

### KM SERIES ■ STANDARD 105°C TYPE

#### KEY FEATURES

- ALUMINUM ELECTROLYTIC CAPACITOR • THT type
- Endurance: 105°C ■ 2 000 hours
- Optimized for cost effective applications
- High capacitance range
- Wide voltage range, up to 500V



#### SPECIFICATIONS

Items		Performance Characteristics								
Operating Temperature Range		-40 ~ +105°C				-25 ~ +105°C				
Rated Voltage Range	V <sub>R</sub>	6.3 ~ 100V DC				160 ~ 500V DC				
Surge Voltage	V <sub>S</sub>	(V <sub>R</sub> ≤ 315V): V <sub>S</sub> = 1.15·V <sub>R</sub>				(V <sub>R</sub> > 315V): V <sub>S</sub> = 1.10·V <sub>R</sub>				
Capacitance Range	C <sub>R</sub>	1 ~ 22000μF				1 ~ 560μF				
Cap. Tolerance	ΔC	±20% (120Hz ▪ 20°C)								
Leakage Current (20°C ▪ V <sub>R</sub> applied)	I <sub>LEAK</sub>	≤ 0.01·C <sub>R</sub> ·V <sub>R</sub> or 3μA, whichever is greater ▪ After 1 minute				≤ 0.03·C <sub>R</sub> ·V <sub>R</sub> or 3μA, whichever is greater ▪ After 1 minute				
		[ I <sub>LEAK</sub> (μA) ; C <sub>R</sub> (μF) ; V <sub>R</sub> (V) ]								
Dissipation Factor % (20°C ▪ 120Hz)	tanδ	V <sub>R</sub> (V DC)	6.3	10	16	25	35	50	63	100
		tanδ (%)	22	17	16	14	12	10	9	8
		V <sub>R</sub> (V DC)	160	200	250	350	400	420	450	500
		tanδ (%)	12	12	12	15	15	17	17	22
		For C <sub>R</sub> > 1000μF, add 2% per every multiple 1000μF of rated capacitance value								
Low Temperature Characteristics at 120Hz	Z ratio max.	V <sub>R</sub> (V DC)	6.3	10	16	25	35	50	63	100
		Z-25°C/Z+20°C	4	3	2	2	2	2	2	2
		Z-40°C/Z+20°C	8	6	4	3	3	3	3	3
		V <sub>R</sub> (V DC)	160	200	250	350	400	420	450	500
		Z-25°C/Z+20°C	2	2	3	5	6	6	6	6
		For capacitance > 1000μF								
		Z-25°C/Z+20°C	Add 0.5 for every multiple 1000μF of rated capacitance value							
		Z-40°C/Z+20°C	Add 1 for every multiple 1000μF of rated capacitance value							
Lifetime Test										
Endurance 105°C (V <sub>R</sub> & I <sub>R</sub> applied)	Test	2 000 hours								
	ΔC/C <sub>R</sub>	≤ ±20% of initial measured value								
	tanδ	≤ 200% of initial specified value								
	I <sub>Leak</sub>	≤ the initial specified value								
Shelf Life 105°C (V <sub>R</sub> = 0)	Test	1 000 hours								
	ΔC/C <sub>R</sub>	≤ ±20% of initial measured value								
	tanδ	≤ 200% of initial specified value								
	I <sub>Leak</sub>	≤ the initial specified value								
	Before measurement: Restore capacitor to 20°C, apply V <sub>R</sub> for 30 min according JIS-C-5101-4									

## STANDARD RATINGS

Part number shows bulk version with straight leads

V <sub>R</sub> (V)	C <sub>R</sub> (μF)	ø D (mm)	L (mm)	I <sub>R</sub> • Max. Ripple Current +105°C • 120Hz (mA rms)	CapXon Part Number
6.3	33	5	11	54	KM330M6R3C110A
	47	5	11	65	KM470M6R3C110A
	68	5	11	75	KM680M6R3C110A
	100	5	11	96	KM101M6R3C110A
	120	5	11	110	KM121M6R3C110A
	150	5	11	120	KM151M6R3C110A
	150	6.3	11	130	KM151M6R3E110A
	180	6.3	11	140	KM181M6R3E110A
	220	6.3	11	160	KM221M6R3E110A
	330	6.3	11	195	KM331M6R3E110A
	470	6.3	11	220	KM471M6R3E110A
	470	8	11.5	270	KM471M6R3F115A
	560	8	11.5	310	KM561M6R3F115A
	680	8	11.5	360	KM681M6R3F115A
	820	8	11.5	390	KM821M6R3F115A
	1000	10	12.5	430	KM102M6R3G125A
	1200	10	12.5	550	KM122M6R3G125A
	1500	10	16	625	KM152M6R3G160A
	1800	10	16	710	KM182M6R3G160A
	2200	10	16	750	KM222M6R3G160A
	2200	10	20	775	KM222M6R3G200A
	2700	10	20	850	KM272M6R3G200A
	3300	13	20	960	KM332M6R3I200A
	3900	13	20	1000	KM392M6R3I200A
	4700	13	20	1150	KM472M6R3I200A
	5600	13	25	1300	KM562M6R3I250A
	6800	13	25	1480	KM682M6R3I250A
	8200	16	25	1520	KM822M6R3J250A
	10000	16	25	1680	KM103M6R3J250A
	12000	16	31.5	1750	KM123M6R3J315A
	15000	16	35.5	2075	KM153M6R3J355A
	18000	18	31.5	2150	KM183M6R3K315A
	22000	18	40	2300	KM223M6R3K400A
10	22	5	11	45	KM220M010C110A
	33	5	11	60	KM330M010C110A
	47	5	11	70	KM470M010C110A
	68	5	11	80	KM680M010C110A
	100	5	11	105	KM101M010C110A
	120	5	11	110	KM121M010C110A
	120	6.3	11	120	KM121M010E110A
	150	5	11	120	KM151M010C110A
	150	6.3	11	145	KM151M010E110A
	180	6.3	11	160	KM181M010E110A
	220	6.3	11	175	KM221M010E110A

