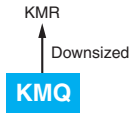


KMQ Series

- Endurance with ripple current : 2,000 hours at 105°C
- Non solvent resistant type
- RoHS2 Compliant



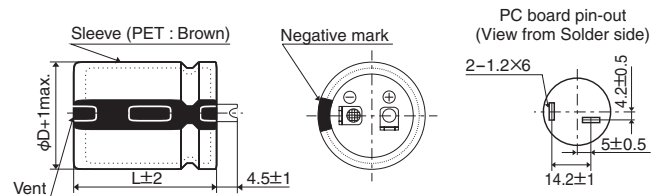
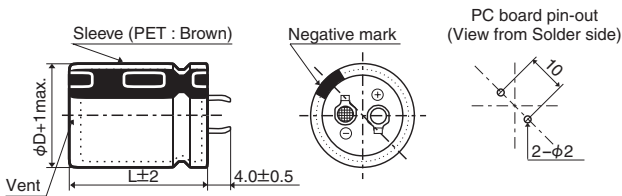
SPECIFICATIONS

Items	Characteristics														
Category	-40 to +105°C (35&50V _{dc}), -25 to +105°C (160 to 450V _{dc})														
Temperature Range															
Rated Voltage Range	35&50V _{dc} , 160 to 450V _{dc}														
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 (tan δ)	Rated voltage (V _{dc})	35V		50V		160 to 250V		315 to 400V		420 & 450V					
	Nominal capacitance (µF)	10,000 > C ≥ 10,000		10,000 > C ≥ 10,000		—		—		—					
	tan δ (Max.)	0.30		0.35		0.25		0.30		0.15		0.15		0.20	
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V _{dc})	35&50V		160 to 250V		315 to 450V									
	Z(-25°C)/Z(+20°C)	4		4		8									
	Z(-40°C)/Z(+20°C)	10		—		—									
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 (the peak voltage shall not exceed the rated voltage) for 2,000 hours at 105°C.														
	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°C after exposing them for 1,000 hours at 105°C 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]

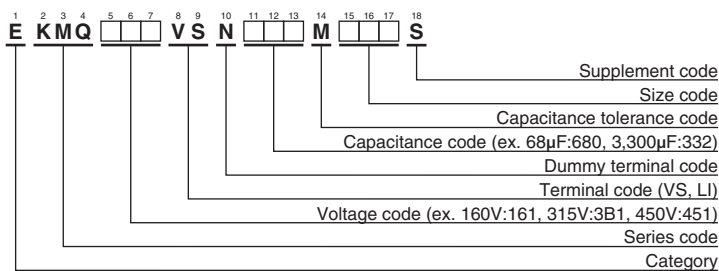
Terminal Code : VS (φ22 to φ35) : Standard

Terminal Code : LI (φ35)



The standard design has no plastic disc.

