NIPPON CHEMI-CON

MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

Long life, 105℃

KMY Series

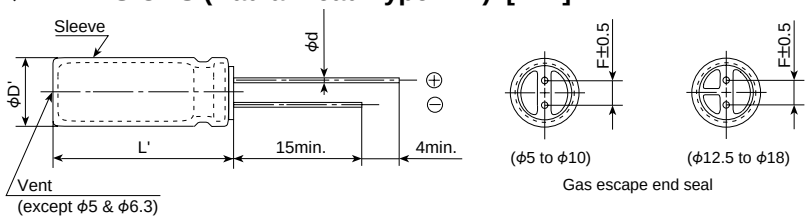
- Endurance : 105℃ 4000 to 7000 hours
- Long life and impedance specified version of KME series
- Non solvent-proof

KMY ← KME
longer life

◆SPECIFICATIONS

Items	Characteristics						
Category Temperature Range	−40 to +105℃						
Rated Voltage Range	10 to 50Vdc						
Capacitance Tolerance	±20% (M)						(at 20℃, 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℃ after 2 minutes)
Dissipation Factor (tanδ)	Rated voltage (Vdc)	10V	16V	25V	35V	50V	
	tanδ (Max.)	0.19	0.16	0.14	0.12	0.10	
	When nominal capacitance exceeds 1000μF, add 0.02 to the value above for each 1000μF increase.						(at 20℃, 120Hz)
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (Vdc)	10V	16V	25V	35V	50V	
	Z(−25℃)/Z(+20℃)	3	2	2	2	2	
	Z(−40℃)/Z(+20℃)	6	4	3	3	3	(at 120Hz)
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 for the specified period of time at 105℃.						
	Time	φ5 & 6.3 : 4000hours φ8 & 10 : 5000hours φ12.5 and larger : 7000hours					
	Capacitance change	≦±25% of the initial value					
	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℃ after exposing them for 1000 hours at 105℃ without voltage applied.						
	Capacitance change	≦±25% of the initial value					
	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	18
φd	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
φD'	φD+0.5max.						
L'	L+1.5max.						

◆PART NUMBERING SYSTEM

KMY 50 VB 1000 M

- M : Cap tolerance (±20%)
- 1000 : Nominal cap code
- VB : Radial lead type
- 50 : Rated voltage in volts
- KMY : Series name

Capacitance	Code
0.47μF	R47
1.0μF	1
4.7μF	4R7
10μF	10
100μF	100

CAT. No. E1001B

KMY Series

◆STANDARD RATINGS

Vdc / Items / μF	10				16			
	Case size φD×L (mm)	Impedance (Ωmax/100kHz) 20℃	Impedance (Ωmax/100kHz) −10℃	Rated ripple current (mArms/105℃, 100kHz)	Case size φD×L (mm)	Impedance (Ωmax/100kHz) 20℃	Impedance (Ωmax/100kHz) −10℃	Rated ripple current (mArms/105℃, 100kHz)
47					5×11.5	0.9	3.6	150
100	5×11.5	0.9	3.6	150	6.3×11.5	0.4	1.6	245
220	6.3×11.5	0.4	1.6	245	8×12	0.25	1.0	395
330	8×12	0.25	1.0	395	8×12	0.25	1.0	395
470	8×12	0.25	1.0	395	10×12.5	0.16	0.65	580
1,000	10×16	0.12	0.46	765	10×20	0.078	0.30	1,010
2,200	12.5×20	0.062	0.21	1,300	12.5×25	0.048	0.16	1,650
3,300	12.5×25	0.048	0.16	1,650	16×25	0.034	0.096	1,850
4,700	16×25	0.034	0.096	1,850	16×31.5	0.029	0.087	2,000
6,800	16×31.5	0.029	0.087	2,000	18×35.5	0.025	0.058	2,200
10,000	18×35.5	0.025	0.058	2,200				

Vdc / Items / μF	25				35			
	Case size φD×L (mm)	Impedance (Ωmax/100kHz) 20℃	Impedance (Ωmax/100kHz) −10℃	Rated ripple current (mArms/105℃, 100kHz)	Case size φD×L (mm)	Impedance (Ωmax/100kHz) 20℃	Impedance (Ωmax/100kHz) −10℃	Rated ripple current (mArms/105℃, 100kHz)
33	5×11.5	0.9	3.6	150	5×11.5	0.9	3.6	150
47	5×11.5	0.9	3.6	150	6.3×11.5	0.4	1.6	245
100	6.3×11.5	0.4	1.6	245	8×12	0.25	1.0	395
220	8×12	0.25	1.0	395	10×12.5	0.16	0.65	580
330	10×12.5	0.16	0.65	580	10×16	0.12	0.46	765
470	10×16	0.12	0.46	765	10×20	0.078	0.30	1,010
1,000	12.5×20	0.062	0.21	1,300	12.5×25	0.048	0.16	1,650
2,200	16×25	0.034	0.096	1,850	16×31.5	0.029	0.087	2,000
3,300	16×31.5	0.029	0.087	2,000	18×35.5	0.025	0.058	2,200
4,700	18×35.5	0.025	0.058	2,200				

Vdc / Items / μF	50			
	Case size φD×L (mm)	Impedance (Ωmax/100kHz) 20℃	Impedance (Ωmax/100kHz) −10℃	Rated ripple current (mArms/105℃, 100kHz)
0.47	5×11.5	5.5	22.0	17
1.0	5×11.5	4.0	16.0	30
2.2	5×11.5	2.5	10.0	43
3.3	5×11.5	2.2	8.8	53
4.7	5×11.5	1.9	7.6	88
10	5×11.5	1.5	6.0	100
22	5×11.5	0.9	3.6	150
33	6.3×11.5	0.4	1.6	245
47	6.3×11.5	0.4	1.6	245
100	8×12	0.25	1.0	395
220	10×16	0.12	0.46	765
330	10×20	0.088	0.34	1,010
470	12.5×20	0.062	0.21	1,300
1,000	16×25	0.034	0.096	1,850
2,200	18×35.5	0.025	0.058	2,200

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Capacitance (μF) \ Frequency (Hz)	120	1k	10k	100k
0.47 to 4.7	0.40	0.70	0.90	1.00
10 to 330	0.55	0.80	0.95	1.00
470 to 1,000	0.70	0.85	0.95	1.00
2,200 to 10,000	0.80	0.95	1.00	1.00