

MKCP4 · MKCP4T · PCB mount · 105 °C

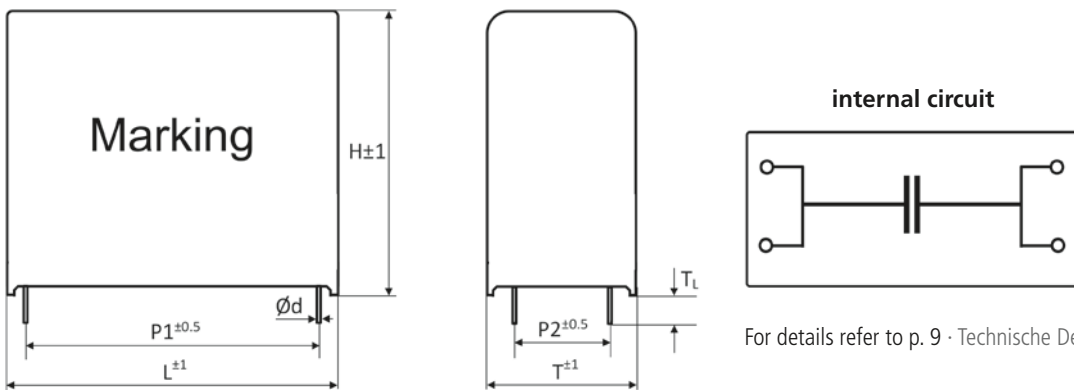
Resin-encased box type · optional Fuse Function for high withstanding voltage
 MKCP4T High-Humidity THB-type · 85 °C · 85 % RH · 1000 hrs

> Specifications · Spezifikationen

Items	Characteristics
Temperature range	-40 °C ~ +105 °C voltage derating when hotspot temp ≥ 85 °C
Rated Voltage U_N	450, 700, 900, 1100Vdc at 85 °C further rated voltage on request
Voltage test between terminals U_{TT}	$1.5 \times U_N / 10s$
Maximum ripple Voltage U_{AC} peak to peak	$0.2 \times U_N$ 85 °C
Terminals	tinned wired leads
Life Time Test / Standard	IEC 61071:2007
Life Time Expectancy	170 000 hrs ($T_{HOTSPOT}$ 75 °C, $1.0 \times U_N$)
Failure Rate	≤ 50 FIT = 50×10^{-9} Failures / hour
Dielectric	Polypropylene
Safety function	Self healing film – optional segmented film with fuse function
Case material	PBT conform to UL94V-0
Filling material	resin conform to UL94V-0
Product Compliance	RoHS, REACH, Conflict Minerals a.o. - refer to p.12–13

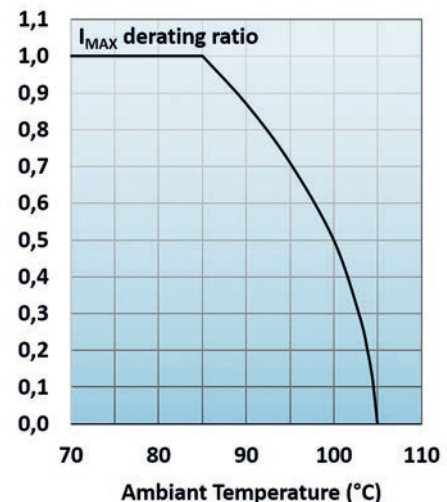
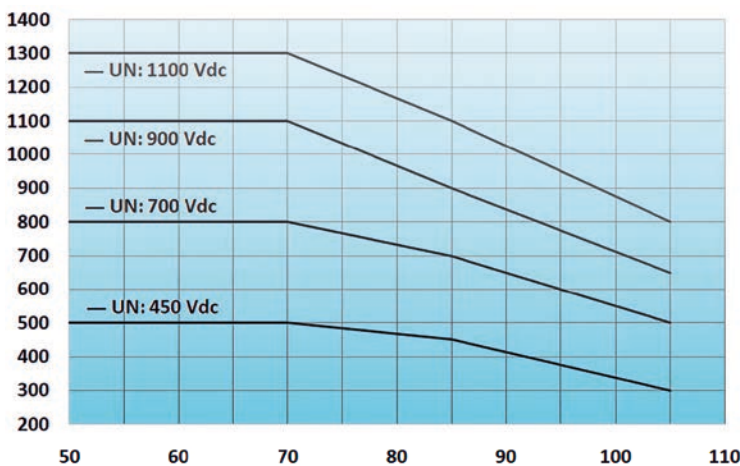


