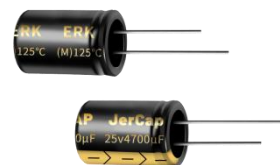


ERK series



■ 特性 Features

- 宽温品, 适用高档电源供应器, LED 电源及各种工业控制设备和量测仪器等
Used in High reliability equipments, filtering circuit, of switching power supply and industrial control equipments
- 耐久性: 125°C2000~3000 小时
Endurance: 125°C2000~3000hours
- 符合 RoHs 要求
RoHS Compliant

■ 仕样 Specifications

项目 Item	性能 Performance														
使用温度范围 Operating Temperature Range	-40℃~+125℃								-25℃~+125℃						
额定工作电压 Rated Voltage Range	10~100V								160~500V						
静电容量范围 Capacitance Range	0.1~10000μF								0.47~470μF						
静电容量误差 Capacitance Tolerance	±20% (120Hz, 20℃)														
漏电流 Leakage Current	LC≤0.01CV or 3.0 (μA) 施加额定电压 2 分钟后取最大值 After 2 minutes whichever is greater measured with rated working voltage applied								LC≤0.03CV (μA) 施加额定电压 2 分钟后取最大值 After 2 minutes with rated working voltage applied						
损耗角正切值 Dissipation Factor (120Hz, 20℃)	W.V(VDC)	10	16	25	35	50	63	100	160	200	250	400	450	500	
	D.F(%)	0.17	0.16	0.14	0.12	0.10	0.09	0.08	0.12	0.12	0.12	0.15	0.17	0.20	
低温特性 Low Temperature Stability (阻抗比) impedance Ratio(MAX)	W.V(VDC)	10	16	25	35	50	63	100	160	200	250	400	450	500	
	Z(-20)/Z(+20℃)	3	2	2	2	2	2	2	2	2	3	6	6	6	
	Z(-40℃)/Z(+20℃)	6	4	3	3	3	3	3	3	-	-	-	-	-	
耐久性 Endurance	试验条件 Test conditions 试验时间 Duration time: 2000~3000hrs 工作温度 Ambient temperature: + 125℃ 工作电压 Applied voltage: Rated DC working voltage 测试条件 After test requirements at +20℃ 静电容量变化率 Capacitance change: within±20% of the initial measured value 损耗角正切 Dissipation factor: ≤200% of the initial specified value 漏电流 Leakage current: ≤ the initial specified value														

ERK series

■ 仕様 Specifications

項目 Item	性能 Performance
高温储存 Shelf Life	试验条件 Test conditions 放置时间 Duration time: 1000hrs 放置温度 Ambient temperature: +125°C 工作电压 Applied voltage: None 放置完成后在+25°C条件下进行特性测试,并在测量前使用额定直流工作电压充电 30 分钟 After test requirements at +20°C : Same limits as Load life. Pre-treatment for measurements shall be conducted after application of DC working voltage for 30minutes.
其它 Others	JIS C-5141 and JIS C-5102

