MLC · Screw-Terminal · 85 °C

Standard Performances · Fuse Function · high withstanding Voltage

Optional UL 810 standard compliance with series MLCU

Optionale Einhaltung der Norm UL 810 mit der Serie MLCU

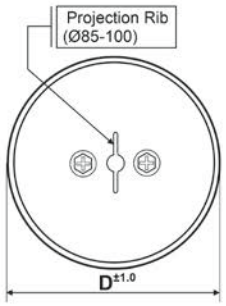
› Specifications · Spezifikationen

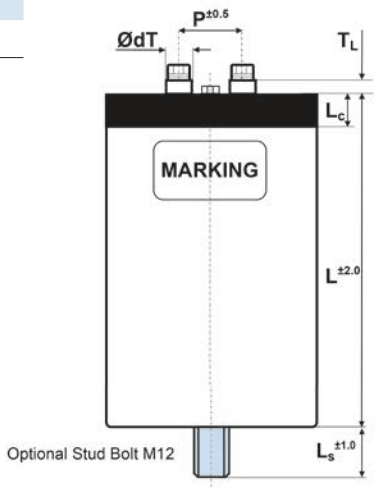
Items	Characteristics
Temperature range	-40 °C ~ +85 °C at 0.7 U_N
	-40 °C ~ +80 °C at 0.8 U_N
	-40 °C ~ +75° C at 0.9 U_N
	-40 °C ~ +70 °C at 1.0 U_N
Rated Voltage U_N	900 ~ 1500 Vdc (other available on request)
Voltage test between terminals U_{TT}	1.5 x U_N / 10 s
Voltage test terminals to case U_{TC}	3200 Vac / 10 s
Terminals	M6 x 10 (refer to p. 8)
Stud Bolt	M12 x 16 (refer to p. 8)
Life Time Test / Reference Standard	IEC 61071 : 2007
Life Time Expectancy	150 000 hrs ($T_{HOTSPOT}$ 70 °C, 1.0 x U_N)
Failure Rate	<= 50 FIT = 50 x 10^{-9} Failures / hour
Dielectric	Polypropylene
Safety Function	Segmented metallized film with Fuse Function
Cap / Impregnants	UL94V-0 listed PBT / Epoxy / Urethane Resin
Case material	Aluminum
Humidity	Class F : 75 % annual average, 95 % 30days / year
Product Compliance	RoHS, REACH, Conflict Minerals a.o. - refer to p.12 – 13

› Dimensions · Abmessungen

For details refer to p. 8 · Technische Details siehe S. 8

Dimensions (mm)	ØD				
	Ø 85	Ø 88.5	Ø 100	Ø 116	Ø 140
Terminal Pitch P	32	32	32	50	50
Diameter at Terminal Ø dT	12	12	12	14	19
Terminal Lenght T_L	5	5	5	5	5
Cap Lenght L_C	15	15	15	20	20
Optional Stud Bolt Length L_S	16	16	16	18	18
Clearance distance (mm)	20	20	20	36	31
Creapage distance (mm)	28	28	28	36	31
Permissible terminal current (Arms)	60	60	60	80	100





› Ripple Current Multiplier · I_r Strom Multiplikatoren

I_r Multiplier (1 kHz – 10 kHz)				
Ambiant Temp.	0.7x U_N	0.8x U_N	0.9x U_N	1.0x U_N
T_a = 50°C	1.32	1.22	1.11	1.00
T_a = 60°C	1.11	1.00	0.86	0.70
T_a = 70°C	0.86	0.70	0.50	0.00
T_a = 75°C	0.70	0.50	0.00	
T_a = 80°C	0.50	0.00		
T_a = 85°C	0.00			

I_{max} is to be controlled below the permissible terminal current. Please contact us if ripple current includes frequencies below 1 kHz and/or above 10 kHz.

