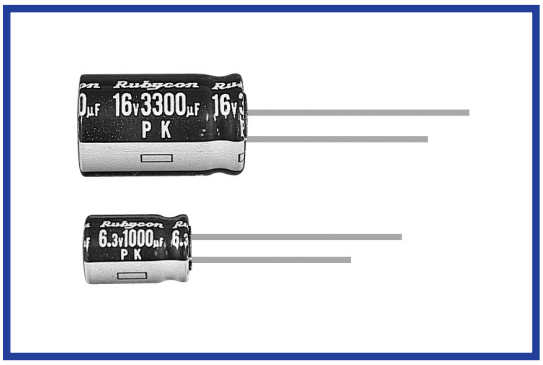
PK SERIES

85℃ Standard



◆FEATURES

- Load life : 85℃ 2000 hours.
- RoHS compliance.

◆SPECIFICATIONS

Items	Characteristics		
Category Temperature Range	−40～+85℃	−25～+85℃	
Rated Voltage Range	6.3～400Vdc	450Vdc	
Capacitance Tolerance	±20%(20℃, 120Hz)		
Leakage Current(MAX)	6.3～100Vdc	160～450Vdc	
	I=0.01CV or 3μA whichever is greater. (After 2 minutes application of rated voltage)	CV≦1000	CV>1000
		I=0.1CV+40μA (1minute) I=0.03CV+15μA (5minutes)	I=0.04CV+100μA (1minute) I=0.02CV+25μA (5minutes)
	I=Leakage Current(μA) C=Capacitance(μF) V=Rated Voltage(Vdc)		

(tanδ) Dissipation Factor(MAX) (20℃, 120Hz)

Rated Voltage (Vdc)	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450
tanδ	0.28	0.24	0.20	0.16	0.14	0.12	0.10	0.10	0.20	0.20	0.20	0.25	0.25	0.25

When capacitance is over 1000μF, tanδ shall be added 0.02 to the listed value with increase of every 1000μF.

Endurance

After applying rated voltage with rated ripple current for 2000 hours at 85℃, the capacitors shall meet the following requirements.

Capacitance Change	Within ±25% of the initial value.
Dissipation Factor	Not more than 200% of the specified value.
Leakage Current	Not more than the specified value.

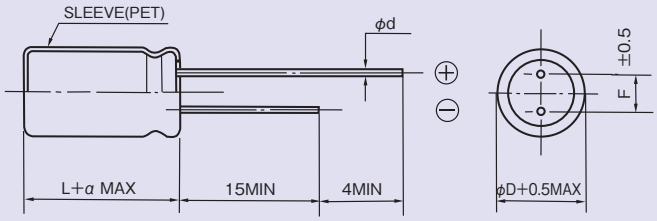
Low Temperature Stability Impedance Ratio(MAX) (120Hz)

Rated Voltage (Vdc)	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450
Z(−25℃)/Z(20℃)	5	4	3	2	2	2	2	2	3	3	4	5	5	7
Z(−40℃)/Z(20℃)	12	10	8	5	4	3	3	3	4	4	8	8	10	−

◆MULTIPLIER FOR RIPPLE CURRENT

Frequency(Hz)		60(50)	120	500	1k	10k≦
Coefficient	0.47～1μF	0.50	1.00	1.20	1.30	1.50
	2.2～4.7μF	0.65	1.00	1.20	1.30	1.50
	10～47μF	0.80	1.00	1.20	1.30	1.50
	100～1000μF	0.80	1.00	1.10	1.15	1.20
	2200～33000μF	0.80	1.00	1.05	1.10	1.15

◆DIMENSIONS (mm)



φD	5	6.3	8	10	12.5	16	18
φd	0.5		0.6			0.8	
F	2.0	2.5	3.5	5.0		7.5	
α	WV≦100:1.5 WV≧160:2.0					2.0	