See "PACKAGING INFORMATION" to taped or formed products.

## STANDARD RATINGS

Part number shows bulk version with straight leads

V <sub>R</sub> (V)	C <sub>R</sub> (μF)	ø D (mm)	L (mm)	I <sub>R</sub> - Max. Ripple Current +105°C - 120Hz (mA rms)	CapXon Part Number
10	330	6.3	11	205	KM331M010E110A
	330	8	11.5	255	KM331M010F115A
	470	6.3	11	235	KM471M010E110A
	470	8	11.5	290	KM471M010F115A
	560	8	11.5	330	KM561M010F115A
	560	10	12.5	340	KM561M010G125A
	680	8	11.5	365	KM681M010F115A
	680	8	16	410	KM681M010F160A
	820	10	12.5	480	KM821M010G125A
	1000	10	12.5	520	KM102M010G125A
	1200	10	16	630	KM122M010G160A
	1500	8	20	715	KM152M010F200A
	1500	10	16	770	KM152M010G160A
	1800	10	20	820	KM182M010G200A
	2200	10	20	860	KM222M010G200A
	2700	10	25	880	KM272M010G250A
	2700	13	20	920	KM272M010I200A
	3300	13	20	1100	KM332M010I200A
	3900	13	20	1280	KM392M010I200A
	4700	13	25	1350	KM472M010I250A
	5600	16	25	1490	KM562M010J250A
	6800	16	25	1670	KM682M010J250A
	8200	16	31.5	1840	KM822M010J315A
	10000	16	35.5	1900	KM103M010J355A
	12000	16	35.5	2050	KM123M010J355A
	15000	18	35.5	2180	KM153M010K355A
	18000	18	35.5	2205	KM183M010K355A
16	10	5	11	35	KM100M016C110A
	22	5	11	54	KM220M016C110A
	33	5	11	64	KM330M016C110A
	47	5	11	100	KM470M016C110A
	68	5	11	105	KM680M016C110A
	100	5	11	115	KM101M016C110A
	100	6.3	11	130	KM101M016E110A
	120	6.3	11	155	KM121M016E110A
	150	6.3	11	170	KM151M016E110A
	180	6.3	11	190	KM181M016E110A
	220	6.3	11	215	KM221M016E110A
	330	6.3	11	225	KM331M016E110A
	330	8	11.5	265	KM331M016F115A
	470	8	11.5	370	KM471M016F115A
	470	8	16	400	KM471M016F160A
	560	10	12.5	410	KM561M016G125A
	680	8	16	470	KM681M016F160A