> Dimensions · Abmessungen



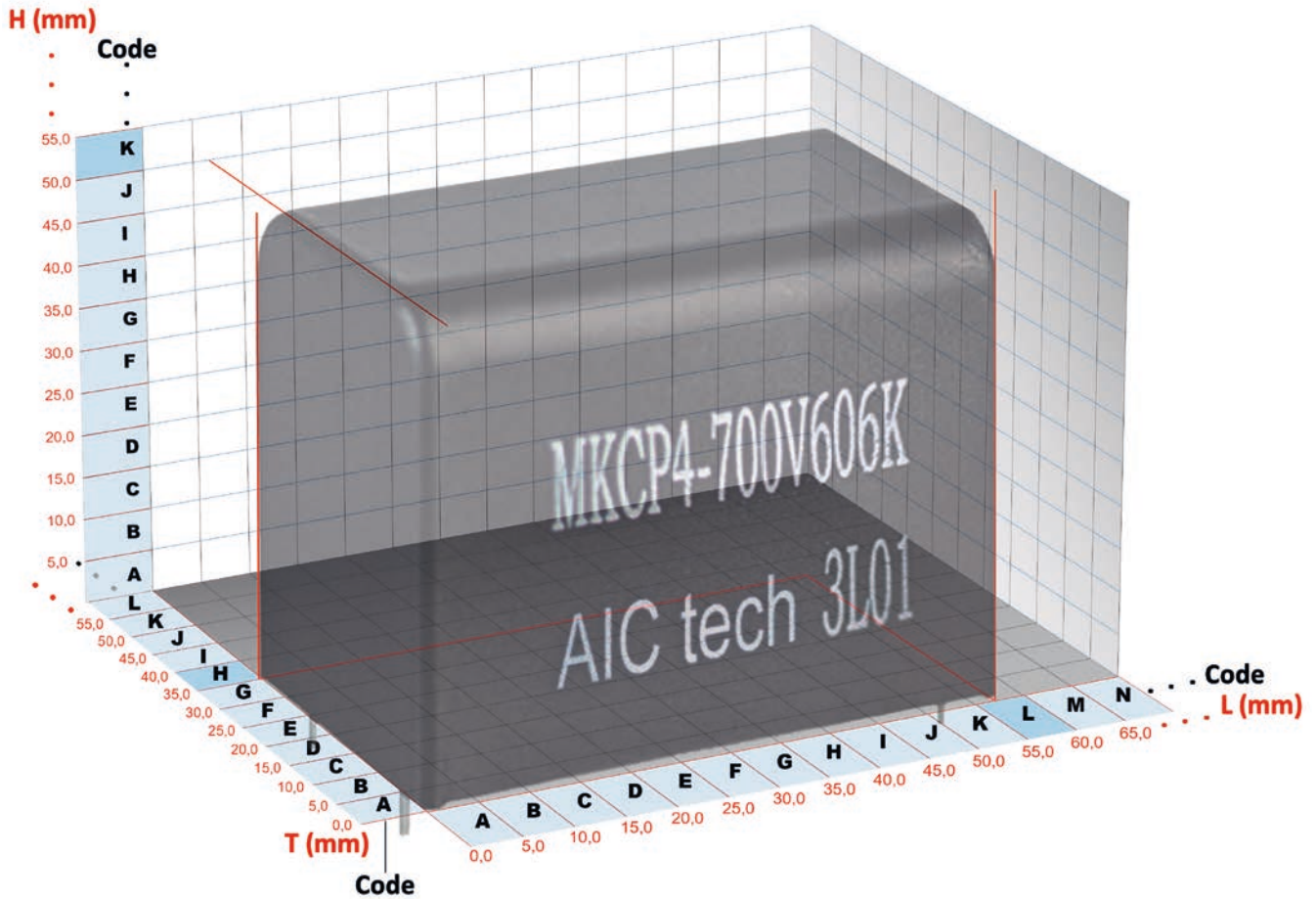
For details refer to p. 9 · Technische Details siehe S. 9

> Voltage and current derating · Spannung und Strom Abstufung



> Case Code · Gehäuse Codierung

Example: MKCP4 700Vdc · 60 µF · T=35.0mm, H=50.0mm, L=57.5mm
 Product Code MKCP4-700V606KHKL



Case dimension code	Case (mm)			Terminals (mm)		
	T	H	L	P1	P2	Ød
DGI	16.0	31.0	41.0	37.5	5.0	1.0
	18.0	32.0	42.0	37.5	10.2	1.0
ECG	20.0	14.0	31.5	27.5	5.0	1.0
EHI	21.5	38.5	43.0	37.5	10.2	1.0
EGI	23.0	34.0	43.0	37.5	10.2	1.2
EII	24.0	44.0	42.0	37.5	10.2	1.0
FJL	25.0	45.0	57.5	52.5	10.2	1.2
FEI	27.0	21.0	42.0	37.5	10.2	1.2
FHI	27.0	36.0	41.0	37.5	10.2	1.2
FII	28.0	42.5	42.0	37.5	10.2	1.0
	29.0	44.0	41.0	37.5	15.0	1.2
GJI	30.0	45.0	42.0	37.5	20.3	1.0
GJL	30.0	45.0	57.5	52.5	20.3	1.2
GLI	30.0	55.0	42.0	37.5	20.3	1.0

Case dimension code	Case (mm)			Terminals (mm)		
	T	H	L	P1	P2	Ød
HEL	35.0	24.0	57.5	52.5	20.3	1.2
HKL	35.0	50.0	57.5	52.5	20.3	1.2
HML	35.0	60.0	57.5	52.5	20.3	1.2
HNL	35.0	65.0	57.5	52.5	20.3	1.2
HQL	35.0	80.0	57.5	52.5	20.3	1.2
HEL	39.0	24.0	57.5	52.5	20.3	1.2
IEL	43.0	22.0	57.5	52.5	20.3	1.2
JEI	45.0	21.0	42.0	37.5	20.3	1.2
JLL	45.0	57.0	57.5	52.5	20.3	1.2
JNL	45.0	65.0	57.5	52.5	20.3	1.2
MJL	60.0	45.0	57.5	52.5	20.3	1.2

Additional designs on request · Weitere Designs auf Anfrage

> Product Code · Bestellbezeichnung

Example: Series MKCP4 · 900 V · 60 µF +/- 10 % · T = 60 mm · H = 45 mm · L = 57.5 mm