■ 频率修正系数 Multiplier for ripple current vs frequency

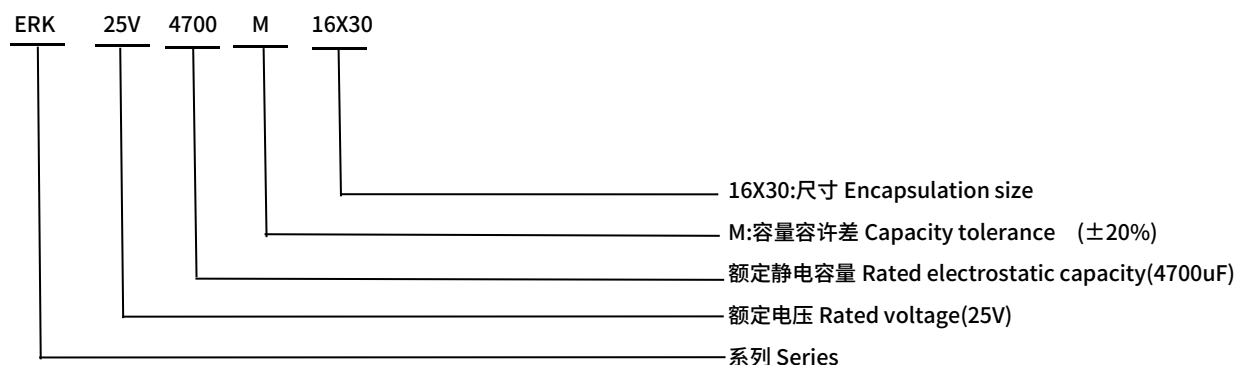
WV	frequency(Hz)	120Hz	1KHz	10KHz	50~100KHz
10~120	CAP≤10	0.40	0.75	0.9	1.00
	10<CAP≤100	0.50	0.8	0.95	1.00
	100<CAP≤1000	0.60	0.85	0.96	1.00
	CAP>1000	0.75	0.9	0.98	1.00
160 含以上	CAP≤10	1.00	1.5	1.75	1.80
	CAP>10	1.00	1.3	1.40	1.50

■ 尺寸图 Diagram of Dimensions (Unit: mm):

Vinyl Sleeve $\Phi D \pm 0.5$ $L \pm \alpha$ 15min 5min $\Phi d \pm 0.05$ $F \pm 0.5$	ΦD	5	6.3	8	10	13	16	18	22
	F	2.0	2.5	2.5 / 3.5	5.0		7.5		10
	Φd	0.5 (0.6)			0.6/0.8		0.8		
	α	$L < 20: \alpha = 1.0 \quad L \geq 20: \alpha = 1.5$							

ERK series

品号编码体系 Part Number Coding System (Example: 16V 330μF)



注释: 型号中 R 表示小数点, 如 4R7 表示 4.7μF

Note: "R" in the model number denotes a decimal point (e.g., 4R7 = 4.7μF)

电气特性 Electrical Characteristics

额定电压 Rated Voltage(V)	额定静电容量 Rated Capacitance(μF)	尺寸 Dimensions ΦDXL(mm)	额定纹波电流 Rated Ripple Current	损失角正切值 tan δ	品号 Part Number
10	10	5X11	28	0.17	ERK10V10M5X11
10	22	5X11	28	0.17	ERK10V22M5X11
10	33	5X11	45	0.17	ERK10V33M5X11
10	47	5X11	45	0.17	ERK10V47M5X11
10	68	5X11	54	0.17	ERK10V68M5X11
10	100	5X11	95	0.17	ERK10V100M5X11
10	220	5X11	165	0.17	ERK10V220M5X11
10	220	6.3X12	185	0.17	ERK10V220M6X12
10	330	6.3X12	230	0.17	ERK10V330M6X12
10	470	6.3X12	280	0.17	ERK10V470M6X12
10	680	8X12	400	0.17	ERK10V680M8X12
10	1000	8X12	450	0.17	ERK10V1000M8X12
10	1000	10X12	550	0.17	ERK10V1000M10X12
10	2200	10X20	880	0.17	ERK10V2200M10X20
10	3300	13X20	1150	0.17	ERK10V3300M13X20
10	4700	13X25	1450	0.17	ERK10V4700M13X25
10	6800	16X25	1800	0.17	ERK10V6800M16X25
10	10000	16X30	1960	0.17	ERK10V10000M16X30
16	10	5X11	35	0.16	ERK16V10M5X11
16	22	5X11	55	0.16	ERK16V22M5X11
16	33	5X11	65	0.16	ERK16V33M5X11