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› Product Code · Bestellbezeichnung

Example: Series MLC · 1100 V · 580 µF +/- 10 % · D = 116 mm · L = 125 mm with Stud Bolt

MLC **1100 V** **587** **K** **B** **116** **125**

- **MLC** — **Type of series**
- **1100 V** — **Rated voltage xxxV**
- **587** — **Capacitance code**: The first two digits are significant. The last digit indicates the number of following zeros in pF.
- **K** — **Capacitance tolerance**: K : ± 10 %; J : -± 5 %
- **B** — **Shape code**: B : Stud Bolt; N : plain bottom
- **116** — **Case Diameter ØD**: Length in mm
- **125** — **Case Lenght**: Length in mm
- **Specific features (...)**

Rated DC Voltage U_N Max ripple Voltage U_r Non repetitive Surge Volt. U_S	Nominal Capacitance C_N [µF]	Ripple Current at 50°C 1 k–10 kHz I_r* [A RMS]	Peak Current Maximum value $\hat{I}$ [kA]	Surge Current Maximum value I_S [kA]	ESR ESR [mΩ]	ESL ESL [nH]	Thermal Resistance R_{th} [K/W]	Case Size D x L [mm]	Product Code # = variable value, see fixing code in the product code
900 VDC Ripple Voltage 200 V Surge Voltage 1 350 V	**180**	28	4	12	2.9	60	8.4	85x70	MLC900V187K#8570
	200	28	4	12	3.1	65	7.9	85x75	MLC900V207K#8575
	210	31	5	15	2.6	60	7.8	88.5x70	MLC900V217K#88570
	230	28	4	12	3.3	65	7.4	85x80	MLC900V237K#8580
		30	5	15	2.8	65	7.7	88.5x75	MLC900V237K#88575
	250	30	4	12	3.1	65	7.0	88.5x80	MLC900V257K#88580
	260	28	4	12	3.7	75	6.8	85x87	MLC900V267K#8587
	270	37	6	18	2.2	60	6.5	100x70	MLC900V277K#10070
	280	28	4	12	3.4	75	6.8	88.5x87	MLC900V287K#88587
	290	27	4	12	4.1	80	6.4	85x95	MLC900V297K#8595
	300	37	6	18	2.3	65	6.1	100x75	MLC900V307K#10075
	320	29	4	12	3.8	80	6.1	88.5x95	MLC900V327K#88595
	330	27	4	12	4.8	90	5.6	85x106	MLC900V337K#85106
		36	6	18	2.5	65	5.9	100x80	MLC900V337K#10080
	360	28	4	12	4.4	90	5.7	88.5x106	MLC900V367K#885106
	370	52	8	24	1.5	40	4.8	85x125	MLC900V377K#85125
		36	6	18	2.8	75	5.4	100x87	MLC900V377K#10087
	380	43	8	24	1.7	60	6.0	116x70	MLC900V387K#11670
	390	26	4	12	5.5	100	5.2	85x120	MLC900V397K#85120
	410	52	8	24	1.6	40	4.5	85x135	MLC900V417K#85135
		43	8	24	1.9	65	5.6	116x75	MLC900V417K#11675
	420	56	9	27	1.4	40	4.5	88.5x125	MLC900V427K#885125
		34	6	18	3.1	80	5.4	100x95	MLC900V427K#10095
	430	28	5	15	5.1	100	4.9	88.5x120	MLC900V437K#885120
	460	52	8	24	1.7	45	4.1	85x145	MLC900V467K#85145
		56	9	27	1.5	40	4.2	88.5x135	MLC900V467K#885135
		43	8	24	2.0	65	5.2	116x80	MLC900V467K#11680
	480	34	6	18	3.5	90	4.7	100x106	MLC900V487K#100106
	510	55	9	27	1.6	45	4.0	88.5x145	MLC900V517K#885145
	520	52	8	24	1.9	50	3.8	85x159	MLC900V527K#85159
		42	8	24	2.2	75	5.0	116x87	MLC900V527K#11687

