KMH Series

● 105℃ 2,000Hrs assured

- Non-solvent proof.
- Wide Temperature Range

KME → KMH

Downsized

SPECIFICATIONS

Item	Characteristics	
Rated Voltage Range	10 ~ 100 V_{DC}	160~ 400 V_{DC}
Operating Temperature Range	-40 ~ + 105 ℃	-25 ~ + 105 ℃
Capacitance Tolerance	±20% (M)	(at 20 ° C ,120 Hz)
Leakage Current	I =0.02CV or 5mA, whichever is smaller. Where, I : Leakage current(μA) C : Nominal capacitance(μF) V : Rated voltage(V_{DC}) (at 20 ° C,5 minutes)	
Dissipation Factor (Tanδ)	Tanδ shall not exceed the values shown in the RATINGS. (at 20 ° C,120Hz)	
Temperature Characteristics (Capacitance change)	Rated Voltage(VDC) / 10~100 / 160~400 Z(-25℃)/Z(20℃) / - / ≥ 0.7 Z(-40℃)/Z(20℃) / ≥ 0.6 / - (at 120Hz)	
Load Life	The following specifications shall be satisfied when capacitors are restored to 20℃ after the rated ripple duplicated voltage(≤WV) applied for 2,000 hours at 105 ℃. Capacitance change ≤ ± 20% of the initial value Tanδ ≤ 200% of the initial specified value Leakage current ≤ The initial specified value	
Shelf Life	The following specification shall be satisfied when the capacitors are restored to 20 ℃ after exposing them for 500 hours at 105℃ without voltage applied. The rated voltage shall be applied to the capacitors for 30 minutes at least 24 hours and not more than 48 hours before the measurement. Capacitance change ≤ ±20% of the initial value Tanδ ≤ 200% of the initial specified value Leakage current ≤ The initial specified value	
Others	Satisfied characteristics B of KS C 6421	

DIMENSIONS : Refer to page 122

Marking : BROWN SLEEVE ,SILVER INK

PERMISSIBLE RIPPLE CURRENT COMPENSATING COEFFICIENT

Frequency Multiplying Factor

Rated Voltage (VDC)	Case Diameter (mm)	Frequency(Hz)				
		60	120	300	1K	10K~
10~50	Φ30 ~ ϕ89	0.95	1.00	1.03	1.05	1.09
63	Φ35	0.90	1.00	1.06	1.10	1.08
	Φ50 ~ ϕ89	0.95	1.00	1.03	1.05	1.09
100	Φ35	0.82	1.00	1.12	1.22	1.30
	Φ50	0.90	1.00	1.06	1.10	1.18
	Φ63.5 ~ ϕ89	0.95	1.00	1.03	1.05	1.09
160~250	Φ35	0.80	1.00	1.19	1.34	1.46
	Φ50 ~ ϕ63.5	0.81	1.00	1.14	1.26	1.36
	Φ76 ~ ϕ89	0.82	1.00	1.12	1.22	1.30
315~400	Φ35 ~ ϕ89	0.80	1.00	1.19	1.34	1.46