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.	
35	4,700	22 × 25	0.30	1.87	EKMQ350VSN472MP25S	160	1,800	30 × 40	0.15	2.70	EKMQ161VSN182MR40S	
	5,600	22 × 25	0.30	2.04	EKMQ350VSN562MP25S		1,800	35 × 30	0.15	2.70	EKMQ161VSN182MA30S	
	5,600	25.4 × 25	0.30	2.00	EKMQ350VSN562MQ25S		2,200	30 × 45	0.15	2.90	EKMQ161VSN222MR45S	
	6,800	22 × 30	0.30	2.36	EKMQ350VSN682MP30S		2,200	35 × 35	0.15	2.90	EKMQ161VSN222MA35S	
	6,800	25.4 × 25	0.30	2.21	EKMQ350VSN682MQ25S		2,700	30 × 50	0.15	3.10	EKMQ161VSN272MR50S	
	8,200	22 × 35	0.30	2.65	EKMQ350VSN822MP35S		2,700	35 × 40	0.15	3.10	EKMQ161VSN272MA40S	
	8,200	25.4 × 30	0.30	2.49	EKMQ350VSN822MQ30S		3,300	35 × 50	0.15	3.30	EKMQ161VSN332MA50S	
	8,200	30 × 25	0.30	2.62	EKMQ350VSN822MR25S		180	390	22 × 25	0.15	1.30	EKMQ181VSN391MP25S
	10,000	22 × 40	0.35	3.00	EKMQ350VSN103MP40S			470	22 × 30	0.15	1.40	EKMQ181VSN471MP30S
	10,000	25.4 × 35	0.35	2.88	EKMQ350VSN103MQ35S			560	22 × 30	0.15	1.50	EKMQ181VSN561MP30S
	10,000	30 × 25	0.35	2.90	EKMQ350VSN103MR25S	560		25.4 × 25	0.15	1.50	EKMQ181VSN102MR25S	
	12,000	22 × 50	0.35	3.47	EKMQ350VSN123MP50S	680		22 × 35	0.15	1.70	EKMQ181VSN681MP35S	
	12,000	25.4 × 35	0.35	3.15	EKMQ350VSN123MQ35S	680		25.4 × 30	0.15	1.70	EKMQ181VSN681MQ30S	
	12,000	30 × 30	0.35	3.25	EKMQ350VSN123MR30S	820		22 × 40	0.15	2.00	EKMQ181VSN821MP40S	
	12,000	35 × 25	0.35	3.20	EKMQ350VSN123MA25S	820		25.4 × 30	0.15	2.00	EKMQ181VSN102MR30S	
	15,000	25.4 × 40	0.35	3.61	EKMQ350VSN153MQ40S	820		30 × 25	0.15	2.00	EKMQ181VSN821MR25S	
	15,000	30 × 35	0.35	3.78	EKMQ350VSN153MR35S	1,000		22 × 45	0.15	2.20	EKMQ181VSN102MP45S	
	15,000	35 × 25	0.35	3.60	EKMQ350VSN153MA25S	1,000	25.4 × 40	0.15	2.20	EKMQ181VSN102MQ40S		
	18,000	25.4 × 50	0.35	4.14	EKMQ350VSN183MQ50S	1,000	30 × 30	0.15	2.20	EKMQ181VSN102MR30S		
	18,000	30 × 40	0.35	4.30	EKMQ350VSN183MR40S	1,000	35 × 25	0.15	2.20	EKMQ181VSN102MA25S		
18,000	35 × 30	0.35	4.10	EKMQ350VSN183MA30S	1,200	25.4 × 45	0.15	2.30	EKMQ181VSN122MQ45S			
22,000	30 × 50	0.35	5.00	EKMQ350VSN223MR50S	1,200	30 × 35	0.15	2.30	EKMQ181VSN122MR35S			