◆OPTION

	Code
PET Sleeve	EFC

◆PART NUMBER

□□□	PK	□□□□□	M	□□□	□□	D×L
Rated Voltage	Series	Capacitance	Capacitance Tolerance	Option	Lead Forming	Case Size

◆STANDARD SIZE

Size φD×L(mm), Rated Ripple Current (mA r.m.s./85℃, 120Hz)

Vdc / Cap(μF)	6.3		10		16		25		35		50		63	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
1											5×11	10		
2.2											5×11	23		
3.3											5×11	35		
4.7											5×11	41		
10											5×11	60	5×11	70
22									5×11	90	5×11	95	5×11	110
33							5×11	98	5×11	110	5×11	130	6.3×11	140
47					5X11	115	5×11	120	5×11	135	6.3×11	160	6.3×11	190
100	5×11	134	5×11	140	5X11	175	5×11	185	6.3×11	215	8×11.5	270	8×11.5	290
220	5×11	220	5×11	230	6.3X11	280	6.3×11	310	8×11.5	370	10×12.5	435	10×16	490
330	6.3×11	280	6.3×11	310	6.3X11	360	8×11.5	410	10×12.5	500	10×16	590	10×20	710
470	6.3×11	360	6.3×11	400	8X11.5	460	8×11.5	550	10×12.5	680	10×20	760	12.5×20	900
680	6.3×11	460	8×11.5	580	8X11.5	620	10×12.5	780	10×16	910	12.5×20	1000	12.5×25	1200
1000	8×11.5	590	8×11.5	660	10X12.5	720	10×16	870	10×20	1180	12.5×25	1350	16×25	1350
2200	10×16	920	10×16	1090	10X20	1320	12.5×20	1500	16×25	1810	16×31.5	1980	18×31.5	1800
3300	10×20	1200	10×20	1440	12.5X20	1600	16×25	2000	16×25	1990	18×31.5	2100	18×40	2600
4700	12.5×20	1550	12.5×20	1680	12.5X25	2050	16×25	2120	16×35.5	2500	18×40	2800		
6800	12.5×25	1920	12.5×25	2150	16X25	2250	16×31.5	2440	18×35.5	2740				
10000	16×25	2370	16×25	2270	16X31.5	2660	18×35.5	2900						
15000	16×31.5	2550	16×35.5	2880	18X35.5	2950								
22000	16×35.5	2900	18×35.5	3100										
33000	18×40	3400												

Vdc / Cap(μF)	100		160		200		250		350		400		450	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
0.47							6.3×11	8	6.3×11	8	6.3×11	8	6.3×11	8
1	5×11	16					6.3×11	16	6.3×11	16	6.3×11	16	6.3×11	16
2.2	5×11	35					6.3×11	30	6.3×11	30	8×11.5	31	8×11.5	29
3.3	5×11	45			6.3×11	40	6.3×11	45	8×11.5	45	8×11.5	48	8×11.5	33
4.7	5×11	50	6.3×11	45	6.3×11	51	6.3×11	54	8×11.5	55	10×12.5	56	10×12.5	46
10	5×11	75	8×11.5	83	8×11.5	85	10×12.5	90	10×16	90	10×16	90	10×20	84
22	6.3×11	135	10×12.5	130	10×16	150	10×16	150	12.5×20	185	12.5×20	200	12.5×25	140
33	8×11.5	185	10×16	180	10×20	205	10×20	205	12.5×25	240	12.5×25	240	16×25	180
47	8×11.5	220	10×20	230	10×20	220	12.5×20	260	16×25	300	16×25	250	16×31.5	220
100	10×16	380	12.5×25	430	12.5×25	320	16×25	450	18×31.5	520	18×35.5	420	18×40	280
220	12.5×20	610	16×31.5	645	16×31.5	540	18×35.5	680						
330	12.5×25	760	16×35.5	700	18×35.5	800								
470	16×25	1000	18×40	1200										
680	16×31.5	1100												
1000	18×31.5	1200												