RATINGS OF KMH Series

VDC / μF	10(1A)			16(1C)			25(1E)			35(1V)		
2,200												
2,700												
3,300												
3,900												
4,700												
5,600												
6,800												
8,200										A5	3.3	0.30
10,000										A5	3.6	0.30
12,000							A5	3.7	0.35	A6	4.2	0.30
15,000							A5	4.1	0.35	A6	4.7	0.30
18,000				A5	4.2	0.45	A6	4.8	0.35	A8	5.7	0.30
22,000	A5	4.9	0.70	A5	4.7	0.45	A6	5.3	0.35	A8	5.7	0.30
27,000	A5	5.1	0.70	A6	5.5	0.45	A8	6.4	0.35	A10	7.5	0.30
33,000	A6	5.9	0.70	A6	5.7	0.45	A8	6.7	0.40	A12	9.0	0.30
39,000	A8	7.1	0.70	A8	6.8	0.45	A10	7.8	0.40	C8	9.2	0.35
47,000	A8	7.1	0.70	A8	7.1	0.50	A12	9.3	0.40	C10	11.2	0.35
56,000	A8	7.1	0.70	A10	8.4	0.50	C8	9.7	0.45	C10	11.4	0.40
68,000	A10	8.5	0.70	A10	8.8	0.55	C10	11.2	0.45	C12	13.6	0.40
82,000	A10	8.9	0.70	C8	10.7	0.55	C10	11.2	0.50	D10	14.8	0.45
100,000	A12	10.7	0.70	C8	10.8	0.65	C12	14.8	0.50	D12	17.6	0.45
120,000	C8	11.0	0.75	C10	13.1	0.65	D10	14.9	0.65	D12	17.6	0.55
150,000	C10	13.2	0.80	C12	15.3	0.70	D12	17.9	0.65	E12	19.8	0.65
180,000	C12	15.7	0.80	C12	15.7	0.80	D12	17.9	0.80	E12	19.8	0.80
220,000	C12	16.8	0.85	D12	19.2	0.85	E12	21.3	0.85	E14	23.4	0.80
270,000	D12	19.6	1.00	D12	19.6	1.00	E12	21.7	1.00	F14	25.5	1.00
330,000	D12	19.7	1.20	E12	21.1	1.30	E14	23.1	1.20			
390,000	E12	21.3	1.50	E12	21.3	1.50	F14	24.9	1.50			
470,000	E12	21.4	1.80	E14	24.2	1.60						
560,000	E14	23.6	2.00	F14	28.1	2.00						
680,000	F14	26.0	2.40	F14	28.5	2.40						

▲ Tanδ

▲ Permissible Ripple Current(Arms / 105℃, 120Hz)

▲ Case Code

VDC / μF	50(1H)			63(1J)			80(1K)		
2,200							A5	2.4	0.15
2,700				A5	2.3	0.20	A5	2.7	0.15
3,300				A5	2.5	0.20	A5	3.0	0.15
3,900	A5	2.8	0.20	A5	2.8	0.20	A6	3.4	0.15
4,700	A5	3.1	0.20	A5	3.1	0.20	A6	3.7	0.15
5,600	A5	3.3	0.20	A6	3.5	0.20	A8	4.5	0.15
6,800	A5	3.3	0.25	A6	3.9	0.20	A8	4.9	0.15
8,200	A6	3.8	0.25	A8	4.7	0.20	A10	5.1	0.20
10,000	A8	4.6	0.25	A8	4.7	0.25	A12	6.1	0.20
12,000	A8	5.1	0.25	A10	5.5	0.25	C8	6.7	0.20
15,000	A8	5.7	0.25	A12	6.6	0.25	C10	8.3	0.20
18,000	A8	5.7	0.25	A12	6.6	0.25	C12	9.9	0.20
22,000	A10	6.7	0.25	C8	7.4	0.25	C12	11.0	0.20
27,000	C8	9.1	0.25	C12	10.9	0.25	D10	11.4	0.25
33,000	C10	11.1	0.25	C12	12.0	0.25	E10	13.9	0.25
39,000	C12	13.1	0.25	D10	12.5	0.30	E10	13.9	0.30
47,000	C12	13.9	0.30	D12	14.9	0.30	E12	16.5	0.30
56,000	D10	13.9	0.35	D12	16.3	0.30	E12	18.1	0.30
68,000	D12	16.6	0.35	E12	18.4	0.35	E14	19.7	0.35
82,000	E12	18.9	0.40	E14	20.0	0.40	F14	22.1	0.40
100,000	E12	19.5	0.45	E14	20.0	0.50			
120,000	E12	19.5	0.55	F14	21.8	0.60			
150,000	F14	23.9	0.60						
180,000	F14	23.9	0.75						
220,000									
270,000									
330,000									
390,000									
470,000									
560,000									
680,000									

▲ Tanδ

▲ Permissible Ripple Current(Arms / 105℃, 120Hz)