ERK series

额定电压 Rated Voltage(V)	额定静容量 Rated Capacitance(μ F)	尺寸 Dimensions Φ DXL(mm)	额定纹波电流 Rated Ripple Current	损失角正切值 $\tan \delta$	品号 Part Number
16	47	5X11	80	0.16	ERK16V47M5X11
16	68	5X11	90	0.16	ERK16V68M5X11
16	100	5X11	120	0.16	ERK16V100M5X11
16	220	6.3X12	210	0.16	ERK16V220M6X12
16	330	8X12	310	0.16	ERK16V330M8X12
16	470	8X12	360	0.16	ERK16V470M8X12
16	680	10X13	480	0.16	ERK16V680M10X13
16	1000	8X16	550	0.16	ERK16V1000M8X16
16	1000	10X16	650	0.16	ERK16V1000M10X16
16	2200	13X20	1100	0.16	ERK16V2200M13X20
16	3300	13X25	1350	0.16	ERK16V3300M13X25
16	4700	16X25	1700	0.16	ERK16V4700M16X25
16	6800	16X30	2000	0.16	ERK16V6800M16X30
16	10000	18X30	2350	0.16	ERK16V10000M18X30
25	4.7	5X11	26	0.14	ERK25V4R7M5X11
25	10	5X11	38	0.14	ERK25V10M5X11
25	22	5X11	55	0.14	ERK25V22M5X11
25	33	5X11	70	0.14	ERK25V33M5X11
25	47	5X11	80	0.14	ERK25V47M5X11
25	68	5X11	90	0.14	ERK25V68M5X11
25	100	5X11	140	0.14	ERK25V100M5X11
25	220	6.3X12	180	0.14	ERK25V220M6X12
25	220	8X12	248	0.14	ERK25V220M8X12
25	330	8X12	320	0.14	ERK25V330M8X12
25	470	8X12	400	0.14	ERK25V470M8X12
25	680	10X16	580	0.14	ERK25V680M10X16
25	1000	10X16	680	0.14	ERK25V1000M10X16
25	1000	10X20	800	0.14	ERK25V1000M10X20
25	2200	13X20	1150	0.14	ERK25V2200M13X20
25	3300	16X25	1600	0.14	ERK25V3300M16X25
25	4700	16X30	2000	0.14	ERK25V4700M16X30
25	5600	16X35	2100	0.14	ERK25V5600M16X35
25	6800	18X30	2300	0.14	ERK25V6800M18X30
25	8200	22X32	2900	0.14	ERK25V8200M22X32

ERK series

额定电压 Rated Voltage(V)	额定静容量 Rated Capacitance(μ F)	尺寸 Dimensions Φ DXL(mm)	额定纹波电流 Rated Ripple Current	损失角正切值 $\tan \delta$	品号 Part Number
35	4.7	5X11	28	0.12	ERK35V4R7M5X11
35	10	5X11	40	0.12	ERK35V10M5X11
35	22	5X11	60	0.12	ERK35V22M5X11
35	33	5X11	70	0.12	ERK35V33M5X11
35	47	5X11	80	0.12	ERK35V47M5X11
35	68	6.3X12	135	0.12	ERK35V68M6X12
35	100	6.3X12	165	0.12	ERK35V100M6X12
35	220	8X12	285	0.12	ERK35V220M8X12
35	220	8X16	320	0.12	ERK35V220M8X16
35	330	8X16	410	0.12	ERK35V330M8X16
35	470	10X16	520	0.12	ERK35V470M10X16
35	680	10X20	680	0.12	ERK35V680M10X20
35	1000	10X20	780	0.12	ERK35V1000M10X20
35	1000	13X20	1000	0.12	ERK35V1000M13X20
35	2200	16X25	1400	0.12	ERK35V2200M16X25
35	3300	16X30	1800	0.12	ERK35V3300M16X30
35	4700	18X35	2200	0.12	ERK35V4700M18X35
50	0.1	5X11	4	0.10	ERK50V0.1M5X11
50	0.22	5X11	4	0.10	ERK50V0.22M5X11
50	0.33	5X11	6	0.10	ERK50V0.33M5X11
50	0.47	5X11	8	0.10	ERK50V0.47M5X11
50	1	5X11	13	0.10	ERK50V1M5X11
50	2.2	5X11	20	0.10	ERK50V2R2M5X11
50	3.3	5X11	28	0.10	ERK50V3R3M5X11
50	4.7	5X11	36	0.10	ERK50V4R7M5X11
50	10	5X11	50	0.10	ERK50V10M5X11
50	22	5X11	76	0.10	ERK50V22M5X11
50	33	6.3X12	100	0.10	ERK50V33M6.3X12
50	47	6.3X12	126	0.10	ERK50V47M6.3X12
50	68	6.3X12	145	0.10	ERK50V68M6.3X12
50	100	8X12	220	0.10	ERK50V100M8X12
50	150	10X13	300	0.10	ERK50V150M10X13
50	220	10X16	480	0.10	ERK50V220M10X16
50	330	10X16	560	0.10	ERK50V330M10X16
50	470	10X20	660	0.10	ERK50V470M10X20