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## STANDARD RATINGS

Part number shows bulk version with straight leads

V <sub>R</sub> (V)	C <sub>R</sub> (μF)	ø D (mm)	L (mm)	I <sub>R</sub> - Max. Ripple Current +105°C - 120Hz (mA rms)	CapXon Part Number
16	680	10	12.5	480	KM681M016G125A
	820	10	16	550	KM821M016G160A
	1000	10	12.5	540	KM102M016G125A
	1000	10	16	600	KM102M016G160A
	1200	10	20	700	KM122M016G200A
	1500	10	20	820	KM152M016G200A
	1800	13	20	920	KM182M016I200A
	2200	13	20	1000	KM222M016I200A
	2700	13	20	1080	KM272M016I200A
	3300	13	25	1200	KM332M016I250A
	3900	16	25	1490	KM392M016J250A
	4700	16	25	1600	KM472M016J250A
	5600	16	31.5	1720	KM562M016J315A
	6800	16	31.5	1900	KM682M016J315A
	8200	16	35.5	2020	KM822M016J355A
	10000	18	35.5	2060	KM103M016K355A
	12000	18	35.5	2150	KM123M016K355A
25	4.7	5	11	26	KM4R7M025C110A
	6.8	5	11	32	KM6R8M025C110A
	10	5	11	38	KM100M025C110A
	22	5	11	58	KM220M025C110A
	33	5	11	69	KM330M025C110A
	47	5	11	105	KM470M025C110A
	68	6.3	11	120	KM680M025E110A
	100	6.3	11	145	KM101M025E110A
	120	6.3	11	175	KM121M025E110A
	150	6.3	11	180	KM151M025E110A
	150	8	11.5	200	KM151M025F115A
	180	8	11.5	210	KM181M025F115A
	220	8	11.5	235	KM221M025F115A
	330	8	11.5	310	KM331M025F115A
	330	10	12.5	335	KM331M025G125A
	470	8	11.5	410	KM471M025F115A
	470	10	12.5	440	KM471M025G125A
	560	10	16	460	KM561M025G160A
	680	10	16	520	KM681M025G160A
	820	10	20	640	KM821M025G200A
	1000	10	20	710	KM102M025G200A
	1200	13	20	810	KM122M025I200A
	1500	13	20	900	KM152M025I200A
	1800	13	25	1050	KM182M025I250A
	2200	13	25	1200	KM222M025I250A
	2700	16	25	1320	KM272M025J250A
	3300	16	25	1460	KM332M025J250A

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V <sub>R</sub> (V)	C <sub>R</sub> (μF)	ø D (mm)	L (mm)	I <sub>R</sub> = Max. Ripple Current +105°C - 120Hz (mA rms)	CapXon Part Number
25	3900	16	31.5	1670	KM392M025J315A
	4700	16	35.5	1780	KM472M025J355A
	5600	16	35.5	1890	KM562M025J355A
	6800	18	35.5	2050	KM682M025K355A
	8200	18	35.5	2090	KM822M025K355A
35	4.7	5	11	28	KM4R7M035C110A
	6.8	5	11	36	KM6R8M035C110A
	10	5	11	46	KM100M035C110A
	22	5	11	61	KM220M035C110A
	33	5	11	75	KM330M035C110A
	47	5	11	110	KM470M035C110A
	68	6.3	11	140	KM680M035E110A
	100	6.3	11	160	KM101M035E110A
	100	8	11.5	175	KM101M035F115A
	120	8	11.5	185	KM121M035F115A
	150	8	11.5	215	KM151M035F115A
	180	8	11.5	225	KM181M035F115A
	180	10	12.5	265	KM181M035G125A
	220	8	11.5	255	KM221M035F115A
	220	10	12.5	300	KM221M035G125A
	330	10	12.5	400	KM331M035G125A
	470	10	16	520	KM471M035G160A
	560	10	20	540	KM561M035G200A
	680	10	20	560	KM681M035G200A
	680	13	20	650	KM681M035I200A
	820	13	20	760	KM821M035I200A
	1000	13	20	830	KM102M035I200A
	1200	13	20	900	KM122M035I200A
	1200	13	25	930	KM122M035I250A
	1500	13	25	960	KM152M035I250A
	1800	16	25	1150	KM182M035J250A
	2200	16	25	1290	KM222M035J250A
	2200	16	31.5	1350	KM222M035J315A
	2700	16	31.5	1480	KM272M035J315A
	3300	16	35.5	1650	KM332M035J355A
	3900	18	31.5	1820	KM392M035K315A
	4700	18	35.5	1900	KM472M035K355A
	5600	18	35.5	2000	KM562M035K355A
50	1	5	11	13	KM010M050C110A
	2.2	5	11	20	KM2R2M050C110A

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V <sub>R</sub> (V)	C <sub>R</sub> (μF)	ø D (mm)	L (mm)	I <sub>R</sub> - Max. Ripple Current +105°C - 120Hz (mA rms)	CapXon Part Number
50	3.3	5	11	26	KM3R3M050C110A
	4.7	5	11	32	KM4R7M050C110A
	6.8	5	11	40	KM6R8M050C110A
	10	5	11	48	KM100M050C110A
	22	5	11	60	KM220M050C110A
	22	6.3	11	70	KM220M050E110A
	33	5	11	75	KM330M050C110A
	33	6.3	11	90	KM330M050E110A
	47	6.3	11	115	KM470M050E110A
	68	6.3	11	130	KM680M050E110A
	68	8	11.5	155	KM680M050F115A
	100	8	11.5	200	KM101M050F115A
	120	8	16	220	KM121M050F160A
	120	10	12.5	225	KM121M050G125A
	150	10	12.5	245	KM151M050G125A
	180	10	12.5	260	KM181M050G125A
	180	10	16	280	KM181M050G160A
	220	10	12.5	345	KM221M050G125A
	220	10	16	360	KM221M050G160A
	330	10	16	450	KM331M050G160A
	330	10	20	470	KM331M050G200A
	470	10	20	600	KM471M050G200A
	470	13	20	650	KM471M050I200A
	560	13	20	660	KM561M050I200A
	680	13	20	700	KM681M050I200A
	680	13	25	770	KM681M050I250A
	820	13	25	850	KM821M050I250A
	1000	13	25	890	KM102M050I250A
	1000	16	25	1000	KM102M050J250A
	1200	16	25	1150	KM122M050J250A
	1500	16	31.5	1300	KM152M050J315A
	1800	16	35.5	1480	KM182M050J355A
	2200	16	35.5	1530	KM222M050J355A
	2700	18	35.5	1590	KM272M050K355A
	3300	18	35.5	1750	KM332M050K355A
63	1	5	11	13	KM010M063C110A
	2.2	5	11	20	KM2R2M063C110A
	3.3	5	11	28	KM3R3M063C110A
	4.7	5	11	32	KM4R7M063C110A
	6.8	5	11	40	KM6R8M063C110A