▲ Case Code

VDC / μF	100(2A)			160(2C)			200(2D)			250(2E)		
180												
220												
270										A5	0.8	0.15
330							A5	0.9	0.15	A5	0.9	0.15
390							A5	1.0	0.15	A5	1.0	0.15
470							A5	1.1	0.15	A5	1.1	0.15
560				A5	1.2	0.15	A5	1.2	0.15	A5	1.2	0.15
680				A5	1.3	0.15	A5	1.3	0.15	A6	1.4	0.15
820				A5	1.4	0.15	A5	1.4	0.15	A8	1.6	0.15
1,000				A5	1.6	0.15	A6	1.7	0.15	A8	1.6	0.20
1,200				A6	1.9	0.15	A6	1.9	0.15	A8	1.8	0.20
1,500				A6	2.1	0.15	A8	2.3	0.15	A10	2.1	0.20
1,800	A5	2.7	0.10	A8	2.5	0.15	A8	2.5	0.15	A12	2.5	0.20
2,200	A5	3.0	0.10	A8	2.8	0.15	A10	2.5	0.15	A12	2.5	0.20
2,700	A6	3.5	0.10	A10	3.3	0.15	A12	3.6	0.15	C10	3.5	0.20
3,300	A8	4.2	0.10	A12	3.8	0.15	C8	4.1	0.15	C12	4.2	0.20
3,900	A8	4.2	0.12	C8	3.8	0.20	C10	4.9	0.15	C12	4.6	0.20
4,700	A10	5.0	0.12	C10	4.6	0.20	D10	5.3	0.20	D12	5.7	0.20
5,600	A10	5.4	0.12	C10	5.1	0.20	D10	5.8	0.20	D12	6.3	0.20
6,800	A12	5.8	0.15	C12	6.1	0.20	D12	6.9	0.20	E12	7.7	0.20
8,200	C8	6.4	0.15	D10	7.0	0.20	D12	7.6	0.20	E12	8.4	0.20
10,000	C10	7.8	0.15	D12	8.4	0.20	E12	9.3	0.20	E14	10.0	0.20
12,000	C12	9.3	0.15	E10	9.4	0.20	E12	10.2	0.20	F14	11.9	0.20
15,000	C12	10.4	0.15	E12	11.4	0.20	E12	10.2	0.20	F14	11.9	0.20
18,000	D10	10.4	0.20	E14	13.4	0.20	F14	13.1	0.25			
22,000	D12	12.5	0.20	F14	14.5	0.25						
27,000	E12	13.7	0.25	F14	16.0	0.25						
33,000	E12	15.2	0.25									
39,000	E14	16.1	0.30									
47,000	F14	19.3	0.30									
56,000	F14	21.1	0.30									

▲ Tanδ

▲ Permissible Ripple Current(Arms / 105℃, 120Hz)

▲ Case Code

VDC / μF	315(2F)			350(2V)			400(2G)		
180	A5	0.8	0.10	A5	0.8	0.10	A5	0.8	0.10
220	A5	0.9	0.10	A5	0.9	0.10	A5	0.9	0.10
270	A5	1.0	0.10	A5	1.0	0.10	A5	1.0	0.10
330	A5	1.1	0.10	A5	1.1	0.10	A6	1.2	0.10
390	A5	1.2	0.10	A5	1.1	0.10	A6	1.2	0.10
470	A6	1.4	0.10	A6	1.4	0.10	A8	1.4	0.10
560	A6	1.5	0.10	A8	1.6	0.10	A8	1.4	0.15
680	A8	1.7	0.10	A8	1.6	0.15	A10	1.7	0.15
820	A8	1.7	0.15	A10	1.8	0.15	A12	2.0	0.15
1,000	A10	2.0	0.15	A12	2.2	0.15	C8	2.2	0.15
1,200	A12	2.4	0.15	C8	2.4	0.15	C10	2.7	0.15
1,500	C8	2.7	0.15	C10	3.0	0.15	C12	3.3	0.15
1,800	C10	3.3	0.15	C12	3.6	0.15			
2,200	C10	4.0	0.15	C12	4.0	0.15	D10	4.2	0.15
2,700	C12	4.4	0.15	D10	4.6	0.15			
3,300	D10	5.1	0.15				D12	5.5	0.15
3,900	D12	6.0	0.15	E12	6.7	0.15			
4,700	E10	6.8	0.15				E13	7.6	0.15
5,600	E12	8.0	0.15	E13	8.3	0.15	F14	9.4	0.15
6,800	F13	9.2	0.15	E14	9.5	0.15	F14	10.4	0.15
8,200	F14	11.4	0.15	F14	11.4	0.15			
10,000	F14	12.6	0.15						
12,000									
15,000									
18,000									
22,000									
27,000									
33,000									
39,000									
47,000									
56,000									

▲ Tanδ

▲ Permissible Ripple Current(Arms / 105℃, 120Hz)

▲ Case Code