ERK series

额定电压 Rated Voltage(V)	额定静容量 Rated Capacitance(μ F)	尺寸 Dimensions Φ DXL(mm)	额定纹波电流 Rated Ripple Current	损失角正切值 $\tan \delta$	品号 Part Number
50	680	13X20	860	0.10	ERK50V680M13X20
50	1000	13X25	1200	0.10	ERK50V1000M13X25
50	1000	16X25	1360	0.10	ERK50V1000M16X25
50	2200	16X30	1650	0.10	ERK50V2200M16X30
50	3300	18X35	2000	0.10	ERK50V3300M18X35
50	4700	18X40	2200	0.10	ERK50V4700M18X40
63	4.7	5X11	38	0.09	ERK63V4R7M5X11
63	10	5X11	55	0.09	ERK63V10M5X11
63	22	6.3X12	80	0.09	ERK63V22M6X12
63	33	6.3X12	120	0.09	ERK63V33M6X12
63	47	6.3X12	136	0.09	ERK63V47M6X12
63	68	8X12	155	0.09	ERK63V68M8X12
63	100	10X13	245	0.09	ERK63V100M10X13
63	150	10X16	350	0.09	ERK63V150M10X16
63	220	10X20	550	0.09	ERK63V220M10X20
63	330	10X20	585	0.09	ERK63V330M10X20
63	470	13X20	760	0.09	ERK63V470M13X20
63	680	13X25	1060	0.09	ERK63V680M13X25
63	1000	16X25	1360	0.09	ERK63V1000M16X25
63	2200	18X35	1660	0.09	ERK63V2200M18X35
100	1	5X11	16	0.08	ERK100V1M5X11
100	2.2	5X11	22	0.08	ERK100V2R2M5X11
100	3.3	5X11	32	0.08	ERK100V3R3M5X11
100	4.7	5X11	40	0.08	ERK100V4R7M5X11
100	10	5X11	58	0.08	ERK100V10M5X11
100	22	6.3X12	96	0.08	ERK100V22M6.3X12
100	33	8X12	140	0.08	ERK100V33M8X12
100	47	10X13	186	0.08	ERK100V47M10X13
100	68	10X16	220	0.08	ERK100V68M10X16
100	100	10X20	300	0.08	ERK100V100M10X20
100	150	13X20	400	0.08	ERK100V150M13X20
100	220	13X25	650	0.08	ERK100V220M13X25
100	330	13X25	760	0.08	ERK100V330M13X25
100	470	16X25	960	0.08	ERK100V470M16X25
100	680	16X30	1260	0.08	ERK100V680M16X30