22,000	35 × 35	0.35	4.64	EKMQ350VSN223MA35S	1,200	35 × 30	0.15	2.30	EKMQ181VSN122MA30S			
27,000	35 × 40	0.35	5.37	EKMQ350VSN273MA40S	1,500	25.4 × 50	0.15	2.50	EKMQ181VSN152MQ50S			
33,000	35 × 50	0.35	6.00	EKMQ350VSN333MA50S	1,500	30 × 40	0.15	2.50	EKMQ181VSN152MR40S			
50	2,700	22 × 25	0.25	1.65	EKMQ500VSN272MP25S	1,500	35 × 30	0.15	2.50	EKMQ181VSN152MA30S		
	3,300	22 × 30	0.25	1.92	EKMQ500VSN332MP30S	1,800	30 × 45	0.15	2.70	EKMQ181VSN182MR45S		
	3,300	25.4 × 25	0.25	1.76	EKMQ500VSN332MQ25S	1,800	35 × 35	0.15	2.70	EKMQ181VSN182MA35S		
	3,900	22 × 30	0.25	2.08	EKMQ500VSN392MP30S	2,200	30 × 50	0.15	2.90	EKMQ181VSN222MR50S		
	3,900	25.4 × 25	0.25	2.04	EKMQ500VSN392MQ25S	2,200	35 × 40	0.15	2.90	EKMQ181VSN222MA40S		
	4,700	22 × 35	0.25	2.43	EKMQ500VSN472MP35S	2,700	35 × 50	0.15	3.10	EKMQ181VSN272MA50S		
	4,700	25.4 × 30	0.25	2.50	EKMQ500VSN472MQ30S	200	390	22 × 25	0.15	1.31	EKMQ201VSN391MP25S	
	4,700	30 × 25	0.25	2.29	EKMQ500VSN472MR25S		470	22 × 30	0.15	1.45	EKMQ201VSN471MP30S	
	5,600	22 × 40	0.25	2.63	EKMQ500VSN562MP40S		560	22 × 30	0.15	1.67	EKMQ201VSN561MP30S	
	5,600	25.4 × 35	0.25	2.61	EKMQ500VSN562MQ35S		560	25.4 × 25	0.15	1.67	EKMQ201VSN561MQ25S	
	5,600	30 × 25	0.25	2.80	EKMQ500VSN562MR25S		680	22 × 40	0.15	1.75	EKMQ201VSN681MP40S	
	6,800	22 × 50	0.25	3.05	EKMQ500VSN682MP50S		680	25.4 × 30	0.15	1.75	EKMQ201VSN681MQ30S	
	6,800	25.4 × 40	0.25	2.94	EKMQ500VSN682MQ40S		820	22 × 45	0.15	2.04	EKMQ201VSN821MP45S	
	6,800	30 × 30	0.25	3.30	EKMQ500VSN682MR30S		820	25.4 × 35	0.15	2.04	EKMQ201VSN821MQ35S	
	6,800	35 × 25	0.25	2.77	EKMQ500VSN682MA25S		820	30 × 25	0.15	2.04	EKMQ201VSN821MR25S	
	8,200	25.4 × 45	0.25	3.60	EKMQ500VSN822MQ45S		1,000	22 × 50	0.15	2.30	EKMQ201VSN102MP50S	
	8,200	30 × 35	0.25	3.60	EKMQ500VSN822MR35S	1,000	25.4 × 45	0.15	2.30	EKMQ201VSN102MQ45S		
	8,200	35 × 30	0.25	3.60	EKMQ500VSN822MA30S	1,000	30 × 30	0.15	2.30	EKMQ201VSN102MR30S		
	10,000	25.4 × 50	0.30	4.00	EKMQ500VSN103MQ50S	1,000	35 × 25	0.15	2.30	EKMQ201VSN102MA25S		