MKCP4	900 V	606	K	MJL	
Type of series	Rated voltage xxxV	Capacitance code	Capacitance tolerance	Case Code	Specific features (...)
		The first two digits are significant. The last digit indicates the number of following zeros in pF.	K : ± 10 % J : ± 5 %		

Rated DC Voltage U_N derating Voltage test between terminals U_{TT}	Nominal Capacitance C_N [µF]	Ripple Current at 85 °C 1 k – 10 kHz I_r^* [A RMS]	Peak Current Maximum value \hat{I} [A]	ESR [mΩ]	ESL [nH]	Thermal Resist. R_{th} [K/W]	dv/dt [V/µs]	Dimensions			Product Code	
								Case Size $T \times H \times L$ [mm]	Terminals $P1$ [mm] $P2$ [mm] $\varnothing d$ [mm]			
450 Vdc at 85 °C 500Vdc at 70 °C 300Vdc at 105 °C U_{TT} 650Vdc / 10s	20	12.0	800	6.0	18	13.0	40	21.5x38.5x43	37.5	10.2	1.0	MKCP4-450V206KEHI
		12.5	800	6.0	19	12.0	40	24x44x42	37.5	10.2	1.0	MKCP4-450V206KEII
	25	13.0	1000	5.5	19	12.0	40	24x44x42	37.5	10.2	1.0	MKCP4-450V256KEII
		12.0	800	6.0	18	13.0	40	21.5x38.5x43	37.5	10.2	1.0	MKCP4-450V306KEHI
	30	17.0	1200	3.5	19	12.0	40	24x44x42	37.5	10.2	1.0	MKCP4-450V306KEIR
		14.0	900	5.0	19	12.0	40	24x44x42	37.5	10.2	1.0	MKCP4-450V356KEII
	35	18.5	1400	3.5	19	9.5	40	30x45x42	37.5	20.3	1.0	MKCP4-450V356KGJI
		18.5	1400	3.5	19	9.5	40	30x45x42	37.5	20.3	1.0	MKCP4-450V406KGJI
	40	18.5	1600	3.5	21	9.5	40	30x55x42	37.5	20.3	1.0	MKCP4-450V406GGLI
		13.5	800	6.0	19	11.0	20	25x45x57.5	52.5	10.2	1.2	MKCP4-450V406KFJL
	45	13.5	900	6.0	19	11.0	20	25x45x57.5	52.5	10.2	1.2	MKCP4-450V456KFJL
		20.5	1400	3.0	21	9.5	40	30x55x42	37.5	20.3	1.0	MKCP4-450V456GGLI
	50	15.5	1000	5.0	19	9.5	20	30x45x57.5	52.5	20.3	1.2	MKCP4-450V506KGJL
	55	20.5	1300	4.0	21	8.0	20	35x50x57.5	52.5	20.3	1.2	MKCP4-450V556KHKL
	60	18.0	1200	4.5	20	8.0	20	35x50x57.5	52.5	20.3	1.2	MKCP4-450V606KHKL
	65	20.5	1300	4.0	21	8.0	20	35x50x57.5	52.5	20.3	1.2	MKCP4-450V656KHKL
	70	19.0	1400	4.0	20	8.0	20	35x50x57.5	52.5	20.3	1.2	MKCP4-450V706KHKL
	80	20.5	1600	3.5	21	8.0	20	35x50x57.5	52.5	20.3	1.2	MKCP4-450V806KHKL
85	20.5	1700	3.5	21	8.0	20	35x60x57.5	52.5	20.3	1.2	MKCP4-450V856KHML	
90	22.0	1800	3.0	21	8.0	20	35x60x57.5	52.5	20.3	1.2	MKCP4-450V906KHML	
180	22.0	2500	3.0	28	8.0	14	35x80x57.5	52.5	20.3	1.2	MKCP4-450V187KHQLP	
700 Vdc at 85 °C 800Vdc at 70 °C 500Vdc at 105 °C U_{TT} 1050Vdc / 10s	10	8.0	400	12.0	17	15.5	40	18x32x42	37.5	10.2	1.0	MKCP4-700V106KDGI
	20	12.0	800	6.0	18	13.0	40	21.5x38.5x43	37.5	10.2	1.0	MKCP4-700V206KEHI
	22	13.5	880	5.5	19	12.0	40	24x44x42	37.5	10.2	1.0	MKCP4-700V226KEII
	25	14.0	1000	5.5	30	11.0	40	28x42.5x42	37.5	10.2	1.0	MKCP4-700V256KFII
	30	17.0	1200	4.0	19	9.5	40	30x45x42	37.5	20.3	1.0	MKCP4-700V306KGJI
		12.0	600	8.0	19	11.0	20	25x45x57.5	52.5	10.2	1.2	MKCP4-700V306KFJL
	35	18.5	1400	3.5	19	9.5	40	30x45x42	37.5	20.3	1.2	MKCP4-700V356KGJIS
		12.5	700	7.0	19	11.0	20	25x45x57.5	52.5	10.2	1.2	MKCP4-700V356KFJL
	40	13.5	800	6.0	19	11.0	20	25x45x57.5	52.5	10.2	1.2	MKCP4-700V406KFJL
	45	15.0	900	5.5	19	9.5	20	30x45x57.5	52.5	20.3	1.2	MKCP4-700V456KGJL
	50	17.3	1000	4.0	22	11.0	20	25x65x57.5	52.5	10.2	1.2	MKCP4-700V506KFNLRL
		14.2	1000	5.5	20	9.5	20	30x45x57.5	52.5	20.3	1.2	MKCP4-700V506KGJL