ERK series

额定电压 Rated Voltage(V)	额定静容量 Rated Capacitance(μF)	尺寸 Dimensions ΦDXL(mm)	额定纹波电流 Rated Ripple Current	损失角正切值 tan δ	品号 Part Number
100	1000	18X35	1680	0.08	ERK100V1000M18X35
160	1	5X11	18	0.12	ERK160V1M5X11
160	2.2	5X11	28	0.12	ERK160V2R2M5X11
160	3.3	6.3X12	36	0.12	ERK160V3R3M6.3X12
160	4.7	6.3X12	42	0.12	ERK160V4R7M6.3X12
160	10	8X12	60	0.12	ERK160V10M8X12
160	22	10X13	105	0.12	ERK160V22M10X13
160	33	10X16	150	0.12	ERK160V33M10X16
160	47	10X20	190	0.12	ERK160V47M10X20
160	68	13X20	250	0.12	ERK160V68M13X20
160	100	13X25	350	0.12	ERK160V100M13X25
160	150	13X30	410	0.12	ERK160V150M13X30
160	220	16X30	660	0.12	ERK160V220M16X30
160	330	18X35	800	0.12	ERK160V330M18X35
160	470	18X40	880	0.12	ERK160V470M18X40
200	1	6.3X12	18	0.12	ERK200V1M6.3X12
200	2.2	6.3X12	28	0.12	ERK200V2R2M6.3X12
200	3.3	6.3X12	38	0.12	ERK200V3R3M6.3X12
200	4.7	6.3X12	44	0.12	ERK200V4R7M6.3X12
200	10	8X12	68	0.12	ERK200V10M8X12
200	22	10X16	110	0.12	ERK200V22M10X16
200	33	10X20	165	0.12	ERK200V33M10X20
200	47	10X20	195	0.12	ERK200V47M10X20
200	68	13X20	280	0.12	ERK200V68M13X20
200	100	16X25	380	0.12	ERK200V100M16X25
200	150	16X25	480	0.12	ERK200V150M16X25
200	220	16X30	680	0.12	ERK200V220M16X30
200	330	18X35	860	0.12	ERK200V330M18X35
200	470	18X40	960	0.12	ERK200V470M18X40
250	0.47	6.3X12	8	0.12	ERK250V0.47M6.3X12
250	1	6.3X12	16	0.12	ERK250V1M6.3X12
250	2.2	6.3X12	26	0.12	ERK250V2R2M6.3X12
250	3.3	6.3X12	35	0.12	ERK250V3R3M6.3X12
250	4.7	8X12	46	0.12	ERK250V4R7M8X12
250	6.8	8X12	56	0.12	ERK250V6R8M8X12

ERK series

额定电压 Rated Voltage(V)	额定静容量 Rated Capacitance(μF)	尺寸 Dimensions ΦDXL(mm)	额定纹波电流 Rated Ripple Current	损失角正切值 tan δ	品号 Part Number
250	10	8X12	66	0.12	ERK250V10M8X12
250	10	10X13	75	0.12	ERK250V10M10X13
250	15	8X16	108	0.12	ERK250V15M8X16
250	22	10X17	115	0.12	ERK250V22M10X17
250	22	10X20	140	0.12	ERK250V22M10X20
250	33	13X20	190	0.12	ERK250V33M13X20
250	47	13X20	220	0.12	ERK250V47M13X20
250	47	13X25	240	0.12	ERK250V47M13X25
250	56	13X20	240	0.12	ERK250V56M13X20
250	68	13X20	240	0.12	ERK250V68M13X20
250	68	13X25	260	0.12	ERK250V68M13X25
250	82	16X25	320	0.12	ERK250V82M16X25
250	100	16X30	370	0.12	ERK250V100M16X30
250	120	16X30	390	0.12	ERK250V120M16X30
250	150	18X30	440	0.12	ERK250V150M18X30
250	180	18X35	460	0.12	ERK250V180M18X35
250	220	18X35	485	0.12	ERK250V220M18X35
250	330	18X35		0.12	ERK250V330M18X35
400	0.47	6.3X12	14	0.15	ERK400V0.47M6X12
400	1	6.3X12	19	0.15	ERK400V1M6X12
400	2.2	6.3X12	35	0.15	ERK400V2R2M6X12
400	2.2	8X12	40	0.15	ERK400V2R2M8X12
400	3.3	8X12	42	0.15	ERK400V3R3M8X12
400	4.7	8X12	48	0.15	ERK400V4R7M8X12
400	4.7	8X14	51	0.15	ERK400V4R7M8X14
400	6.8	8X16	68	0.15	ERK400V6R8M8X16
400	6.8	10X13	70	0.15	ERK400V6R8M10X13
400	10	10X15	88	0.15	ERK400V10M10X15
400	10	10X17	100	0.15	ERK400V10M10X17
400	12	10X15	95	0.15	ERK400V12M10X15
400	12	10X17	108	0.15	ERK400V12M10X17
400	15	10X17	120	0.15	ERK400V15M10X17
400	15	10X20	130	0.15	ERK400V15M10X20
400	22	10X20	155	0.15	ERK400V22M10X20
400	22	13X20	180	0.15	ERK400V22M13X20