	10,000	30 × 40	0.30	4.00	EKMQ500VSN103MR40S	1,200	25.4 × 50	0.15	2.65	EKMQ201VSN122MQ50S		
10,000	35 × 30	0.30	4.00	EKMQ500VSN103MA30S	1,200	30 × 35	0.15	2.65	EKMQ201VSN122MR35S			
12,000	30 × 50	0.30	4.29	EKMQ500VSN123MR50S	1,200	35 × 30	0.15	2.65	EKMQ201VSN122MA30S			
12,000	35 × 35	0.30	4.37	EKMQ500VSN123MA35S	1,500	30 × 40	0.15	2.80	EKMQ201VSN152MR40S			
15,000	35 × 40	0.30	4.50	EKMQ500VSN153MA40S	1,500	35 × 30	0.15	2.80	EKMQ201VSN152MA30S			
18,000	35 × 50	0.30	5.30	EKMQ500VSN183MA50S	1,800	30 × 45	0.15	3.08	EKMQ201VSN182MR45S			
160	470	22 × 25	0.15	1.40	EKMQ161VSN471MP25S	1,800	35 × 40	0.15	3.08	EKMQ201VSN182MA40S		
	560	22 × 30	0.15	1.50	EKMQ161VSN561MP30S	2,200	35 × 45	0.15	3.48	EKMQ201VSN222MA45S		
	680	22 × 30	0.15	1.70	EKMQ161VSN681MP30S	250	220	22 × 25	0.15	1.00	EKMQ251VSN221MP25S	
	680	25.4 × 25	0.15	1.70	EKMQ161VSN681MQ25S		270	22 × 25	0.15	1.10	EKMQ251VSN271MP25S	
	820	22 × 35	0.15	2.00	EKMQ161VSN821MP35S		330	22 × 30	0.15	1.20	EKMQ251VSN331MP30S	
	820	25.4 × 30	0.15	2.00	EKMQ161VSN821MQ30S		330	25.4 × 25	0.15	1.20	EKMQ251VSN331MQ25S	
	820	30 × 25	0.15	2.00	EKMQ161VSN821MR25S		390	22 × 35	0.15	1.30	EKMQ251VSN391MP35S	
	1,000	22 × 40	0.15	2.20	EKMQ161VSN102MP40S		390	25.4 × 25	0.15	1.30	EKMQ251VSN391MQ25S	
	1,000	25.4 × 35	0.15	2.20	EKMQ161VSN102MQ35S		470	22 × 40	0.15	1.40	EKMQ251VSN471MP40S	
	1,000	30 × 25	0.15	2.20	EKMQ161VSN102MR25S		470	25.4 × 30	0.15	1.40	EKMQ251VSN471MQ30S	
	1,200	25.4 × 40	0.15	2.30	EKMQ161VSN122MQ40S		470	30 × 25	0.15	1.40	EKMQ251VSN471MR25S	
	1,200	30 × 30	0.15	2.30	EKMQ161VSN122MR30S		560	22 × 45	0.15	1.50	EKMQ251VSN561MP45S	
	1,200	35 × 25	0.15	2.30	EKMQ161VSN122MA25S	560	25.4 × 35	0.15	1.50	EKMQ251VSN561MQ35S		
	1,500	25.4 × 45	0.15	2.50	EKMQ161VSN152MQ45S	560	30 × 25	0.15	1.50	EKMQ251VSN561MR25S		
	1,500	30 × 35	0.15	2.50	EKMQ161VSN152MR35S	680	22 × 50	0.15	1.70	EKMQ251VSN681MP50S		
	1,500	35 × 30	0.15	2.50	EKMQ161VSN152MA30S	680	25.4 × 40	0.15	1.70	EKMQ251VSN681MQ40S		
	1,800	25.4 × 50	0.15	2.70	EKMQ161VSN182MQ50S	680	30 × 30	0.15	1.70	EKMQ251VSN681MR30S		