* additional information for I_r on page 51 and 58

Additional designs on request · Weitere Designs auf Anfrage

MKCP4 · PCB mount · 105 °C

Rated DC Voltage U_N derating Voltage test between terminals U_T	Nominal Capacitance C_N [μF]	Ripple Current at 85 °C 1 k–10 kHz I_r^* [A RMS]	Peak Current Maximum value \hat{I} [A]	ESR [mΩ]	ESL [nH]	Thermal Resist. R_{th} [K/W]	dv/dt [V/μs]	Dimensions				Product Code
								Case Size $T \times H \times L$ [mm]		Terminals $P1$ [mm] $P2$ [mm] $\varnothing d$ [mm]		
700 Vdc at 85 °C 800Vdc at 70 °C 500Vdc at 105 °C U_T 1050Vdc/10s	55	18.0	1100	4.5	20	8.0	20	35x50x57.5	52.5	20.3	1.2	MKCP4-700V556KHKL
	60	19.0	1200	4.0	20	8.0	20	35x50x57.5	52.5	20.3	1.2	MKCP4-700V606KHKL
	65	20.5	1300	3.5	20	8.0	20	35x50x57.5	52.5	20.3	1.2	MKCP4-700V656KHKL
	70	20.5	1400	3.5	21	8.0	20	35x60x57.5	52.5	20.3	1.2	MKCP4-700V706KHML
	80	21.5	1600	3.0	21	8.0	20	35x60x57.5	52.5	20.3	1.2	MKCP4-700V806KHML
	85	22.0	1700	3.0	22	8.0	20	35x65x57.5	52.5	20.3	1.2	MKCP4-700V856KHNL
	90	22.0	1800	3.0	22	8.0	20	35x65x57.5	52.5	20.3	1.2	MKCP4-700V906KHNL
		23.0	1800	3.0	21	7.5	20	45x57x57.5	52.5	20.3	1.2	MKCP4-700V906KJLL
	100	24.0	2000	2.5	28	8.0	20	35x80x57.5	52.5	20.3	1.2	MKCP4-700V107KHQL
		25.0	2000	2.5	22	7.5	20	45x65x57.5	52.5	20.3	1.2	MKCP4-700V107KJNL
25.0		2000	2.5	19	6.0	20	60x45x57.5	52.5	20.3	1.2	MKCP4-700V107KMJL	
120	22.0	2400	3.0	28	8.0	20	35x80x57.5	52.5	20.3	1.2	MKCP4-700V127KHQLP	
900 Vdc at 85 °C 1100Vdc at 70 °C 650Vdc at 105 °C U_T 1350Vdc/10s	2.5	4.0	150	35.0	14	20.0	60	20x14x31.5	27.5	5.0	1.0	MKCP4-900V255KECGAS
	5	8.0	200	22.0	18	13.0	40	27x21x42	37.5	10.2	1.2	MKCP4-900V505KFEI
	5.5	11.0	220	9.5	18	12.0	40	23x34x43	37.5	10.2	1.2	MKCP4-900V555KEGIS
	8	7.0	230	16.5	18	15.5	40	16x31x41	37.5	5.0	1.0	MKCP4-900V805KDGIAS
	10	9.0	400	11.0	18	13.0	40	21.5x38.5x43	37.5	10.2	1.0	MKCP4-900V106KEHI
		10.0	480	9.0	18	13.0	40	21.5x38.5x43	37.5	10.2	1.0	MKCP4-900V126KEHI
	12	10.0	240	15.0	18	8.0	20	35x24x57.5	52.5	20.3	1.2	MKCP4-900V126KHEL
		10.0	520	9.0	18	13.0	40	45x21x42	37.5	20.3	1.2	MKCP4-900V136KJEI
	13	12.0	600	7.0	19	12.0	40	24x44x42	37.5	10.2	1.0	MKCP4-900V156KEII
		9.5	300	12.0	19	11.0	20	25x45x57.5	52.5	10.2	1.2	MKCP4-900V156KFJL
	15	12.0	400	8.0	18	10.5	40	27x36x41	37.5	15.0	1.2	MKCP4-900V156KFHIDS
		11.5	400	11.5	18	8.0	20	39x24x57.5	52.5	20.3	1.2	MKCP4-900V166KHEL
	16	11.5	400	11.5	18	8.0	20	39x24x57.5	52.5	20.3	1.2	MKCP4-900V166KHEL
	17	8.6	340	12.0	19	8.0	20	43x22x57.5	52.5	20.3	1.2	MKCP4-900V176KIELS
	20	15.5	800	5.0	19	9.5	40	30x45x42	37.5	20.3	1.0	MKCP4-900V206KGJI
		10.0	400	11.0	19	11.0	20	25x45x57.5	52.5	10.2	1.2	MKCP4-900V206KFJL
	25	15.5	700	5.0	19	9.5	40	29x44x41	37.5	15.0	1.2	MKCP4-900V206KFIIAS
		11.5	500	9.0	19	9.5	20	30x45x57.5	52.5	20.3	1.2	MKCP4-900V256KGJL
	35	15.5	700	6.0	20	8.0	20	35x50x57.5	52.5	20.3	1.2	MKCP4-900V356KHKL
	40	17.0	800	5.0	20	8.0	20	35x50x57.5	52.5	20.3	1.2	MKCP4-900V406KHKL
	45	16.5	900	5.0	21	8.0	20	35x60x57.5	52.5	20.3	1.2	MKCP4-900V456KHML
	50	18.5	1000	4.0	21	8.0	20	35x60x57.5	52.5	20.3	1.2	MKCP4-900V506KHML
		19.0	1100	4.0	22	8.0	20	35x65x57.5	52.5	20.3	1.2	MKCP4-900V556KHNL
	55	19.6	1100	4.0	21	7.5	20	45x57x57.5	52.5	20.3	1.2	MKCP4-900V556KJLL
		23.5	1200	3.5	19	6.0	20	60x45x57.5	52.5	20.3	1.2	MKCP4-900V606KMJL
	60	20.5	1200	3.5	28	8.0	20	35x80x57.5	52.5	20.3	1.2	MKCP4-900V606KHQL
23.0		1300	3.0	22	7.5	20	45x65x57.5	52.5	20.3	1.2	MKCP4-900V656KJNL	