ERK series

额定电压 Rated Voltage(V)	额定静容量 Rated Capacitance(μ F)	尺寸 Dimensions Φ DXL(mm)	额定纹波电流 Rated Ripple Current	损失角正切值 $\tan \delta$	品号 Part Number
400	33	13X20	210	0.15	ERK400V33M13X20
400	33	13X25	240	0.15	ERK400V33M13X25
400	47	16X22	260	0.15	ERK400V47M16X22
400	47	16X25	280	0.15	ERK400V47M16X25
400	56	16X25	320	0.15	ERK400V56M16X25
400	56	18X26	340	0.15	ERK400V56M18X26
400	68	16X30	390	0.15	ERK400V68M16X30
400	68	18X30	420	0.15	ERK400V68M18X30
400	82	18X30	450	0.15	ERK400V82M18X30
400	82	18X32	470	0.15	ERK400V82M18X32
400	100	18X36	530	0.15	ERK400V100M18X36
400	120	18X40	580	0.15	ERK400V120M18X40
400	150	18X45	650	0.15	ERK400V150M18X45
400	180	22X41	720	0.15	ERK400V180M22X41
400	220	22X45	760	0.15	ERK400V220M22X45
450	1	6.3X12	20	0.17	ERK450V1M6.3X12
450	2.2	8X12	31	0.17	ERK450V2R2M8X12
450	3.3	8X12	42	0.17	ERK450V3R3M8X12
450	3.3	10X13	44	0.17	ERK450V3R3M10X13
450	4.7	8X16	47	0.17	ERK450V4R7M8X16
450	4.7	10X13	50	0.17	ERK450V4R7M10X13
450	6.8	8X20	65	0.17	ERK450V6R8M8X20
450	6.8	10X17	74	0.17	ERK450V6R8M10X17
450	10	10X17	96	0.17	ERK450V10M10X17
450	10	10X20	106	0.17	ERK450V10M10X20
450	12	10X17	100	0.17	ERK450V12M10X17
450	12	10X20	118	0.17	ERK450V12M10X20
450	15	10X20	128	0.17	ERK450V15M10X20
450	15	13X20	140	0.17	ERK450V15M13X20
450	22	13X20	180	0.17	ERK450V22M13X20
450	22	13X25	208	0.17	ERK450V22M13X25
450	33	13X30	230	0.17	ERK450V33M13X30
450	33	16X25	250	0.17	ERK450V33M16X25
450	47	16X30	340	0.17	ERK450V47M16X30
450	56	16X32	350	0.17	ERK450V56M16X32

ERK series

额定电压 Rated Voltage(V)	额定静容量 Rated Capacitance(μ F)	尺寸 Dimensions Φ DXL(mm)	额定纹波电流 Rated Ripple Current	损失角正切值 $\tan \delta$	品号 Part Number
450	56	18X30	370	0.17	ERK450V56M18X30
450	68	18X32	450	0.17	ERK450V68M18X32
450	68	18X36	480	0.17	ERK450V68M18X36
450	82	18X36	510	0.17	ERK450V82M18X36
450	82	18X40	530	0.17	ERK450V82M18X40
450	100	18X45	560	0.17	ERK450V100M18X45
450	120	22X41	600	0.17	ERK450V120M22X41
450	150	22X45	680	0.17	ERK450V150M22X45

10~120V Ripple Current(mA,rms,at 125°C,100KHz)

160V higher Ripple Current(mA,rms,at 125°C,120Hz)