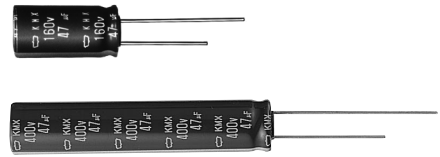


KMX Series

- Slender case sizes are lined up for laying down small places on PC board
- For electronic ballast circuits and other long life required applications
- Endurance with ripple current : 105°C 8000 to 10000 hours
- Non solvent-proof type
- Pb-free design

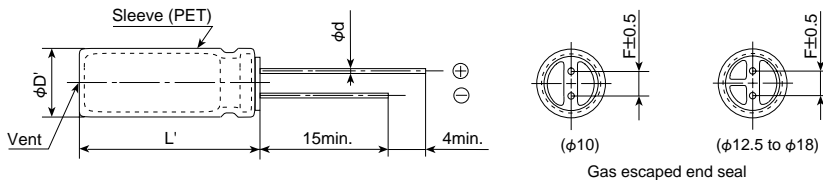


◆ SPECIFICATIONS

Items	Characteristics			
Category	-40 to +105°C (160 to 400V _{dc}) -25 to +105°C (450V _{dc})			
Temperature Range				
Rated Voltage Range	160 to 450V _{dc}			
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)			
Leakage Current	CV	time	After 1 minute	After 5 minutes
	CV ≤ 1000		I = 0.1CV + 40	I = 0.03CV + 15
	CV > 1000		I = 0.04CV + 100	I = 0.02CV + 25
	Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C)			
Dissipation Factor (tanδ)	Rated voltage (V _{dc})	160 to 250V	350 & 400V	450V
	tanδ (Max.)	0.20	0.24	0.24
	(at 20°C, 120Hz)			
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V _{dc})	160 to 250V	350 & 400V	450V
	Z(-25°C)/Z(+20°C)	3	5	6
	Z(-40°C)/Z(+20°C)	6	6	-
(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 10000 hours (8000 hours for φ10) 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	≤ ±20% of the initial value		
	D.F. (tanδ)	≤ 200% of the initial specified value		
	Leakage current	≤ 500% of the initial specified value		

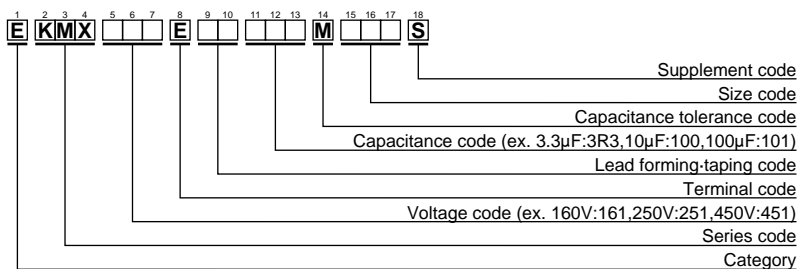
◆ DIMENSIONS [mm]

- Terminal Code : E



φD	10	12.5	16	18
φd	0.6	0.6	0.8	0.8
F	5.0	5.0	7.5	7.5
φD'	φD+0.5max.			
L'	L+1.5max.			

