

# MKCP4T Series (Resin-encased Metallized polypropylene film capacitors)

## Features

- Suitable for a DC link circuit in the high humidity environment.
- 85°C, 85%RH, 1kh.
- 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

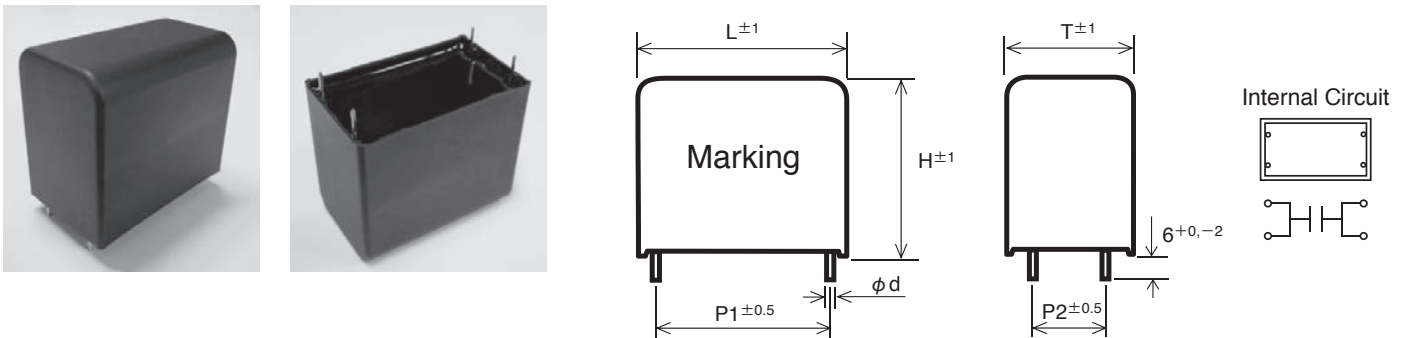
\* Temperature in table is value at hot spot on capacitor case.

## Dimension

Case (mm)			Terminal (mm)			Case dimension code
T	H	L	P1	P2	$\phi d$	
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

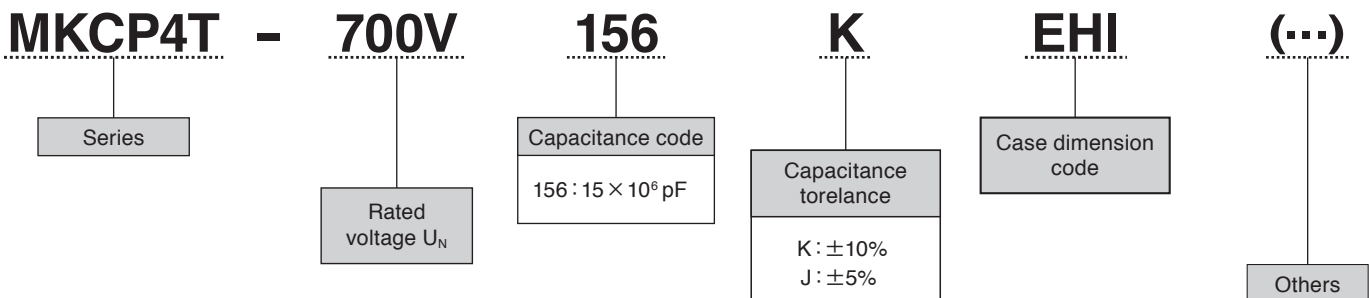
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## Outline of drawings and dimensions