* additional information for I_r on page 51 and 58

Additional designs on request · Weitere Designs auf Anfrage

Rated DC Voltage U_N derating Voltage test between terminals U_{TT}	Nominal Capacitance C_N [μ F]	Ripple Current at 85 °C 1 k–10 kHz I_r^* [A RMS]	Peak Current Maximum value \hat{I} [A]	ESR	ESL	Thermal Resist.	dv/dt	Dimensions				Product Code
				ESR	ESL	R_{th}		Case Size		Terminals		
				[m Ω]	[nH]	[K/W]	[V/ μ s]	T x H x L [mm]	P1 [mm]	P2 [mm]	$\varnothing d$ [mm]	
1100 Vdc at 85 °C 1300Vdc at 70 °C 800Vdc at 105 °C U_{TT} 1650Vdc/10s	4	5.5	180	27.0	18	15.5	45	18x32x42	37.5	10.2	1.0	MKCP4-1100V405KDGI
	5	7.5	225	16.0	18	13.0	45	21.5x38.5x43	37.5	10.2	1.0	MKCP4-1100V505KEHI
	7	8.5	310	11.5	18	13.0	45	21.5x38.5x43	37.5	10.2	1.0	MKCP4-1100V705KEHI
	8	9.5	360	10.0	18	13.0	45	21.5x38.5x43	37.5	10.2	1.0	MKCP4-1100V805KEHI
	10	11.0	459	8.0	19	12.0	45	24x44x42	37.5	10.2	1.0	MKCP4-1100V106KEII
		8.5	230	16.0	19	11.0	23	25x45x57.5	52.5	10.2	1.2	MKCP4-1100V106KFJL
	12	13.5	540	6.5	19	9.5	45	30x45x42	37.5	20.3	1.0	MKCP4-1100V126KGJI
	15	10.5	340	10.5	19	11.0	23	25x45x57.5	52.5	10.2	1.2	MKCP4-1100V156KFJL
		15.0	670	5.5	21	9.5	45	30x55x42	37.5	20.3	1.0	MKCP4-1100V156KGLI
	20	12.5	460	8.0	19	9.5	23	30x45x57.5	52.5	20.3	1.2	MKCP4-1100V206KGJL
	22	14.5	500	7.0	20	8.0	23	35x50x57.5	52.5	20.3	1.2	MKCP4-1100V226KHKL
	25	15.0	550	6.5	20	8.0	23	35x50x57.5	52.5	20.3	1.2	MKCP4-1100V256KHKL
	30	16.5	690	5.0	21	8.0	23	35x60x57.5	52.5	20.3	1.2	MKCP4-1100V306KHML
	35	18.0	800	4.5	22	8.0	23	35x65x57.5	52.5	20.3	1.2	MKCP4-1100V356KHNL
		18.0	800	4.5	21	7.5	23	45x57x57.5	52.5	20.3	1.2	MKCP4-1100V356KJLL
	40	22.0	920	4.0	19	6.0	23	60x45x57.5	52.5	20.3	1.2	MKCP4-1100V406KMJL
19.0		920	4.0	29	8.0	23	35x80x57.5	52.5	20.3	1.2	MKCP4-1100V406KHQL	
45	19.5	1000	4.0	22	7.5	23	45x65x57.5	52.5	20.3	1.2	MKCP4-1100V456KJNL	