◆ PART NUMBERING SYSTEM



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KMX Series

◆ **STANDARD RATINGS**

WV (Vdc)	Cap (μF)	Case size φD×L(mm)	Impedance (Ωmax/20°C, 100kHz)	Rated ripple current (mA rms/105°C)		Part No.	WV (Vdc)	Cap (μF)	Case size φD×L(mm)	Impedance (Ωmax/20°C, 100kHz)	Rated ripple current (mA rms/105°C)		Part No.	
				120Hz	100kHz						120Hz	100kHz		
160	33	10×20	1.3	210	565	EKMX161E□□330MJ20S	250	220	16×50	0.28	820	1710	EKMX251E□□221ML50S	
	47	12.5×20	0.91	270	725	EKMX161E□□470MK20S		220	18×40	0.35	820	1485	EKMX251E□□221MM40S	
	68	12.5×25	0.63	350	950	EKMX161E□□680MK25S		330	18×50	0.23	1030	2140	EKMX251E□□331MM50S	
	68	16×20	0.47	430	970	EKMX161E□□680ML20S		350	22	12.5×20	2.1	185	270	EKMX351E□□220MK20S
	100	16×25	0.27	475	1280	EKMX161E□□101ML25S	33		16×20	0.91	250	600	EKMX351E□□330ML20S	
	100	18×20	0.31	465	1180	EKMX161E□□101MM20S	47		10×50	1.2	270	705	EKMX351E□□470MJ50S	
	150	10×50	0.77	545	1020	EKMX161E□□151MJ50S	47		16×25	0.73	325	700	EKMX351E□□331MM25S	
	150	16×25	0.27	580	1300	EKMX161E□□151ML25S	47		18×20	0.75	350	750	EKMX351E□□470MM20S	
	220	12.5×45	0.52	740	1200	EKMX161E□□221MK45S	68		12.5×40	1.1	335	895	EKMX351E□□680MK40S	
	220	16×31.5	0.22	750	1300	EKMX161E□□221MLN3S	68		16×31.5	0.49	420	1100	EKMX351E□□680MLN3S	
	220	18×25	0.23	725	1300	EKMX161E□□221MM25S	68		18×25	0.53	400	875	EKMX351E□□680MM25S	
	330	16×40	0.35	990	1540	EKMX161E□□331ML40S	100		12.5×55	0.71	435	1050	EKMX351E□□101MK55S	
	330	18×31.5	0.22	960	1700	EKMX161E□□331MMN3S	100		18×31.5	0.40	530	1170	EKMX351E□□101MMN3S	
	470	16×55	0.25	1220	1870	EKMX161E□□471ML55S	150		16×50	0.51	690	1400	EKMX351E□□151ML50S	
	560	16×60	0.23	1350	2140	EKMX161E□□561ML60S	220		18×55	0.32	840	1610	EKMX351E□□221MM55S	
	680	18×55	0.20	1480	2330	EKMX161E□□681MM55S	400	10	10×20	2.9	110	180	EKMX401E□□100MJ20S	
200	22	10×20	1.5	165	440	EKMX201E□□220MJ20S		22	12.5×25	1.3	200	300	EKMX401E□□220MK25S	
	33	12.5×20	0.91	230	590	EKMX201E□□330MK20S		22	16×20	0.91	200	600	EKMX401E□□220ML20S	
	47	12.5×20	0.91	270	780	EKMX201E□□470MK20S		33	10×40	1.7	215	640	EKMX401E□□330MJ40S	
	68	12.5×25	0.63	350	950	EKMX201E□□680MK25S		33	16×20	0.91	250	600	EKMX401E□□330ML20S	
	68	16×20	0.47	430	970	EKMX201E□□680ML20S		47	12.5×40	1.1	280	775	EKMX401E□□470MK40S	
	100	10×50	0.73	430	930	EKMX201E□□101MJ50S		47	16×25	0.73	325	700	EKMX401E□□470ML25S	
	100	16×25	0.27	425	1280	EKMX201E□□101ML25S		47	18×20	0.75	350	750	EKMX401E□□470MM20S	
	100	18×20	0.31	465	1180	EKMX201E□□101MM20S		68	12.5×50	0.81	335	895	EKMX401E□□680MK50S	
	150	12.5×40	0.56	615	1200	EKMX201E□□151MK40S		68	16×31.5	0.49	420	1100	EKMX401E□□680MLN3S	
	150	16×25	0.27	580	1300	EKMX201E□□151ML25S		68	18×25	0.53	400	875	EKMX401E□□680MM25S	
	220	12.5×55	0.39	790	1420	EKMX201E□□221MK55S		100	16×40	0.63	540	1210	EKMX401E□□101ML40S	
	220	18×31.5	0.22	780	1700	EKMX201E□□221MMN3S		100	18×35.5	0.34	545	1250	EKMX401E□□101MMP1S	
	330	16×50	0.28	1020	1870	EKMX201E□□331ML50S		150	16×60	0.41	695	1490	EKMX401E□□151ML60S	
	470	18×50	0.23	1230	2180	EKMX201E□□471MM50S		450	3.3	10×20	6.5	60	150	EKMX451E□□3R3MJ20S
	560	18×60	0.18	1330	2390	EKMX201E□□561MM60S			4.7	12.5×20	3.6	80	200	EKMX451E□□4R7MK20S
	250	10	10×20	3.5	110	300	EKMX251E□□100MJ20S		10	12.5×25	2.5	125	315	EKMX451E□□100MK25S
22		12.5×20	2.3	185	480	EKMX251E□□220MK20S	22		10×45	2.3	185	520	EKMX451E□□220MJ45S	
33		12.5×25	1.7	250	630	EKMX251E□□330MK25S	22		16×25	1.7	210	570	EKMX451E□□220ML25S	
47		12.5×25	1.7	295	630	EKMX251E□□470MK25S	22		18×20	2.1	200	550	EKMX451E□□220MM20S	
47		16×20	1.1	300	750	EKMX251E□□470ML20S	33		12.5×40	1.3	235	710	EKMX451E□□330MK40S	
68		10×50	0.73	340	840	EKMX251E□□680MJ50S	33		16×31.5	1.1	275	620	EKMX451E□□330MLN3S	
68		16×25	0.78	390	1000	EKMX251E□□680ML25S	33		18×25	1.1	280	590	EKMX451E□□330MM25S	
68		18×20	0.90	385	900	EKMX251E□□680MM20S	47		12.5×50	0.95	300	845	EKMX451E□□470MK50S	
100		12.5×40	0.56	500	1200	EKMX251E□□101MK40S	47		18×31.5	0.93	340	900	EKMX451E□□470MMN3S	
100		16×31.5	0.63	520	1400	EKMX251E□□101MLN3S	68		16×40	0.71	445	985	EKMX451E□□680ML40S	
100		18×25	0.63	500	1345	EKMX251E□□101MM25S	68		18×35.5	0.71	420	980	EKMX451E□□680MMP1S	
150		12.5×55	0.39	650	1420	EKMX251E□□151MK55S	100		16×60	0.45	570	1300	EKMX451E□□101ML60S	
150		18×31.5	0.42	640	1450	EKMX251E□□151MMN3S	150		18×60	0.41	690	1510	EKMX451E□□151MM60S	

□□ : Lead forming / Taping code

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