* additional information for I_r on page 16

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Rated DC Voltage U_N Max ripple Voltage U_r Non repetitive Surge Volt. U_S	**Nominal Capacitance** C_N [µF]	**Ripple Current** at 50°C 1 k–10 kHz I_r* [A RMS]	**Peak Current** Maximum value $\hat{I}$ [kA]	**Surge Current** Maximum value I_S [kA]	**ESR** ESR [mΩ]	**ESL** ESL [nH]	**Thermal Resistance** R_{th} [K/W]	**Case Size** D x L [mm]	**Product Code** # = variable value, see fixing code in the product code
900 VDC Ripple Voltage 200 V Surge Voltage 1 350 V	**540**	60	12	36	1.1	40	3.9	100x125	MLC900V547K#100125
	560	33	6	18	4.1	100	4.3	100x120	MLC900V567K#100120
	570	55	9	27	1.8	50	3.6	88.5x159	MLC900V577K#885159
		46	12	36	1.4	60	6.6	140x70	MLC900V577K#14070
	590	52	8	24	2.1	55	3.4	85x175	MLC900V597K#85175
		42	8	24	2.4	80	4.5	116x95	MLC900V597K#11695
	600	60	12	36	1.2	40	3.6	100x135	MLC900V607K#100135
	630	46	12	36	1.4	65	6.6	140x75	MLC900V637K#14075
	650	55	9	27	2.0	55	3.2	88.5x175	MLC900V657K#885175
	660	51	8	24	2.5	60	3.0	85x197	MLC900V667K#85197
		41	8	24	2.8	90	4.2	116x106	MLC900V667K#116106
	670	60	12	36	1.3	45	3.5	100x145	MLC900V677K#100145
	700	46	12	36	1.6	65	5.8	140x80	MLC900V707K#14080
	730	54	9	27	2.3	60	2.9	88.5x197	MLC900V737K#885197
	750	60	12	36	1.5	50	3.2	100x159	MLC900V757K#1001509
	760	77	16	48	0.9	40	3.5	116x125	MLC900V767K#116125
	780	41	8	24	3.2	100	3.6	116x120	MLC900V787K#116120
		50	8	24	2.9	70	2.7	85x225	MLC900V787K#85225
		46	12	36	1.7	75	5.4	140x87	MLC900V787K#14087
	830	77	16	48	1.0	40	3.3	116x135	MLC900V837K#116135
	850	60	12	36	1.6	55	2.8	100x175	MLC900V857K#100175
	870	54	9	27	2.6	70	2.6	88.5x225	MLC900V877K#885225
	880	76	15	45	1.1	45	3.0	116x145	MLC900V887K#116145
	890	45	12	36	1.9	80	5.1	140x95	MLC900V897K#14095
	930	77	16	48	1.1	45	3.1	116x145	MLC900V937K#116145
	960	60	12	36	1.9	60	2.5	100x197	MLC900V967K#100197
	1 000	76	16	48	1.2	50	2.8	116x159	MLC900V108K#116159
		44	12	36	2.1	90	4.8	140x106	MLC900V108K#140106
	1 100	60	11	33	2.2	70	2.2	100x225	MLC900V118K#100225
		75	15	45	1.4	55	2.5	116x175	MLC900V118K#116175
		43	11	33	2.5	100	4.2	140x120	MLC900V118K#140120
		80	24	72	0.8	40	3.8	140x125	MLC900V118K#140125
	1 200	80	23	69	0.8	40	3.8	140x135	MLC900V128K#140135
	1 300	75	16	48	1.5	60	2.3	116x197	MLC900V138K#116197
	1 400	81	24	72	0.8	45	3.7	140x145	MLC900V148K#140145
	1 500	74	16	48	1.8	70	2.0	116x225	MLC900V158K#116225
		80	23	69	0.9	50	3.4	140x159	MLC900V158K#140159
	1 700	79	23	69	1.0	55	3.2	140x175	MLC900V178K#140175
	2 000	80	24	72	1.2	60	2.6	140x197	MLC900V208K#140197
	2 300	79	24	72	1.3	70	2.3	140x225	MLC900V238K#140225
1100 VDC Ripple Voltage 250 V Surge Voltage 1 650 V	**140**	26	3	9	3.3	60	8.6	85x70	MLC1100V147K#8570
	160	27	4	12	3.5	65	7.6	85x75	MLC1100V167K#8575
	170	29	4	12	2.8	60	8.3	88.5x70	MLC1100V177K#88570
	180	27	4	12	3.7	65	7.1	85x80	MLC1100V187K#8580
		29	4	12	3.1	65	7.5	88.5x75	MLC1100V187K#88575