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V <sub>R</sub> (V)	C <sub>R</sub> (μF)	ø D (mm)	L (mm)	I <sub>R</sub> = Max. Ripple Current +105°C - 120Hz (mA rms)	CapXon Part Number
63	10	5	11	42	KM100M063C110A
	10	6.3	11	48	KM100M063E110A
	22	6.3	11	82	KM220M063E110A
	33	6.3	11	100	KM330M063E110A
	47	6.3	11	125	KM470M063E110A
	47	8	11.5	140	KM470M063F115A
	68	8	11.5	155	KM680M063F115A
	68	10	12.5	185	KM680M063G125A
	100	10	12.5	230	KM101M063G125A
	120	10	16	255	KM121M063G160A
	150	10	16	270	KM151M063G160A
	180	10	16	310	KM181M063G160A
	220	10	16	375	KM221M063G160A
	220	10	20	400	KM221M063G200A
	330	13	20	580	KM331M063I200A
	470	13	20	690	KM471M063I200A
	560	13	25	770	KM561M063I250A
	680	16	25	880	KM681M063J250A
	820	16	25	920	KM821M063J250A
	1000	16	31.5	1185	KM102M063J315A
	1200	16	35.5	1200	KM122M063J355A
	1500	18	31.5	1350	KM152M063K315A
100	1	5	11	15	KM010M100C110A
	2.2	5	11	21	KM2R2M100C110A
	3.3	5	11	30	KM3R3M100C110A
	4.7	5	11	35	KM4R7M100C110A
	6.8	6.3	11	47	KM6R8M100E110A
	10	6.3	11	56	KM100M100E110A
	10	8	11.5	60	KM100M100F115A
	22	6.3	11	75	KM220M100E110A
	22	8	11.5	90	KM220M100F115A
	33	8	11.5	140	KM330M100F115A
	33	10	12.5	155	KM330M100G125A
	47	8	16	165	KM470M100F160A
	47	10	12.5	170	KM470M100G125A
	68	10	16	240	KM680M100G160A
	100	10	20	280	KM101M100G200A
	120	10	20	295	KM121M100G200A
	150	13	20	340	KM151M100I200A
	150	13	25	360	KM151M100I250A

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100	180	13	20	410	KM181M100I200A
	180	13	25	480	KM181M100I250A
	220	13	25	520	KM221M100I250A
	330	16	25	690	KM331M100J250A
	470	16	25	820	KM471M100J250A
	470	16	31.5	860	KM471M100J315A
	560	16	35.5	900	KM561M100J355A
	680	16	35.5	920	KM681M100J355A
	680	18	31.5	950	KM681M100K315A
	820	18	35.5	1020	KM821M100K355A
	1000	18	40	1200	KM102M100K400A
160	1	5	11	17	KM010M160C110A
	1	6.3	11	19	KM010M160E110A
	2.2	6.3	11	25	KM2R2M160E110A
	3.3	6.3	11	32	KM3R3M160E110A
	4.7	6.3	11	38	KM4R7M160E110A
	4.7	8	11.5	42	KM4R7M160F115A
	6.8	8	11.5	56	KM6R8M160F115A
	10	8	11.5	63	KM100M160F115A
	10	10	12.5	75	KM100M160G125A
	22	10	12.5	95	KM220M160G125A
	22	10	16	105	KM220M160G160A
	22	10	20	120	KM220M160G200A
	33	10	16	155	KM330M160G160A
	33	10	20	170	KM330M160G200A
	47	10	20	180	KM470M160G200A
	47	13	20	210	KM470M160I200A
	68	13	20	260	KM680M160I200A
	68	13	25	280	KM680M160I250A
	100	13	25	310	KM101M160I250A
	100	16	25	330	KM101M160J250A
	120	13	25	320	KM121M160I250A
	120	16	25	350	KM121M160J250A
	150	16	25	470	KM151M160J250A
	180	16	25	550	KM181M160J250A
	220	16	31.5	560	KM221M160J315A
	220	16	35.5	580	KM221M160J355A
	330	18	31.5	660	KM331M160K315A
	330	18	35.5	700	KM331M160K355A
	470	18	35.5	810	KM471M160K355A
	470	18	40	860	KM471M160K400A

