

# KMQ Series

- Downsized from current downsized snap-ins KMM series
- Endurance with ripple current : 105°C 2000 hours
- Non solvent-proof type

KMQ

↑  
downsized  
KMM

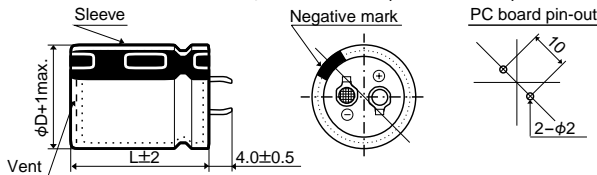


## ◆SPECIFICATIONS

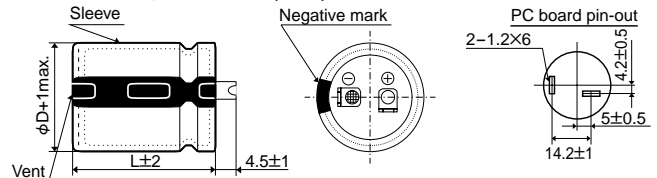
Items	Characteristics			
Category	-25 to +105°C			
Temperature Range				
Rated Voltage Range	160 to 450V <sub>dc</sub>			
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)			
Leakage Current	I ≤ 3√CV Where, I : Max. leakage current (µA), C : Nominal capacitance (µF), V : Rated voltage (V) (at 20°C after 5 minutes)			
Dissipation Factor (tanδ)	Rated voltage (V <sub>dc</sub> )	160 to 250V	315 to 400V	450V
	tanδ (Max.)	0.15	0.15	0.20
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V <sub>dc</sub> )	160 to 250V	315 to 400V	450V
	Z(-25°C)/Z(+20°C)	4	8	8
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 2000 hours at 105°C.			
	Capacitance change	≤±20% 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°C after exposing them for 1000 hours at 105°C without voltage applied.			
	Capacitance change	≤±15% of the initial value		
	D.F. (tanδ)	≤150% of the initial specified value		
	Leakage current	≤The initial specified value		

## ◆DIMENSIONS [mm]

- Standard Terminal Type : VSSN (φ22 to φ35)

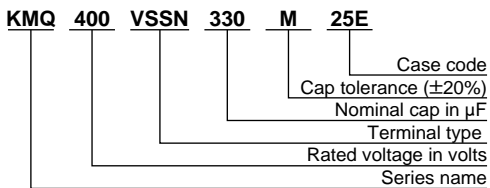


- Terminal Type : LISN (φ35)



\* No plastic disk is the standard design.

## ◆PART NUMBERING SYSTEM



## ◆CASE CODE [mm]

Case code	Case size φDXL	Case code	Case size φDXL	Case code	Case size φDXL	Case code	Case size φDXL
22A	22×25	25A	25.4×25	30A	30×25	35A	35×25
22B	22×30	25B	25.4×30	30B	30×30	35B	35×30
22C	22×35	25C	25.4×35	30C	30×35	35C	35×35
22D	22×40	25D	25.4×40	30D	30×40	35D	35×40
22E	22×45	25E	25.4×45	30E	30×45	35E	35×45
22F	22×50	25F	25.4×50	30F	30×50	35F	35×50

## ◆STANDARD RATINGS

μF	V <sub>dc</sub>		160				180				200			
	φ	D	22	25	30	35	22	25	30	35	22	25	30	35
390							22×25 1.30				22×25 1.31			
470			22×25 1.40				22×30 1.40				22×30 1.45			
560			22×30 1.50				22×30 1.50	25.4×25 1.50			22×30 1.67	25.4×25 1.67		
680			22×30 1.70	25.4×25 1.70			22×35 1.70	25.4×30 1.70			22×40 1.75	25.4×30 1.75		
820			22×35 2.00	25.4×30 2.00	30×25 2.00		22×40 2.00	25.4×30 2.00	30×25 2.00		22×45 2.04	25.4×35 2.04	30×25 2.04	
1,000			22×40 2.20	25.4×35 2.20	30×25 2.20		22×45 2.20	25.4×40 2.20	30×30 2.20	35×25 2.20	22×50 2.30	25.4×45 2.30	30×30 2.30	35×25 2.30
1,200				25.4×40 2.30	30×30 2.30	35×25 2.30		25.4×45 2.30	30×35 2.30	35×30 2.30		25.4×50 2.65	30×35 2.65	35×30 2.65
1,500				25.4×45 2.50	30×35 2.50	35×30 2.50		25.4×50 2.50	30×40 2.50	35×30 2.50			30×40 2.80	35×30 2.80
1,800				25.4×50 2.70	30×40 2.70	35×30 2.70			30×45 2.70	35×35 2.70			30×45 3.08	35×40 3.08
2,200					30×45 2.90	35×35 2.90			30×50 2.90	35×40 2.90				35×45 3.48
2,700					30×50 3.10	35×40 3.10				35×50 3.10				
3,300						35×50 3.30	← Upper : Case size φDXL (mm) ← Lower : Rated ripple current (Arms) at 105°C, 120Hz							

