

MKCP4 Series (Resin-encased Metallized polypropylene film capacitors)

Features

- Suitable for DC link circuit.
- Plastic case and filling resin materials conform to UL94V-0.

Specifications

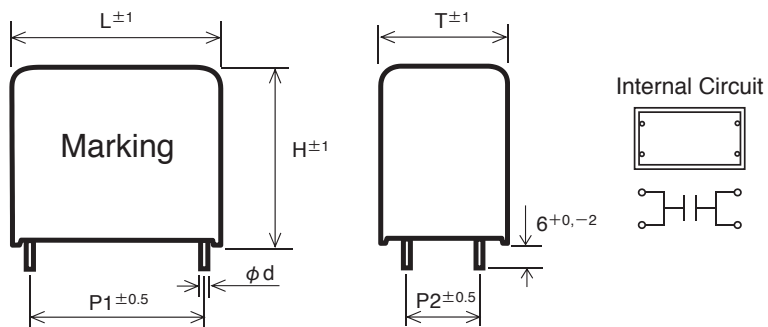
Items	Description
Operating Temperature range *	-40 ~ +105°C (voltage derating is required at $\geq +85^\circ\text{C}$)
Rated Voltage U_N	700, 900, 1,100V.DC
Voltage test between terminals	$1.5 \times U_N / 10\text{s}$
Terminals	Tinned wire leads
Reference standard	IEC 61071 : 2007
Dielectric	Polypropylene
Electrode	no internal safety device (optional : segmented metallization design)
Case	UL94V-0
Filling material	UL94V-0
Environmental regulation	Comply with RoHS

* Temperature in table is value at hot spot on capacitor case.

Dimension

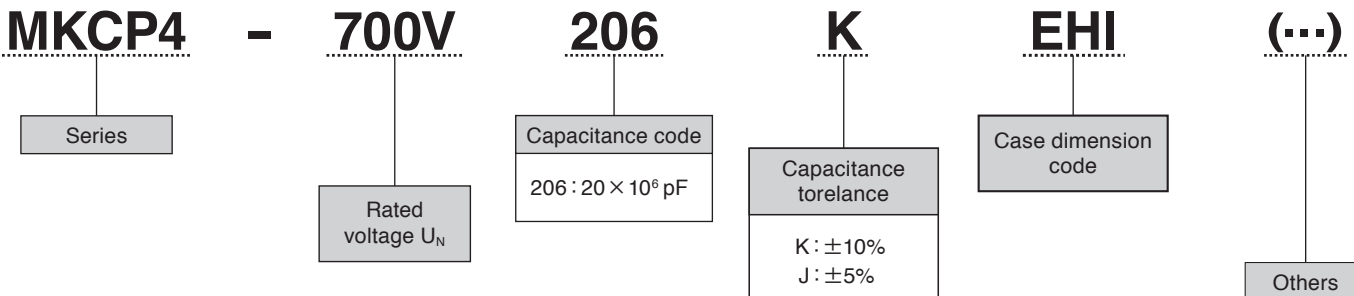
Case (mm)			Terminal (mm)			Case dimension code
T	H	L	P1	P2	ϕd	
21.5	38.5	43.0	37.5	10.2	1.0	EHI
24.0	44.0	42.0	37.5	10.2	1.0	EII
30.0	45.0	42.0	37.5	20.3	1.0	GJI
30.0	55.0	42.0	37.5	20.3	1.0	GLI
25.0	45.0	57.5	52.5	10.2	1.2	FJL
30.0	45.0	57.5	52.5	20.3	1.2	GJL
35.0	50.0	57.5	52.5	20.3	1.2	HKL
35.0	60.0	57.5	52.5	20.3	1.2	HML
35.0	65.0	57.5	52.5	20.3	1.2	HNL
45.0	57.0	57.5	52.5	20.3	1.2	JLL
60.0	45.0	57.5	52.5	20.3	1.2	MJL
35.0	80.0	57.5	52.5	20.3	1.2	HQL
45.0	65.0	57.5	52.5	20.3	1.2	JNL