◆ 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.
250	680	35 × 25	0.15	1.70	EKMQ251VSN681MA25S	400	270	25.4 × 40	0.15	1.22	EKMQ401VSN271MQ40S
	820	25.4 × 45	0.15	2.00	EKMQ251VSN821MQ45S		270	30 × 30	0.15	1.22	EKMQ401VSN271MR30S
	820	30 × 35	0.15	2.00	EKMQ251VSN821MR35S		270	35 × 25	0.15	1.22	EKMQ401VSN271MA25S
	820	35 × 30	0.15	2.00	EKMQ251VSN821MA30S		330	25.4 × 45	0.15	1.44	EKMQ401VSN331MQ45S
	1,000	30 × 40	0.15	2.20	EKMQ251VSN102MR40S		330	30 × 35	0.15	1.44	EKMQ401VSN331MR35S
	1,000	35 × 30	0.15	2.20	EKMQ251VSN102MA30S		330	35 × 30	0.15	1.44	EKMQ401VSN331MA30S
	1,200	30 × 45	0.15	2.30	EKMQ251VSN122MR45S		390	25.4 × 50	0.15	1.55	EKMQ401VSN391MQ50S
	1,200	35 × 35	0.15	2.30	EKMQ251VSN122MA35S		390	30 × 40	0.15	1.55	EKMQ401VSN391MR40S
	1,500	35 × 45	0.15	2.50	EKMQ251VSN152MA45S		390	35 × 30	0.15	1.55	EKMQ401VSN391MA30S
	1,800	35 × 50	0.15	2.70	EKMQ251VSN182MA50S		470	30 × 45	0.15	1.68	EKMQ401VSN471MR45S
315	150	22 × 25	0.15	0.82	EKMQ3B1VSN151MP25S	470	35 × 35	0.15	1.68	EKMQ401VSN471MA35S	
	180	22 × 30	0.15	0.90	EKMQ3B1VSN181MP30S	560	30 × 50	0.15	1.90	EKMQ401VSN561MR50S	
	220	22 × 30	0.15	1.00	EKMQ3B1VSN221MP30S	560	35 × 40	0.15	1.90	EKMQ401VSN561MA40S	
	220	25.4 × 25	0.15	1.00	EKMQ3B1VSN221MQ25S	680	35 × 45	0.15	2.12	EKMQ401VSN681MA45S	
	270	22 × 35	0.15	1.10	EKMQ3B1VSN271MP35S	82	22 × 25	0.20	0.64	EKMQ421VSN820MP25S	
	270	25.4 × 30	0.15	1.10	EKMQ3B1VSN271MQ30S	100	22 × 25	0.20	0.66	EKMQ421VSN101MP25S	
	330	22 × 45	0.15	1.20	EKMQ3B1VSN331MP45S	100	25.4 × 25	0.20	0.66	EKMQ421VSN101MQ25S	
	330	25.4 × 35	0.15	1.20	EKMQ3B1VSN331MQ35S	120	22 × 30	0.20	0.81	EKMQ421VSN121MP30S	
	330	30 × 25	0.15	1.20	EKMQ3B1VSN331MR25S	120	25.4 × 25	0.20	0.81	EKMQ421VSN121MQ25S	
	390	22 × 45	0.15	1.30	EKMQ3B1VSN391MP45S	150	22 × 35	0.20	0.84	EKMQ421VSN151MP35S	
	390	25.4 × 40	0.15	1.30	EKMQ3B1VSN391MQ40S	150	25.4 × 30	0.20	0.84	EKMQ421VSN151MQ30S	
	390	30 × 30	0.15	1.30	EKMQ3B1VSN391MR30S	150	30 × 25	0.20	0.84	EKMQ421VSN151MR25S	
	390	35 × 25	0.15	1.30	EKMQ3B1VSN391MA25S	180	22 × 40	0.20	0.91	EKMQ421VSN181MP40S	
	470	25.4 × 45	0.15	1.40	EKMQ3B1VSN471MQ45S	180	25.4 × 30	0.20	0.91	EKMQ421VSN181MQ30S	
	470	30 × 35	0.15	1.40	EKMQ3B1VSN471MR35S	180	30 × 25	0.20	0.91	EKMQ421VSN181MR25S	
	470	35 × 25	0.15	1.40	EKMQ3B1VSN471MA25S	220	22 × 45	0.20	1.05	EKMQ421VSN221MP45S	
	560	25.4 × 50	0.15	1.50	EKMQ3B1VSN561MQ50S	220	25.4 × 35	0.20	1.05	EKMQ421VSN221MQ35S	
	560	30 × 40	0.15	1.50	EKMQ3B1VSN561MR40S	220	30 × 30	0.20	1.05	EKMQ421VSN221MR30S	
	560	35 × 30	0.15	1.50	EKMQ3B1VSN561MA30S	220	35 × 25	0.20	1.05	EKMQ421VSN221MA25S	
	680	30 × 45	0.15	1.70	EKMQ3B1VSN681MR45S	270	25.4 × 40	0.20	1.25	EKMQ421VSN271MQ40S	
680	35 × 35	0.15	1.70	EKMQ3B1VSN681MA35S	270	30 × 30	0.20	1.25	EKMQ421VSN271MR30S		
820	30 × 50	0.15	2.00	EKMQ3B1VSN821MR50S	270	35 × 25	0.20	1.25	EKMQ421VSN271MA25S		