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V <sub>R</sub> (V)	C <sub>R</sub> (μF)	ø D (mm)	L (mm)	I <sub>R</sub> = Max. Ripple Current +105°C • 120Hz (mA rms)	CapXon Part Number
200	1	6.3	11	17	KM010M200E110A
	2.2	6.3	11	25	KM2R2M200E110A
	3.3	6.3	11	33	KM3R3M200E110A
	3.3	8	11.5	35	KM3R3M200F115A
	4.7	6.3	11	42	KM4R7M200E110A
	4.7	8	11.5	50	KM4R7M200F115A
	6.8	8	11.5	60	KM6R8M200F115A
	6.8	10	12.5	63	KM6R8M200G125A
	10	8	11.5	78	KM100M200F115A
	10	10	12.5	85	KM100M200G125A
	22	10	16	125	KM220M200G160A
	22	10	20	130	KM220M200G200A
	33	10	16	160	KM330M200G160A
	33	10	20	180	KM330M200G200A
	33	13	20	190	KM330M200I200A
	47	13	20	220	KM470M200I200A
	68	13	20	270	KM680M200I200A
	68	13	25	300	KM680M200I250A
	100	13	25	320	KM101M200I250A
	100	16	25	345	KM101M200J250A
	120	16	25	360	KM121M200J250A
	120	16	31.5	390	KM121M200J315A
	150	16	25	440	KM151M200J250A
	150	16	31.5	480	KM151M200J315A
	180	16	31.5	550	KM181M200J315A
	180	16	35.5	560	KM181M200J355A
	220	16	35.5	670	KM221M200J355A
	220	18	31.5	690	KM221M200K315A
	330	18	35.5	750	KM331M200K355A
	330	18	40	810	KM331M200K400A
	470	18	40	840	KM471M200K400A
	470	22	40	925	KM471M200M400A
	560	18	50	940	KM561M200K500A
250	1	6.3	11	16	KM010M250E110A
	2.2	6.3	11	20	KM2R2M250E110A
	2.2	8	11.5	25	KM2R2M250F115A
	3.3	8	11.5	33	KM3R3M250F115A
	4.7	8	11.5	46	KM4R7M250F115A
	4.7	10	12.5	50	KM4R7M250G125A
	6.8	8	11.5	60	KM6R8M250F115A
	6.8	10	12.5	70	KM6R8M250G125A
	10	8	11.5	68	KM100M250F115A

See "PACKAGING INFORMATION" to taped or formed products.

## STANDARD RATINGS

Part number shows bulk version with straight leads

V <sub>R</sub> (V)	C <sub>R</sub> (μF)	ø D (mm)	L (mm)	I <sub>R</sub> = Max. Ripple Current +105°C - 120Hz (mA rms)	CapXon Part Number
250	10	10	12.5	80	KM100M250G125A
	22	10	16	110	KM220M250G160A
	22	10	20	125	KM220M250G200A
	22	13	20	150	KM220M250I200A
	33	13	20	190	KM330M250I200A
	47	13	20	230	KM470M250I200A
	47	13	25	240	KM470M250I250A
	56	13	20	255	KM560M250I200A
	56	13	25	280	KM560M250I250A
	68	13	25	310	KM680M250I250A
	68	16	25	355	KM680M250J250A
	82	16	25	370	KM820M250J250A
	100	16	25	375	KM101M250J250A
	100	16	31.5	395	KM101M250J315A
	120	16	31.5	420	KM121M250J315A
	120	16	35.5	430	KM121M250J355A
	150	16	35.5	460	KM151M250J355A
	150	18	31.5	460	KM151M250K315A
	180	18	31.5	465	KM181M250K315A
	180	18	35.5	470	KM181M250K355A
	220	18	35.5	650	KM221M250K355A
	220	18	40	700	KM221M250K400A
	330	18	45	720	KM331M250K450A
	330	22	40	780	KM331M250M400A
350	1	6.3	11	16	KM010M350E110A
	2.2	8	11.5	31	KM2R2M350F115A
	3.3	8	11.5	34	KM3R3M350F115A
	3.3	10	12.5	38	KM3R3M350G125A
	4.7	8	11.5	47	KM4R7M350F115A
	4.7	10	12.5	52	KM4R7M350G125A
	6.8	10	12.5	79	KM6R8M350G125A
	10	10	16	87	KM100M350G160A
	10	10	20	92	KM100M350G200A
	22	13	20	160	KM220M350I200A
	22	13	25	170	KM220M350I250A
	33	13	20	180	KM330M350I200A
	33	13	25	200	KM330M350I250A
	47	16	25	245	KM470M350J250A
	47	16	31.5	260	KM470M350J315A
	56	16	25	330	KM560M350J250A
	68	16	31.5	370	KM680M350J315A
	82	16	35.5	385	KM820M350J355A
	100	18	31.5	390	KM101M350K315A

See "PACKAGING INFORMATION" to taped or formed products.