* additional information for I_r on page 51 and 58

Additional designs on request · Weitere Designs auf Anfrage

MKCP4T · PCB mount · 105 °C

Rated DC Voltage U_N derating Voltage test between terminals U_T	Nominal Capacitance C_N [μ F]	Ripple Current at 85 °C 1 k–10 kHz I_r^* [A RMS]	Peak Current Maximum value \hat{I} [A]	ESR [m Ω]	ESL [nH]	Thermal Resist. R_{th} [K/W]	dv/dt [V/ μ s]	Dimensions				Product Code
								Case Size		Terminals		
								T x H x L [mm]	P1 [mm]	P2 [mm]	$\varnothing d$ [mm]	
450 Vdc at 85 °C 500Vdc at 70 °C 300Vdc at 105 °C U_T 650Vdc/10s	20	12.0	800	6.0	18	13.0	40	21.5x38.5x43	37.5	10.2	1.0	MKCP4T-450V206KEHI
	25	13.0	1000	5.5	19	12.0	40	24x44x42	37.5	10.2	1.0	MKCP4T-450V256KEII
	35	18.5	1400	3.5	19	9.5	40	30x45x42	37.5	20.3	1.0	MKCP4T-450V356KGJI
	40	18.5	1600	3.5	21	9.5	40	30x55x42	37.5	20.3	1.0	MKCP4T-450V406KGLI
	40	13.5	800	6.0	19	11.0	20	25x45x57.5	52.5	10.2	1.2	MKCP4T-450V406KFJL
	50	15.5	1000	5.0	19	9.5	20	30x45x57.5	52.5	20.3	1.2	MKCP4T-450V506KGJL
	60	18.0	1200	4.5	20	8.0	20	35x50x57.5	52.5	20.3	1.2	MKCP4T-450V606KHKL
	70	19.0	1400	4.0	20	8.0	20	35x50x57.5	52.5	20.3	1.2	MKCP4T-450V706KHKL
	80	20.5	1600	3.5	21	8.0	20	35x50x57.5	52.5	20.3	1.2	MKCP4T-450V806KHKL
	85	20.5	1700	3.5	21	8.0	20	35x60x57.5	52.5	20.3	1.2	MKCP4T-450V856KHML
90	22.0	1800	3.0	21	8.0	20	35x60x57.5	52.5	20.3	1.2	MKCP4T-450V906KHML	
700 Vdc at 85 °C 800Vdc at 70 °C 500Vdc at 105 °C U_T 1050Vdc/10s	15	10.5	600	8.0	18	13.0	40	21.5x38.5x43	37.5	10.2	1.0	MKCP4T-700V156KEHI
	20	12.5	800	6.0	19	12.0	40	24x44x42	37.5	10.2	1.0	MKCP4T-700V206KEII
	25	14.0	1000	5.5	30	11.0	40	28x42.5x42	37.5	10.2	1.0	MKCP4T-700V256KFII
		15.0	1000	5.0	19	9.5	40	30x45x42	37.5	20.3	1.0	MKCP4T-700V256KGJI
	30	17.0	1200	4.0	21	9.5	40	30x55x42	37.5	20.3	1.0	MKCP4T-700V306KGLI
		12.0	600	8.0	19	11.0	20	25x45x57.5	52.5	10.2	1.2	MKCP4T-700V306KFJL
	40	15.0	800	6.0	19	9.5	20	30x45x57.5	52.5	20.3	1.2	MKCP4T-700V406KGJL
	50	14.2	1000	5.5	20	9.5	20	30x45x57.5	52.5	20.3	1.2	MKCP4T-700V506KGJL
		17.0	1000	5.0	20	8.0	20	35x50x57.5	52.5	20.3	1.2	MKCP4T-700V506KHKL
	55	18.0	1100	4.5	20	8.0	20	35x50x57.5	52.5	20.3	1.2	MKCP4T-700V556KHKL
	70	20.5	1400	3.5	21	8.0	20	35x60x57.5	52.5	20.3	1.2	MKCP4T-700V706KHML
	80	21.5	1600	3.0	21	8.0	20	35x60x57.5	52.5	20.3	1.2	MKCP4T-700V806KHML
100	21.0	2000	4.0	35	7.0	20	60x45x57.5	52.5	20.3	1.2	MKCP4T-700V107KMJL	
120	22.5	2000	3.0	35	8.0	20	35x80x57.5	52.5	20.3	1.2	MKCP4T-700V127KHQLP	
900 Vdc at 85 °C 1100Vdc at 70 °C 650Vdc at 105 °C U_T 1350Vdc/10s	9	8.5	360	12.5	18	13.0	40	21.5x38.5x43	37.5	10.2	1.0	MKCP4T-900V905KEHI
	12	10.0	480	9.0	19	12.0	40	24x44x42	37.5	10.2	1.0	MKCP4T-900V126KEII
	15	13.5	600	7.0	19	9.5	40	30x45x42	37.5	20.3	1.0	MKCP4T-900V156KGJI
	17	14.0	680	6.0	19	9.5	40	30x45x42	37.5	20.3	1.0	MKCP4T-900V176KGJI
	20	15.5	800	5.0	21	9.5	40	30x55x42	37.5	20.3	1.0	MKCP4T-900V206KGLI
		10.0	400	11.0	19	11.0	20	25x45x57.5	52.5	10.2	1.2	MKCP4T-900V206KFJL
	25	11.5	500	9.0	19	9.5	20	30x45x57.5	52.5	20.3	1.2	MKCP4T-900V256KGJL
	30	14.0	600	7.0	20	8.0	20	35x50x57.5	52.5	20.3	1.2	MKCP4T-900V306KHKL
	35	15.5	700	6.0	20	8.0	20	35x50x57.5	52.5	20.3	1.2	MKCP4T-900V356KHKL
40	16.5	800	5.0	21	8.0	20	35x60x57.5	52.5	20.3	1.2	MKCP4T-900V406KHML	