μF	V <sub>dc</sub>		250				315				350			
	φ	D	22	25	30	35	22	25	30	35	22	25	30	35
120											22×25 0.75			
150							22×25 0.82				22×30 0.82			
180							22×30 0.90				22×30 0.90	25.4×25 0.90		
220			22×25 1.00				22×30 1.00	25.4×25 1.00			22×35 1.00	25.4×30 1.00		
270			22×25 1.10				22×35 1.10	25.4×30 1.10			22×40 1.10	25.4×30 1.10	30×25 1.10	
330			22×30 1.20	25.4×25 1.20			22×45 1.20	25.4×35 1.20	30×25 1.20		22×45 1.20	25.4×40 1.20	30×30 1.20	
390			22×35 1.30	25.4×25 1.30			22×45 1.30	25.4×40 1.30	30×30 1.30	35×25 1.30		25.4×45 1.30	30×35 1.30	
470			22×40 1.40	25.4×30 1.40	30×25 1.40			25.4×45 1.40	30×35 1.40	35×25 1.40		25.4×50 1.40	30×35 1.40	35×30 1.40
560			22×45 1.50	25.4×35 1.50	30×25 1.50			25.4×50 1.50	30×40 1.50	35×30 1.50			30×45 1.50	35×35 1.50
680			22×50 1.70	25.4×40 1.70	30×30 1.70	35×25 1.70			30×45 1.70	35×35 1.70			30×50 1.70	35×40 1.70
820				25.4×45 2.00	30×35 2.00	35×30 2.00			30×50 2.00	35×40 2.00				35×45 1.90
1,000					30×40 2.20	35×30 2.20				35×45 2.30				
1,200					30×45 2.30	35×35 2.30								
1,500						35×45 2.50								
1,800						35×50 2.70	← Upper : Case size φDXL (mm) ← Lower : Rated ripple current (Arms) at 105°C, 120Hz							



◆STANDARD RATINGS

μF	V <sub>dc</sub>		400				450			
	φ	D	22	25	30	35	22	25	30	35
68							22×25 0.50			
82							22×30 0.56			
100			22×25 0.70				22×30 0.64	25.4×25 0.64		
120			22×30 0.75				22×35 0.72	25.4×30 0.72		
150			22×30 0.88	25.4×25 0.88			22×40 0.79	25.4×30 0.79	30×25 0.79	
180			22×35 0.95	25.4×30 0.95			22×45 0.87	25.4×40 0.87	30×30 0.87	
220			22×45 1.10	25.4×35 1.10	30×25 1.10			25.4×45 1.00	30×30 1.00	35×25 1.00
270			22×50 1.22	25.4×40 1.22	30×30 1.22	35×25 1.22		25.4×50 1.19	30×40 1.19	35×30 1.19
330				25.4×45 1.44	30×35 1.44	35×30 1.44			30×45 1.38	35×35 1.38
390				25.4×50 1.55	30×40 1.55	35×30 1.55			30×50 1.55	35×40 1.55
470					30×45 1.68	35×35 1.68				35×45 1.74
560					30×50 1.90	35×40 1.90				35×50 1.90
680						35×45 2.12	← Upper : Case size φDXL (mm) ← Lower : Rated ripple current (Arms) at 105°C, 120Hz			

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Frequency(Hz)	50	120	300	1k	10k	50k
160 to 250V <sub>dc</sub>	0.81	1.00	1.17	1.32	1.45	1.50
315 to 450V <sub>dc</sub>	0.77	1.00	1.16	1.30	1.41	1.43