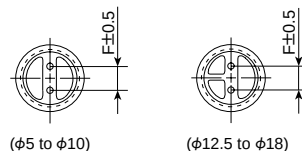
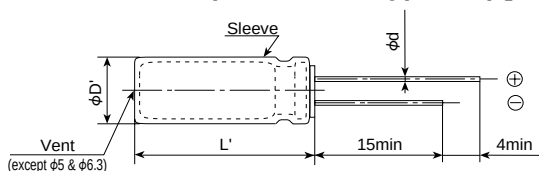
- Ultra Low impedance for Personal Computer and Storage Equipment
- Endurance with ripple current: 105°C 5000 to 6000 hours
- Non solvent-proof type



SPECIFICATIONS

Items	Characteristics					
Category	-40 to +105°C					
Temperature Range						
Rated Voltage Range	6.3 to 35V _{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 (tanδ)	Rated voltage (V _{dc})	6.3V	10V	16V	25V	35V
	tanδ (Max.)	0.22	0.19	0.16	0.14	0.12
	When nominal capacitance exceeds 1000μF, add 0.02 to the value above for each 1000μF increase. (at 20°C, 120Hz)					
Low Temperature Characteristics (Max. Impedance Ratio)	Z (-25°C) / Z (+20°C)	2max.				
	Z (-40°C) / Z (+20°C)	3max.				
(at 120Hz)						
Endurance	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 for the specified period of time at 105°C.					
	Time	φ5 & φ6.3 : 5000hours φ8 to φ16 : 6000hours				
	Capacitance change	≤±25% of the initial value (6.3, 10V : ≤±30%)				
	D.F. (tanδ)	≤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°C after exposing them for 500 hours at 105°C without voltage applied.					
	Capacitance change	≤±25% of the initial value (6.3, 10V : ≤±30%)				
	D.F. (tanδ)	≤200% of the initial specified value				
	Leakage current	≤The initial specified value				

DIMENSIONS (Radial Lead Type=VB) [mm]



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

PART NUMBERING SYSTEM

KZH 6.3 VB 1500 M H20

Case code
Cap tolerance (±20%)
Nominal cap code
Radial lead type
Rated voltage in volts
Series name

Capacitance	Code
47µF	47
100µF	100
2200µF	2200

RATED RIPPLE CURRENT MULTIPLIERS

- Frequency Multipliers

Capacitance(µF)	Frequency (Hz)			
	120	1k	10k	100k
0.47 to 150	0.40	0.75	0.90	1.00
220 to 560	0.50	0.85	0.94	1.00
680 to 1,800	0.60	0.87	0.95	1.00
2,200 to 3,900	0.75	0.90	0.95	1.00
4,700 to 8,200	0.85	0.95	0.98	1.00

◆STANDARD RATINGS

Case size φD×L(mm)	Case code	V _{dc}	6.3				10				16			
			Capacitance (μF)	Impedance (Ω _{max} /100kHz)		Rated ripple current (mA _{rms} /105°C 100kHz)	Capacitance (μF)	Impedance (Ω _{max} /100kHz)		Rated ripple current (mA _{rms} /105°C 100kHz)	Capacitance (μF)	Impedance (Ω _{max} /100kHz)		Rated ripple current (mA _{rms} /105°C 100kHz)
				20°C	-10°C			20°C	-10°C			20°C	-10°C	
5×11	E11	220	0.24	0.80	330	150	0.24	0.80	330	100	0.24	0.80	330	
6.3×11	F11	470	0.11	0.35	500	330	0.11	0.35	500	220	0.11	0.35	500	
8×11.5	H11	820	0.062	0.19	900	680	0.062	0.19	900	470	0.062	0.19	900	
8×15	H15	1,200	0.048	0.15	1,210	1,000	0.048	0.15	1,210	680	0.048	0.15	1,210	
8×20	H20	1,500	0.033	0.11	1,410	1,500	0.033	0.11	1,410	1,000	0.033	0.11	1,410	
10×12.5	J12	1,200	0.045	0.14	1,240	1,000	0.045	0.14	1,240	680	0.045	0.14	1,240	
10×16	J16	1,800	0.032	0.10	1,650	1,500	0.032	0.10	1,650	1,000	0.032	0.10	1,650	
10×20	J20	2,200	0.020	0.060	1,960	1,800	0.020	0.060	1,960	1,500	0.020	0.060	1,960	
10×25	J25	2,700	0.018	0.054	2,250	2,200	0.018	0.054	2,250	1,800	0.018	0.054	2,250	
12.5×20	K20	3,900	0.017	0.043	2,480	3,300	0.017	0.043	2,480	2,200	0.017	0.043	2,480	
12.5×25	K25	4,700	0.015	0.038	2,900	3,900	0.015	0.038	2,900	2,700	0.015	0.038	2,900	
12.5×30	K30	5,600	0.013	0.033	3,450	4,700	0.013	0.033	3,450	3,300	0.013	0.033	3,450	
12.5×35	K35	6,800	0.012	0.031	3,570	5,600	0.012	0.031	3,570	3,900	0.012	0.031	3,570	
16×20	L20	6,800	0.015	0.038	3,250	4,700	0.015	0.038	3,250	3,300	0.015	0.038	3,250	
16×25	L25	8,200	0.013	0.035	3,630	6,800	0.013	0.035	3,630	4,700	0.013	0.035	3,630	

Case size φD×L (mm)	Case code	V _{dc}		25			35		
		Capacitance (μF)	Impedance (Ω _{max} /100kHz)		Rated ripple current (mA _{rms} /105°C 100kHz)	Capacitance (μF)	Impedance (Ω _{max} /100kHz)		Rated ripple current (mA _{rms} /105°C 100kHz)
			20°C	-10°C			20°C	-10°C	
5X11	E11	68	0.24	0.80	330	47	0.24	0.80	330
6.3X11	F11	150	0.11	0.35	500	100	0.11	0.35	500
8X11.5	H11	330	0.062	0.19	900	220	0.062	0.19	900
8X15	H15	390	0.048	0.15	1,210	270	0.048	0.15	1,210
8X20	H20	560	0.033	0.11	1,410	390	0.033	0.11	1,410
10X12.5	J12	470	0.045	0.14	1,240	330	0.045	0.14	1,240
10X16	J16	680	0.032	0.10	1,650	470	0.032	0.10	1,650
10X20	J20	820	0.020	0.060	1,960	560	0.020	0.060	1,960
10X25	J25	1,000	0.018	0.054	2,250	680	0.018	0.054	2,250
12.5X20	K20	1,500	0.017	0.043	2,480	1,000	0.017	0.043	2,480
12.5X25	K25	1,800	0.015	0.038	2,900	1,200	0.015	0.038	2,900
12.5X30	K30	2,200	0.013	0.033	3,450	1,500	0.013	0.033	3,450
12.5X35	K35	2,700	0.012	0.031	3,570	1,800	0.012	0.031	3,570
16X20	L20	2,200	0.015	0.038	3,250	1,500	0.015	0.038	3,250
16X25	L25	3,300	0.013	0.035	3,630	2,200	0.013	0.035	3,630