* additional information for I_r on page 51 and 58

Additional designs on request · Weitere Designs auf Anfrage

Rated DC Voltage U_N derating Voltage test between terminals U_{TT}	Nominal Capacitance C_N [μ F]	Ripple Current at 85 °C 1 k–10 kHz I_r^* [A RMS]	Peak Current Maximum value \hat{I} [A]	ESR [m Ω]	ESL [nH]	Thermal Resist. R_{th} [K/W]	dv/dt [V/ μ s]	Dimensions				Product Code	
								Case Size		Terminals			
								T x H x L [mm]	P1 [mm]	P2 [mm]	$\varnothing d$ [mm]		
1100 Vdc at 85 °C 1300Vdc at 70 °C 800Vdc at 105 °C U_{TT} 1650Vdc/10s	5	7.5	225	16.0	18	13.0	45	21.5x38.5x43	37.5	10.2	1.0	MKCP4T-1100V505KEHI	
	6	8.0	270	13.5	18	13.0	45	21.5x38.5x43	37.5	10.2	1.0	MKCP4T-1100V605KEHI	
	8	10.0	360	10.0	19	12.0	45	24x44x42	37.5	10.2	1.0	MKCP4T-1100V805KEII	
	12	13.5	540	6.5	19	9.5	45	30x45x42	37.5	20.3	1.0	MKCP4T-1100V126KGJI	
	14	14.0	630	6.0	21	9.5	45	30x55x42	37.5	20.3	1.0	MKCP4T-1100V146KGLI	
		9.5	320	11.5	19	11.0	23	25x45x57.5	52.5	10.2	1.2	MKCP4T-1100V146KFJL	
	15	15.0	675	5.5	21	9.5	45	30x55x42	37.5	20.3	1.0	MKCP4T-1100V156KGLI	
	18	11.5	410	9.0	19	9.5	23	30x45x57.5	52.5	20.3	1.2	MKCP4T-1100V186KGJL	
	22	14.5	500	7.0	20	8.0	23	35x50x57.5	52.5	20.3	1.2	MKCP4T-1100V226KHKL	
	25	15.0	570	6.5	20	8.0	23	35x50x57.5	52.5	20.3	1.2	MKCP4T-1100V256KHKL	
30	16.5	690	5.0	21	8.0	23	35x60x57.5	52.5	20.3	1.2	MKCP4T-1100V306KHML		

* additional information for I_r on page 51 and 58

Additional designs on request · Weitere Designs auf Anfrage

> Life Time Table · Brauchbarkeitsdauer – Tabelle

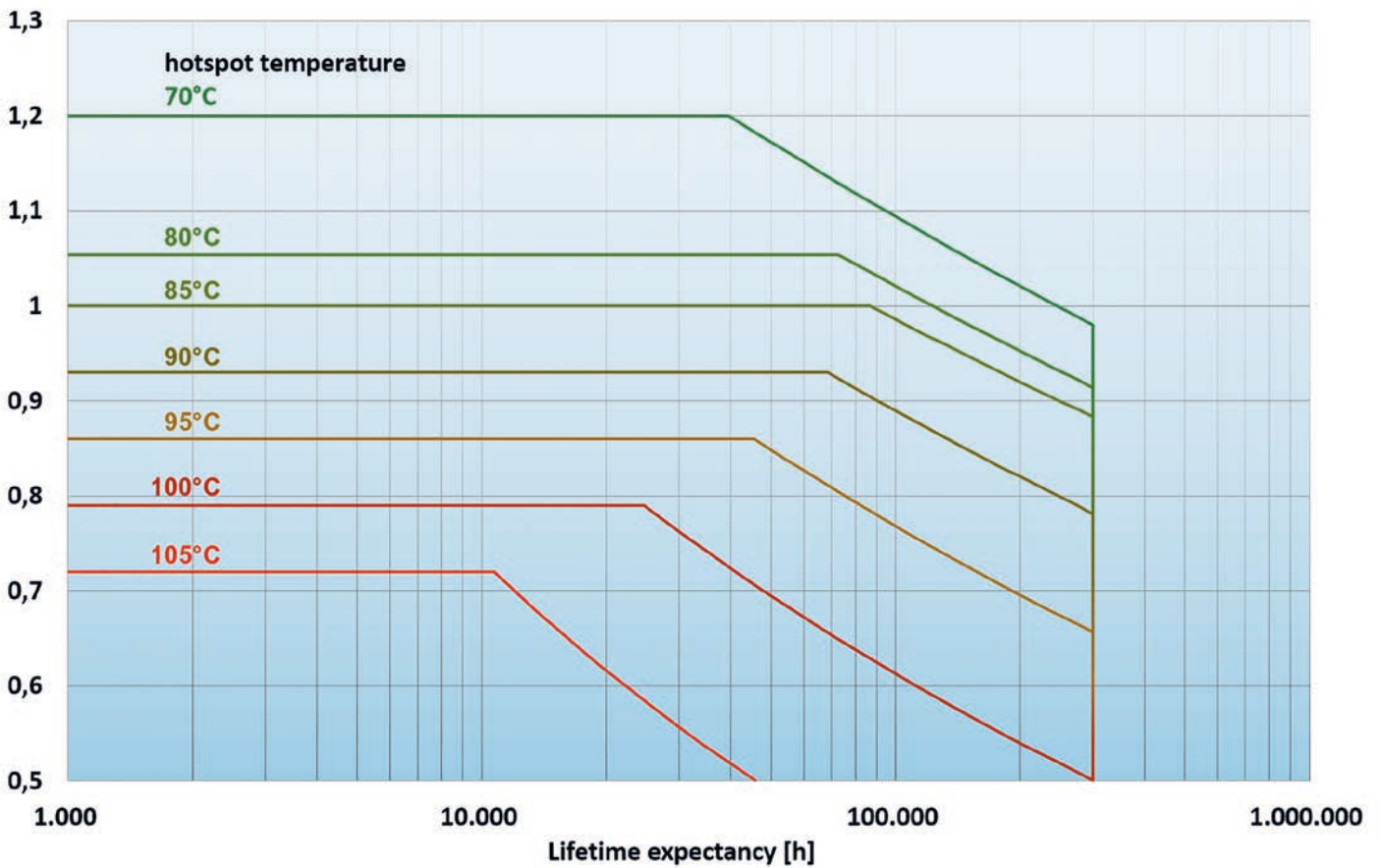
Lifetime as function of ratio between the effective working voltage U_w and the rated DC voltage U_N													
$T_{HOTSPOT}$	x 0.5	x 0.6	x 0.7	x 0.75	x 0.8	x 0.85	x 0.9	x 0.95	x 1.0	x 1.05	x 1.1	x 1.15	x 1.20
50 °C	300	300	300	300	300	300	300	300	300	300	300	243	159
60 °C	300	300	300	300	300	300	300	300	300	300	189	121	79
70 °C	300	300	300	300	300	300	300	300	245	151	95	61	40
75 °C	300	300	300	300	300	300	300	290	175	106	67		
80 °C	300	300	300	300	300	300	300	205	123	76			
85 °C	300	300	300	300	300	300	249	145	87				
90 °C	300	300	300	247	148	148	91	57					
95 °C	300	300	192	119	76	49							
100 °C	300	112	48	33	23								
105 °C	46	22	12										