## Part number

Example : MKCP4T series 700V.dc 15  $\mu$ F  $\pm 10\%$



Standard Products Table

Nominal Capacitance $C_N$ [ $\mu F$ ]	Dimensions [mm]						$dv/dt$ [V/us]	Maximum peak current $\hat{i}$ [A <sub>p</sub> ]	Maximum ripple current $I_{max}$ [Arms] (at 85°C, 10kHz)	ESR (typ.) [mΩ]	ESL (typ.) [nH]	R <sub>th</sub> [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				
15	21.5	38.5	43.0	37.5	10.2	1.0	40	600	10.5	8.0	18	13.0	MKCP4T-700V156KEHI
20	24.0	44.0	42.0	37.5	10.2	1.0	40	800	12.5	6.0	19	12.0	MKCP4T-700V206KEII
25	30.0	45.0	42.0	37.5	20.3	1.0	40	1,000	15.0	5.0	19	9.5	MKCP4T-700V256KGJI
30	30.0	55.0	42.0	37.5	20.3	1.0	40	1,200	17.0	4.0	21	9.5	MKCP4T-700V306KGLI
30	25.0	45.0	57.5	52.5	10.2	1.2	20	600	12.0	8.0	19	11.0	MKCP4T-700V306KFJL
40	30.0	45.0	57.5	52.5	20.3	1.2	20	800	15.0	6.0	19	9.5	MKCP4T-700V406KGJL
50	35.0	50.0	57.5	52.5	20.3	1.2	20	1,000	17.0	5.0	20	8.0	MKCP4T-700V506KHKL
55	35.0	50.0	57.5	52.5	20.3	1.2	20	1,100	18.0	4.5	20	8.0	MKCP4T-700V556KHKL
70	35.0	60.0	57.5	52.5	20.3	1.2	20	1,400	20.5	3.5	21	8.0	MKCP4T-700V706KHML
Rated voltage $U_N$ : 900Vdc (70°C : 1,100Vdc, 85°C : 900Vdc, 105°C : 650Vdc)									Voltage test between terminals $U_{TT}$ : 1,350Vdc/10s				
9	21.5	38.5	43.0	37.5	10.2	1.0	40	360	8.5	12.5	18	13.0	MKCP4T-900V905KEHI
12	24.0	44.0	42.0	37.5	10.2	1.0	40	480	10.0	9.0	19	12.0	MKCP4T-900V126KEII
17	30.0	45.0	42.0	37.5	20.3	1.0	40	680	14.0	6.0	19	9.5	MKCP4T-900V176KGJI
20	30.0	55.0	42.0	37.5	20.3	1.0	40	800	15.5	5.0	21	9.5	MKCP4T-900V206KGLI
20	25.0	45.0	57.5	52.5	10.2	1.2	20	400	10.0	11.0	19	11.0	MKCP4T-900V206KFJL
25	30.0	45.0	57.5	52.5	20.3	1.2	20	500	11.5	9.0	19	9.5	MKCP4T-900V256KGJL
30	35.0	50.0	57.5	52.5	20.3	1.2	20	600	14.0	7.0	20	8.0	MKCP4T-900V306KHKL
35	35.0	50.0	57.5	52.5	20.3	1.2	20	700	15.5	6.0	20	8.0	MKCP4T-900V356KHKL
40	35.0	60.0	57.5	52.5	20.3	1.2	20	800	16.5	5.0	21	8.0	MKCP4T-900V406KHML
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				
6	21.5	38.5	43.0	37.5	10.2	1.0	45	270	8.0	13.5	18	13.0	MKCP4T-1100V605KEHI
8	24.0	44.0	42.0	37.5	10.2	1.0	45	360	10.0	10.0	19	12.0	MKCP4T-1100V805KEII
12	30.0	45.0	42.0	37.5	20.3	1.0	45	540	13.5	6.5	19	9.5	MKCP4T-1100V126KGJI
14	30.0	55.0	42.0	37.5	20.3	1.0	45	630	14.0	6.0	21	9.5	MKCP4T-1100V146KGLI
14	25.0	45.0	57.5	52.5	10.2	1.2	23	320	9.5	11.5	19	11.0	MKCP4T-1100V146KFJL
18	30.0	45.0	57.5	52.5	20.3	1.2	23	410	11.5	9.0	19	9.5	MKCP4T-1100V186KGJL
22	35.0	50.0	57.5	52.5	20.3	1.2	23	500	14.5	7.0	20	8.0	MKCP4T-1100V226KHKL
25	35.0	50.0	57.5	52.5	20.3	1.2	23	570	15.0	6.5	20	8.0	MKCP4T-1100V256KHKL
30	35.0	60.0	57.5	52.5	20.3	1.2	23	690	16.5	5.0	21	8.0	MKCP4T-1100V306KHML

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