820	35 × 40	0.15	2.00	EKMQ3B1VSN821MA40S	330	25.4 × 50	0.20	1.42	EKMQ421VSN331MQ50S		
1,000	35 × 45	0.15	2.30	EKMQ3B1VSN102MA45S	330	30 × 35	0.20	1.42	EKMQ421VSN331MR35S		
350	120	22 × 25	0.15	0.75	EKMQ351VSN121MP25S	330	35 × 30	0.20	1.42	EKMQ421VSN331MA30S	
	150	22 × 30	0.15	0.82	EKMQ351VSN151MP30S	390	30 × 40	0.20	1.61	EKMQ421VSN391MR40S	
	180	22 × 30	0.15	0.90	EKMQ351VSN181MP30S	390	35 × 35	0.20	1.61	EKMQ421VSN391MA35S	
	180	25.4 × 25	0.15	0.90	EKMQ351VSN181MQ25S	470	30 × 45	0.20	1.86	EKMQ421VSN471MR45S	
	220	22 × 35	0.15	1.00	EKMQ351VSN221MP35S	470	35 × 40	0.20	1.86	EKMQ421VSN471MA40S	
	220	25.4 × 30	0.15	1.00	EKMQ351VSN221MQ30S	560	35 × 45	0.20	2.10	EKMQ421VSN561MA45S	
	270	22 × 40	0.15	1.10	EKMQ351VSN271MP40S	680	35 × 50	0.20	2.20	EKMQ421VSN681MA50S	
	270	25.4 × 30	0.15	1.10	EKMQ351VSN271MQ30S	68	22 × 25	0.20	0.50	EKMQ451VSN680MP25S	
	270	30 × 25	0.15	1.10	EKMQ351VSN271MR25S	82	22 × 30	0.20	0.56	EKMQ451VSN820MP30S	
	330	22 × 45	0.15	1.20	EKMQ351VSN331MP45S	100	22 × 30	0.20	0.64	EKMQ451VSN101MP30S	
	330	25.4 × 40	0.15	1.20	EKMQ351VSN331MQ40S	100	25.4 × 25	0.20	0.64	EKMQ451VSN101MQ25S	
	330	30 × 30	0.15	1.20	EKMQ351VSN331MR30S	120	22 × 35	0.20	0.72	EKMQ451VSN121MP35S	
	390	25.4 × 45	0.15	1.30	EKMQ351VSN391MQ45S	120	25.4 × 30	0.20	0.72	EKMQ451VSN121MQ30S	
	390	30 × 35	0.15	1.30	EKMQ351VSN391MR35S	150	22 × 40	0.20	0.79	EKMQ451VSN151MP40S	
	470	25.4 × 50	0.15	1.40	EKMQ351VSN471MQ50S	150	25.4 × 30	0.20	0.79	EKMQ451VSN151MQ30S	
	470	30 × 35	0.15	1.40	EKMQ351VSN471MR35S	150	30 × 25	0.20	0.79	EKMQ451VSN151MR25S	
	470	35 × 30	0.15	1.40	EKMQ351VSN471MA30S	180	22 × 45	0.20	0.87	EKMQ451VSN181MP45S	
	560	30 × 45	0.15	1.50	EKMQ351VSN561MR45S	180	25.4 × 40	0.20	0.87	EKMQ451VSN181MQ40S	
	560	35 × 35	0.15	1.50	EKMQ351VSN561MA35S	180	30 × 30	0.20	0.87	EKMQ451VSN181MR30S	
	680	30 × 50	0.15	1.70	EKMQ351VSN681MR50S	220	25.4 × 45	0.20	1.00	EKMQ451VSN221MQ45S	
680	35 × 40	0.15	1.70	EKMQ351VSN681MA40S	220	30 × 30	0.20	1.00	EKMQ451VSN221MR30S		
820	35 × 45	0.15	1.90	EKMQ351VSN821MA45S	220	35 × 25	0.20	1.00	EKMQ451VSN221MA25S		
400	100	22 × 25	0.15	0.70	EKMQ401VSN101MP25S	270	25.4 × 50	0.20	1.19	EKMQ451VSN271MQ50S	
	120	22 × 30	0.15	0.75	EKMQ401VSN121MP30S	270	30 × 40	0.20	1.19	EKMQ451VSN271MR40S	
	150	22 × 30	0.15	0.88	EKMQ401VSN151MP30S	270	35 × 30	0.20	1.19	EKMQ451VSN271MA30S	
	150	25.4 × 25	0.15	0.88	EKMQ401VSN151MQ25S	330	30 × 45	0.20	1.38	EKMQ451VSN331MQ45S	
	180	22 × 35	0.15	0.95	EKMQ401VSN181MP35S	330	35 × 35	0.20	1.38	EKMQ451VSN331MA35S	
	180	25.4 × 30	0.15	0.95	EKMQ401VSN181MQ30S	390	30 × 50	0.20	1.55	EKMQ451VSN391MR50S	
	220	22 × 45	0.15	1.10	EKMQ401VSN221MP45S	390	35 × 40	0.20	1.55	EKMQ451VSN391MA40S	
	220	25.4 × 35	0.15	1.10	EKMQ401VSN221MQ35S	470	35 × 45	0.20	1.74	EKMQ451VSN471MA45S	
	220	30 × 25	0.15	1.10	EKMQ401VSN221MR25S	560	35 × 50	0.20	1.90	EKMQ451VSN561MA50S	
	270	22 × 50	0.15	1.22	EKMQ401VSN271MP50S						