khrs value limited to 300 000 hours.

> Life Time Graph · Brauchbarkeitsdauer – Diagramm

Lifetime expectancy depending on hotspot temperature $T_{HOTSPOT}$ versus ratio between the effective working voltage U_w and the rated DC voltage U_N

Lebenserwartung in Abhängigkeit von der hotspot Temperatur $T_{HOTSPOT}$ und dem Verhältnis der tatsächlich anliegenden Spannung zur DC Nennspannung U_N

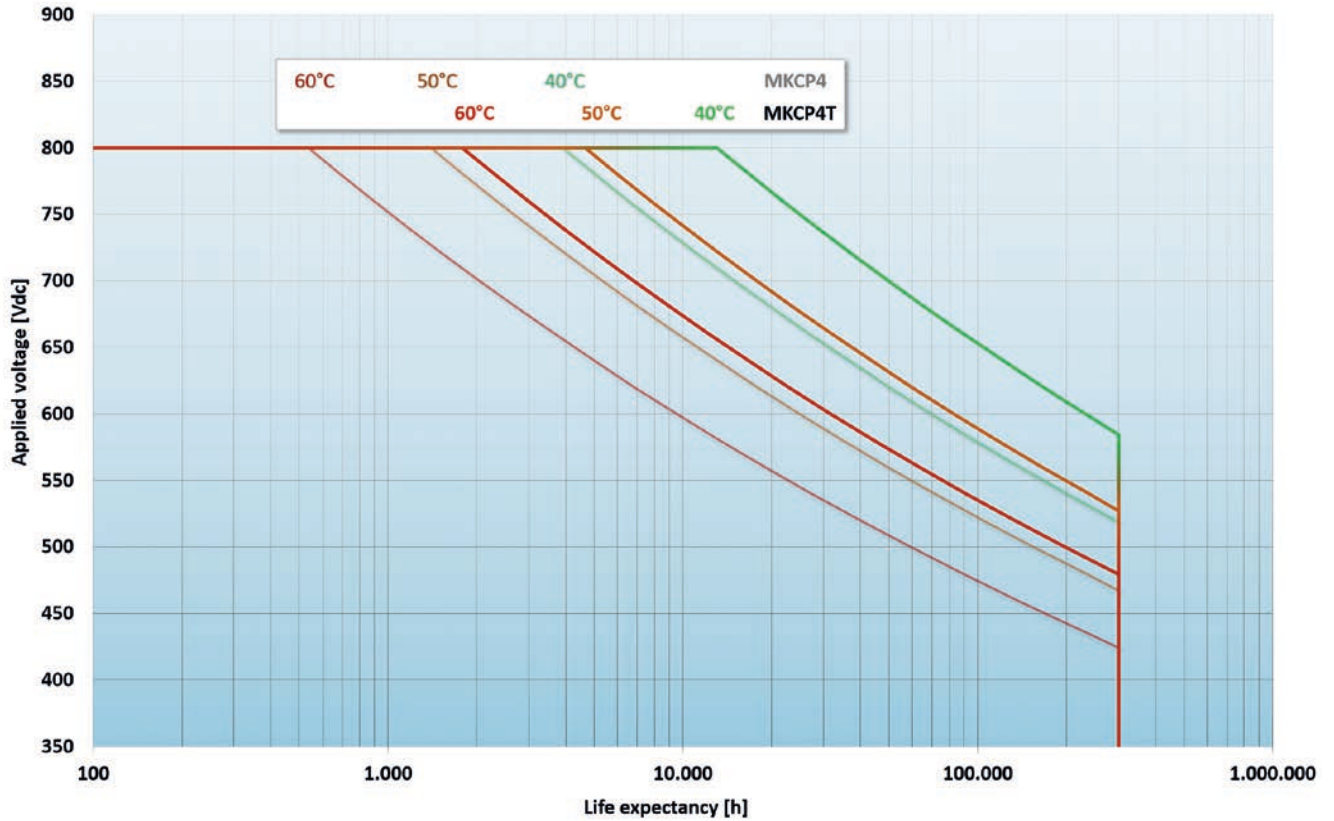


$$T_{HOTSPOT} = T_a + I^2 \times ESR \times R_{th}$$

> 95 % RH Lifetime comparison

Brauchbarkeitsdauer Vergleich bei 95 % relative Luftfeuchte

Example · Beispiel: MKCP4 vs. MKCP4T: $U_N=700\text{Vdc}$ at 85 °C



Example · Beispiel: MKCP4 vs. MKCP4T: $U_N=1100\text{Vdc}$ at 85 °C