## STANDARD RATINGS

Part number shows bulk version with straight leads

V <sub>R</sub> (V)	C <sub>R</sub> (μF)	ø D (mm)	L (mm)	I <sub>R</sub> = Max. Ripple Current +105°C - 120Hz (mA rms)	CapXon Part Number
350	120	16	40	400	KM121M350J400A
	120	18	35.5	400	KM121M350K355A
	150	18	40	420	KM151M350K400A
	180	18	40	430	KM181M350K400A
	220	22	40	500	KM221M350M400A
400	1	6.3	11	17	KM010M400E110A
	2.2	6.3	15	34	KM2R2M400E150A
	2.2	8	11.5	35	KM2R2M400F115A
	2.2	10	12.5	40	KM2R2M400G125A
	3.3	6.3	15	35	KM3R3M400E150A
	3.3	8	11.5	36	KM3R3M400F115A
	3.3	8	16	40	KM3R3M400F160A
	3.3	10	12.5	41	KM3R3M400G125A
	4.7	8	11.5	48	KM4R7M400F115A
	4.7	8	16	54	KM4R7M400F160A
	4.7	10	12.5	55	KM4R7M400G125A
	4.7	10	16	65	KM4R7M400G160A
	6.8	8	14	75	KM6R8M400F140A
	6.8	8	15	77	KM6R8M400F150A
	6.8	8	16	80	KM6R8M400F160A
	6.8	10	12.5	82	KM6R8M400G125A
	6.8	10	16	90	KM6R8M400G160A
	10	10	14	104	KM100M400G140A
	10	10	15	107	KM100M400G150A
	10	10	16	110	KM100M400G160A
	10	10	20	125	KM100M400G200A
	22	10	25	162	KM220M400G250A
	22	13	20	170	KM220M400I200A
	22	13	25	190	KM220M400I250A
	33	13	20	235	KM330M400I200A
	33	13	25	260	KM330M400I250A
	33	16	25	290	KM330M400J250A
	47	16	25	300	KM470M400J250A
	47	16	31.5	360	KM470M400J315A
	47	18	25	320	KM470M400K250A
	56	16	25	360	KM560M400J250A
	56	16	31.5	400	KM560M400J315A
	68	16	25	410	KM680M400J250A
	68	16	31.5	450	KM680M400J315A
	68	16	35.5	480	KM680M400J355A
	68	18	25	440	KM680M400K250A
	68	18	31.5	500	KM680M400K315A
	82	16	31.5	480	KM820M400J315A

See "PACKAGING INFORMATION" to taped or formed products.

## STANDARD RATINGS

Part number shows bulk version with straight leads

V <sub>R</sub> (V)	C <sub>R</sub> (μF)	ø D (mm)	L (mm)	I <sub>R</sub> = Max. Ripple Current +105°C - 120Hz (mA rms)	CapXon Part Number
400	82	18	25	470	KM820M400K250A
	82	18	31.5	520	KM820M400K315A
	100	16	35.5	520	KM101M400J355A
	100	18	31.5	530	KM101M400K315A
	100	18	35.5	550	KM101M400K355A
	120	18	31.5	550	KM121M400K315A
	120	18	35.5	580	KM121M400K355A
	150	18	35.5	610	KM151M400K355A
	150	18	40	650	KM151M400K400A
	150	22	30	640	KM151M400M300A
	180	18	45	700	KM181M400K450A
420	1	8	11.5	20	KM010M420F115A
	2.2	8	11.5	35	KM2R2M420F115A
	3.3	10	12.5	42	KM3R3M420G125A
	4.7	10	12.5	58	KM4R7M420G125A
	4.7	10	16	61	KM4R7M420G160A
	6.8	10	16	84	KM6R8M420G160A
	10	10	20	112	KM100M420G200A
	22	13	25	185	KM220M420I250A
	33	16	25	230	KM330M420J250A
	47	16	25	280	KM470M420J250A
	47	16	31.5	310	KM470M420J315A
	56	16	35.5	390	KM560M420J355A
	68	18	31.5	470	KM680M420K315A
	82	18	31.5	475	KM820M420K315A
	82	18	35.5	500	KM820M420K355A
	100	16	35.5	525	KM101M420J355A
	100	18	31.5	535	KM101M420K315A
	100	18	35.5	555	KM101M420K355A
	120	18	31.5	560	KM121M420K315A
	120	18	35.5	590	KM121M420K355A
	120	18	40	630	KM121M420K400A
	150	18	35.5	615	KM151M420K355A
	150	18	40	660	KM151M420K400A
	180	18	45	680	KM181M420K450A
	180	20	40	685	KM181M420L400A
450	1	8	11.5	20	KM010M450F115A
	2.2	8	11.5	30	KM2R2M450F115A
	2.2	10	12.5	35	KM2R2M450G125A
	3.3	8	11.5	32	KM3R3M450F115A
	3.3	10	12.5	38	KM3R3M450G125A
	3.3	10	16	42	KM3R3M450G160A

See "PACKAGING INFORMATION" to taped or formed products.