Outline of drawings and dimensions



Part number

Example : MKCP4 series 700V.dc 20 μF $\pm 10\%$



Standard Products Table

Nominal Capacitance C_N (μF)	Dimensions [mm]						dv/dt (V/us)	Maximum peak current \hat{i} (A _p)	Maximum ripple current I_{max} (Arms) (at 85°C, 10kHz)	ESR (typ.) (mΩ)	ESL (typ.) (nH)	R_{th} (K/W)	Part number
	T	H	L	P1	P2	φd							
Rated voltage U_N : 700Vdc (70°C : 800Vdc, 85°C : 700Vdc, 105°C : 500Vdc)								Voltage test between terminals U_{TT} : 1,050Vdc/10s					
20	21.5	38.5	43.0	37.5	10.2	1.0	40	800	12.0	6.0	18	13.0	MKCP4-700V206KEHI
22	24.0	44.0	42.0	37.5	10.2	1.0	40	880	13.5	5.5	19	12.0	MKCP4-700V226KEII
30	30.0	45.0	42.0	37.5	20.3	1.0	40	1,200	17.0	4.0	19	9.5	MKCP4-700V306KGJI
30	25.0	45.0	57.5	52.5	10.2	1.2	20	600	12.0	8.0	19	11.0	MKCP4-700V306KFJL
35	30.0	45.0	42.0	37.5	20.3	1.0	40	1,400	18.5	3.5	19	9.5	MKCP4-700V356KGJI
35	25.0	45.0	57.5	52.5	10.2	1.2	20	700	12.5	7.0	19	11.0	MKCP4-700V356KFJL
40	25.0	45.0	57.5	52.5	10.2	1.2	20	800	13.5	6.0	19	11.0	MKCP4-700V406KFJL
45	30.0	45.0	57.5	52.5	20.3	1.2	20	900	15.0	5.5	19	9.5	MKCP4-700V456KGJL
55	35.0	50.0	57.5	52.5	20.3	1.2	20	1,100	18.0	4.5	20	8.0	MKCP4-700V556KHKL
60	35.0	50.0	57.5	52.5	20.3	1.2	20	1,200	19.0	4.0	20	8.0	MKCP4-700V606KHKL
65	35.0	50.0	57.5	52.5	20.3	1.2	20	1,300	20.5	3.5	20	8.0	MKCP4-700V656KHKL
70	35.0	60.0	57.5	52.5	20.3	1.2	20	1,400	20.5	3.5	21	8.0	MKCP4-700V706KHML
80	35.0	60.0	57.5	52.5	20.3	1.2	20	1,600	21.5	3.0	21	8.0	MKCP4-700V806KHML
85	35.0	65.0	57.5	52.5	20.3	1.2	20	1,700	22.0	3.0	22	8.0	MKCP4-700V856KHNL
90	45.0	57.0	57.5	52.5	20.3	1.2	20	1,800	22.0	3.0	21	7.5	MKCP4-700V906KJLL
100	60.0	45.0	57.5	52.5	20.3	1.2	20	2,000	22.0	2.5	19	6.0	MKCP4-700V107KJML
100	35.0	80.0	57.5	52.5	20.3	1.2	20	2,000	22.0	2.5	28	8.0	MKCP4-700V107KHQL
100	45.0	65.0	57.5	52.5	20.3	1.2	20	2,000	22.0	2.5	22	7.5	MKCP4-700V107KJNL
Rated voltage U_N : 900Vdc (70°C : 1,100Vdc, 85°C : 900Vdc, 105°C : 650Vdc)								Voltage test between terminals U_{TT} : 1,350Vdc/10s					
10	21.5	38.5	43.0	37.5	10.2	1.0	40	400	9.0	11.0	18	13.0	MKCP4-900V106KEHI
12	21.5	38.5	43.0	37.5	10.2	1.0	40	480	10.0	9.0	18	13.0	MKCP4-900V126KEHI
15	24.0	44.0	42.0	37.5	10.2	1.0	40	600	12.0	7.0	19	12.0	MKCP4-900V156KEII
15	25.0	45.0	57.5	52.5	10.2	1.2	20	300	9.5	12.0	19	11.0	MKCP4-900V156KFJL