KMQ Series

◆ RATED RIPPLE CURRENT MULTIPLIERS

● Frequency Multipliers

Frequency(Hz)	50	120	300	1k	10k	50k
35, 50V _{dc}	0.95	1.00	1.03	1.05	1.08	1.08
160 to 250V _{dc}	0.81	1.00	1.17	1.32	1.45	1.50
315 to 450V _{dc}	0.77	1.00	1.16	1.30	1.41	1.43

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.



- Always read "Notes on Use" before using the product in order to enable you to use the product correctly and prevent any faults and accidents from occurring.
- Request the Product Specification on the product of NIPPON CHEMI-CON CORPORATION to refer to it as well as this brochure prior to the order of the products. Some specific notes on use of the ordered product may be described in the specifications.
- The products listed in this catalog are designed and manufactured for general electronics equipment use and are not intended for use in applications that can adversely affect human life; where the malfunction of equipment may cause damage to life or property. In addition, our products are not intended to be used in specific applications that may cause a major social impact. Please consult with us in advance of usage of our products in the following listed applications. ① Aerospace equipment ② Power generation equipment such as thermal power, nuclear power etc. ③ Medical equipment ④ Transport equipment (automobiles, trains, ships, etc.) ⑤ Transportation control equipment ⑥ Disaster prevention / crime prevention equipment ⑦ Highly publicized information processing equipment ⑧ Submarine equipment ⑨ Other applications that are not considered general-purpose applications.
- The circuits described as examples in this catalog and the "delivery specifications" are featured in order to show the operations and usage of our products, however, this fact does not guarantee that the circuits are available to function in your equipment systems. We are not in any case responsible for any failures or damage caused by the use of information contained herein. You should examine our products, of which the characteristics are described in the "delivery specifications" and other documents, and determine whether or not our products suit your requirements according to the specifications of your equipment systems. Therefore, you bear final responsibility regarding the use of our products.
Please make sure that you take appropriate safety measures such as use of redundant design and malfunction prevention measures in order to prevent fatal accidents and/or fires in the event any of our products malfunction.
- We strongly recommend our customers to purchase Nippon Chemi-Con products only through our official sales channels. We assume no responsibility for any defects or damages caused by using products purchased from outside our official sales channel or of counterfeit goods. In addition, we will ask the customer to pay the investigation cost for products purchased outside our official sales channel.
- We reserve the right to discontinue production and delivery of products. We do not guarantee that all the products included in this catalog will be available in the future.
The aforementioned does not apply in the case of individual agreements deviating from the foregoing for customer-specific products
- We continually strive to improve the quality and reliability of our products, but in any case that our product does not meet our published specifications, please stop using it promptly and contact us immediately. As for compensation for non-conforming goods delivered by Chemi-Con, we will limit it only to goods found in non-compliance of our published specifications. This may be accomplished by a no cost replacement of non-conforming individual products, a credit of the piece price paid per each individual non-conforming product, or in other ways deemed necessary.
In addition, we have an established system with enhanced traceability, therefore we will limit the applicable lot items for any potential compensation.

[Part Numbering System](#)

[Part Numbering System \(Appendix\)](#)

[Standardization](#)

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[Recommended Soldering Conditions](#)

[Taping, Lead-preforming and Packaging](#)

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