## STANDARD RATINGS

Part number shows bulk version with straight leads

V <sub>R</sub> (V)	C <sub>R</sub> (μF)	ø D (mm)	L (mm)	I <sub>R</sub> - Max. Ripple Current +105°C - 120Hz (mA rms)	CapXon Part Number
450	4.7	8	16	44	KM4R7M450F160A
	4.7	10	16	50	KM4R7M450G160A
	4.7	10	12.5	45	KM4R7M450G125A
	6.8	10	12.5	58	KM6R8M450G125A
	6.8	10	16	65	KM6R8M450G160A
	6.8	10	20	72	KM6R8M450G200A
	10	10	16	80	KM100M450G160A
	10	10	20	92	KM100M450G200A
	10	13	20	98	KM100M450I200A
	22	13	20	165	KM220M450I200A
	22	13	25	180	KM220M450I250A
	22	16	25	200	KM220M450J250A
	33	13	25	185	KM330M450I250A
	33	16	25	210	KM330M450J250A
	33	16	31.5	230	KM330M450J315A
	47	16	25	305	KM470M450J250A
	47	16	31.5	340	KM470M450J315A
	47	16	35.5	380	KM470M450J355A
	47	18	25	350	KM470M450K250A
	47	18	31.5	360	KM470M450K315A
	56	16	31.5	370	KM560M450J315A
	56	16	35.5	400	KM560M450J355A
	56	18	25	370	KM560M450K250A
	68	16	31.5	425	KM680M450J315A
	68	16	35.5	450	KM680M450J355A
	68	18	25	410	KM680M450K250A
	68	18	31.5	460	KM680M450K315A
	68	18	35.5	470	KM680M450K355A
	82	18	31.5	465	KM820M450K315A
	82	18	35.5	480	KM820M450K355A
	100	18	31.5	500	KM101M450K315A
	100	18	35.5	525	KM101M450K355A
	100	18	40	560	KM101M450K400A
	120	18	40	580	KM121M450K400A
	120	20	35	580	KM121M450L350A
	120	22	40	650	KM121M450M400A
	150	18	45	690	KM151M450K450A
	150	20	40	695	KM151M450L400A
	150	22	35	695	KM151M450M350A
	150	22	40	720	KM151M450M400A

See "PACKAGING INFORMATION" to taped or formed products.