20	30.0	45.0	42.0	37.5	20.3	1.0	40	800	15.5	5.0	19	9.5	MKCP4-900V206KGJI
20	25.0	45.0	57.5	52.5	10.2	1.2	20	400	10.0	11.0	19	11.0	MKCP4-900V206KFJL
25	30.0	45.0	57.5	52.5	20.3	1.2	20	500	11.5	9.0	19	9.5	MKCP4-900V256KGJL
35	35.0	50.0	57.5	52.5	20.3	1.2	20	700	15.5	6.0	20	8.0	MKCP4-900V356KHKL
40	35.0	50.0	57.5	52.5	20.3	1.2	20	800	17.0	5.0	20	8.0	MKCP4-900V406KHKL
45	35.0	60.0	57.5	52.5	20.3	1.2	20	900	17.5	5.0	21	8.0	MKCP4-900V456KHML
50	35.0	60.0	57.5	52.5	20.3	1.2	20	1,000	18.5	4.0	21	8.0	MKCP4-900V506KHML
55	35.0	65.0	57.5	52.5	20.3	1.2	20	1,100	19.0	4.0	22	8.0	MKCP4-900V556KHNL
55	45.0	57.0	57.5	52.5	20.3	1.2	20	1,100	19.6	4.0	21	7.5	MKCP4-900V556KJLL
60	60.0	45.0	57.5	52.5	20.3	1.2	20	1,200	22.0	3.5	19	6.0	MKCP4-900V606KMJL
60	35.0	80.0	57.5	52.5	20.3	1.2	20	1,200	20.5	3.5	28	8.0	MKCP4-900V606KHQL
65	45.0	65.0	57.5	52.5	20.3	1.2	20	1,300	22.0	3.0	22	7.5	MKCP4-900V656KJNL
Rated voltage U_N : 1,100Vdc (70°C : 1,300Vdc, 85°C : 1,100Vdc, 105°C : 800Vdc)								Voltage test between terminals U_{TT} : 1,650Vdc/10s					
7	21.5	38.5	43.0	37.5	10.2	1.0	45	310	8.5	11.5	18	13.0	MKCP4-1100V705KEHI
8	21.5	38.5	43.0	37.5	10.2	1.0	45	360	9.5	10.0	18	13.0	MKCP4-1100V805KEHI
10	24.0	44.0	42.0	37.5	10.2	1.0	45	450	11.0	8.0	19	12.0	MKCP4-1100V106KEII
10	25.0	45.0	57.5	52.5	10.2	1.2	23	230	8.5	16.0	19	11.0	MKCP4-1100V106KFJL
12	30.0	45.0	42.0	37.5	20.3	1.0	45	540	13.5	6.5	19	9.5	MKCP4-1100V126KGJI
15	30.0	55.0	42.0	37.5	20.3	1.0	45	670	15.0	5.5	21	9.5	MKCP4-1100V156KGLI
15	25.0	45.0	57.5	52.5	10.2	1.2	23	340	10.5	10.5	19	11.0	MKCP4-1100V156KFJL
20	30.0	45.0	57.5	52.5	20.3	1.2	23	460	12.5	8.0	19	9.5	MKCP4-1100V206KGJL
22	35.0	50.0	57.5	52.5	20.3	1.2	23	500	14.5	7.0	20	8.0	MKCP4-1100V226KHKL
25	35.0	50.0	57.5	52.5	20.3	1.2	23	550	15.0	6.5	20	8.0	MKCP4-1100V256KHKL
30	35.0	60.0	57.5	52.5	20.3	1.2	23	690	16.5	5.0	21	8.0	MKCP4-1100V306KHML
35	35.0	65.0	57.5	52.5	20.3	1.2	23	800	18.0	4.5	22	8.0	MKCP4-1100V356KHNL
35	45.0	57.0	57.5	52.5	20.3	1.2	23	800	18.0	4.5	21	7.5	MKCP4-1100V356KJLL
40	60.0	45.0	57.5	52.5	20.3	1.2	23	920	22.0	4.0	19	6.0	MKCP4-1100V406KMJL
40	35.0	80.0	57.5	52.5	20.3	1.2	23	920	19.0	4.0	28	8.0	MKCP4-1100V406KHQL
45	45.0	65.0	57.5	52.5	20.3	1.2	23	1,000	19.5	4.0	22	7.5	MKCP4-1100V456KJNL

PLASTIC FILM CAPACITORS