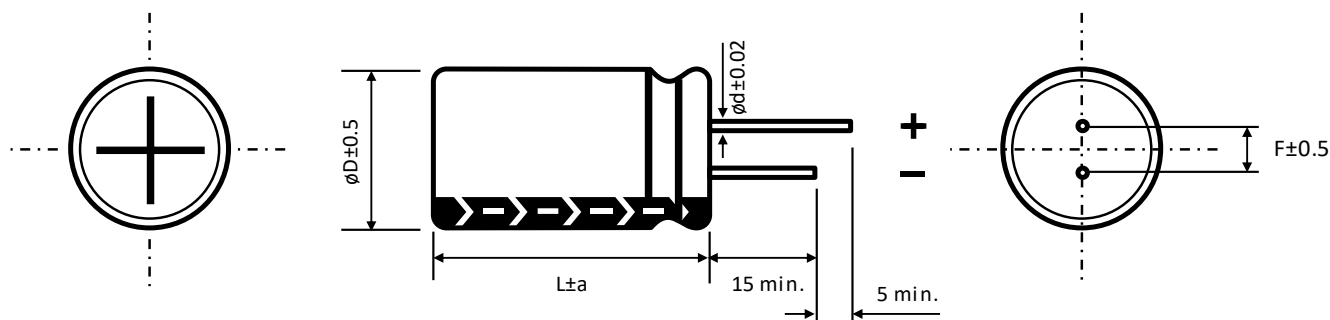
## STANDARD RATINGS

Part number shows bulk version with straight leads

V <sub>R</sub> (V)	C <sub>R</sub> (μF)	ø D (mm)	L (mm)	I <sub>R</sub> - Max. Ripple Current +105°C - 120Hz (mA rms)	CapXon Part Number
500	1	8	11.5	20	KM010M500F115A
	1	8	16	23	KM010M500F160A
	1	10	12.5	24	KM010M500G125A
	2.2	8	16	32	KM2R2M500F160A
	2.2	10	12.5	33	KM2R2M500G125A
	2.2	10	16	36	KM2R2M500G160A
	3.3	10	12.5	38	KM3R3M500G125A
	3.3	10	16	42	KM3R3M500G160A
	3.3	10	20	49	KM3R3M500G200A
	4.7	10	16	50	KM4R7M500G160A
	4.7	10	20	58	KM4R7M500G200A
	6.8	10	16	63	KM6R8M500G160A
	6.8	10	20	70	KM6R8M500G200A
	6.8	13	20	80	KM6R8M500I200A
	10	10	20	90	KM100M500G200A
	10	13	20	98	KM100M500I200A
	10	13	25	115	KM100M500I250A
	22	13	25	160	KM220M500I250A
	22	16	25	180	KM220M500J250A
	33	16	31.5	230	KM330M500J315A
	33	18	25	220	KM330M500K250A
	47	16	35.5	360	KM470M500J355A
	47	18	25	330	KM470M500K250A
	47	18	31.5	360	KM470M500K315A
	56	16	35.5	390	KM560M500J355A
	56	16	40	420	KM560M500J400A
	56	18	31.5	400	KM560M500K315A
	68	16	45	480	KM680M500J450A
	68	18	35.5	460	KM680M500K355A
	68	18	40	490	KM680M500K400A
	82	16	45	490	KM820M500J450A
	82	18	35.5	470	KM820M500K355A
	82	18	40	500	KM820M500K400A
	100	18	40	550	KM101M500K400A
	100	18	45	570	KM101M500K450A
	100	20	40	580	KM101M500L400A
	120	20	45	600	KM121M500L450A
	150	22	45	750	KM151M500M450A

See "PACKAGING INFORMATION" to taped or formed products.

### DIMENSIONS - All dimensions in mm



$\phi D$	5	6.3	8	10	13	16	18	22
F	2	2.5	3.5	5	5	7.5	7.5	10
$\phi d$	0.5		L < 20 0.5	L ≥ 20 0.6	0.6		0.8	

a	$\phi D < 16$	$\phi D = 16$		$\phi D = 18$		$\phi D > 18$
	1.5	L = 25 to 35.5	L < 25 and L ≥ 40	L = 25 to 31.5	L < 25 and L ≥ 35.5	2
		1.5	2	1.5	2	

### MULTIPLIER $K_f$ for RIPPLE CURRENT vs. FREQUENCY

$C_R$ (μF) / Frequency (Hz)	50/60	100/120	400	1k	10k	50k - 100k
$C_R \leq 10$	0.8	1	1.3	1.45	1.65	1.7
$10 < C_R \leq 100$	0.8	1	1.23	1.36	1.48	1.53
$100 < C_R \leq 1000$	0.8	1	1.16	1.25	1.35	1.38
$1000 \leq C_R$	0.8	1	1.11	1.17	1.25	1.28

### PRECAUTIONS, GUIDELINES AND PACKAGING INFORMATION

Unless otherwise agreed in individual specifications, all products are subject to our “General Precautions and Guidelines” as well as our “Packaging Information”. Please refer to the following links in the table.

<a href="#">General Precautions &amp; Guidelines</a>	<a href="#">Packaging Information</a>	<a href="#">3D Models</a>	<a href="#">Reliability Tests</a>

### GROUP CHART





### DISCLAIMER

All product related data (e.g. specification, statements and general information) are subject to change without any notice. It is necessary that the customer observes all product related technical / application information and handling instructions.

CapXon products are designed and manufactured according to severe quality and safety standards. Under no circumstance, CapXon warrants that any CapXon product is suitable for the purposes intended for your application, even CapXon knows the application. It is customer's duty and obligation to check and make sure that CapXon products are suitable for the purposes intended and select the correct and proper CapXon product. Customers are requested to perform a sufficient validation and reliability evaluation to assure needed safety level and reliability performance by suitable designs and to apply proper safeguards (e.g. redundancies, protective circuits).

Particular operating conditions (ambient temperature, ripple current, voltage, thermal resistance, etc.) as well as storage, production or assembly may affect the performance and the lifetime of the capacitor. Please consult CapXon for lifetime estimation, failure mode considerations or worst-case scenarios according to the product technology, product tolerances / deviations or change of the characteristics of the capacitor due to shipment, storage, handling, production and usage.

For aerospace or military application, life-saving, life-sustaining, safety critical applications or any application where failure may cause severe personal injury or death, please consult us before design-in the capacitor in your application.

Except for the written expressed warranties, CapXon does not impliedly, by assumption or whatever else, warrant, undertake, promise any other warranty or guaranty for any CapXon product.

For further information, please visit our website [www.capxongroup.com](http://www.capxongroup.com) or contact CapXon directly.