* additional information for I_r on page 16

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Rated DC Voltage U_N Max ripple Voltage U_r Non repetitive Surge Volt. U_S	**Nominal Capacitance** **C_N** [µF]	**Ripple Current** at 50°C 1 k–10 kHz **I_r*** [A RMS]	**Peak Current** Maximum value **$\hat{I}$** [kA]	**Surge Current** Maximum value **I_S** [kA]	**ESR** **ESR** [mΩ]	**ESL** **ESL** [nH]	**Thermal Resistance** **R_{th}** [K/W]	**Case Size** **D x L** [mm]	**Product Code** # = variable value, see fixing code in the product code
1100 VDC Ripple Voltage 250 V Surge Voltage 1 650 V	**200**	26	4	12	4.2	75	6.9	85x87	MLC1100V207K#8587
		28	4	12	3.4	65	7.3	88.5x80	MLC1100V207K#88580
	210	34	5	15	2.4	60	6.9	100x70	MLC1100V217K#10070
	230	26	4	12	4.6	80	6.2	85x95	MLC1100V237K#8595
		28	4	12	3.7	75	6.7	88.5x87	MLC1100V237K#88587
		34	5	15	2.6	65	6.4	100x75	MLC1100V237K#10075
	260	25	4	12	5.3	90	5.8	85x106	MLC1100V267K#85106
		28	4	12	4.1	80	6.1	88.5x95	MLC1100V267K#88595
		33	5	15	2.8	65	6.3	100x80	MLC1100V267K#10080
	290	50	7	21	1.7	40	4.7	85x125	MLC1100V297K#85125
		27	4	12	4.8	90	5.6	88.5x106	MLC1100V297K#885106
		33	5	15	3.1	75	5.8	100x87	MLC1100V297K#10087
		41	7	21	1.9	60	6.0	116x70	MLC1100V297K#11670
	310	25	4	12	6.1	100	5.1	85x120	MLC1100V317K#85120
	320	50	7	21	1.8	40	4.3	85x135	MLC1100V327K#85135
		41	7	21	2.1	65	5.6	116x75	MLC1100V327K#11675
	330	53	8	24	1.5	40	4.6	88.5x125	MLC1100V337K#885125
		33	5	15	3.4	80	5.2	100x95	MLC1100V337K#10095
	350	27	4	12	5.5	100	4.9	88.5x120	MLC1100V357K#885120
	360	49	7	21	1.9	45	4.2	85x145	MLC1100V367K#85145
		41	7	21	2.2	65	5.2	116x80	MLC1100V367K#11680
	370	54	8	24	1.6	40	4.2	88.5x135	MLC1100V377K#885135
	380	32	5	15	3.9	90	4.8	100x106	MLC1100V387K#100106
	390	50	8	24	1.8	45	4.3	85x137.5	MLC1100V397K#851375S
	400	50	8	24	1.8	45	4.4	85x135	MLC1100V407K#851375S
		49	7	21	2.2	50	3.7	85x159	MLC1100V407K#85159
		40	7	21	2.4	75	5.0	116x87	MLC1100V407K#11687
	410	53	8	24	1.7	45	4.1	88.5x145	MLC1100V417K#885145
	440	60	10	30	1.2	40	3.9	100x125	MLC1100V447K#100125
	450	60	8	24	1.5	50	3.7	88.5x159	MLC1100V457K#885159
		32	5	15	4.5	100	4.2	100x120	MLC1100V457K#100120
	460	49	7	21	2.4	55	3.4	85x175	MLC1100V467K#85175
		53	8	24	1.9	50	3.7	88.5x159	MLC1100V467K#885159
		40	7	21	2.7	80	4.5	116x95	MLC1100V467K#11695
		45	11	33	1.4	60	6.9	140x70	MLC1100V467K#14070
	470	60	10	30	1.4	40	3.6	100x135	MLC1100V477K#100135
	500	49	8	24	2.2	55	3.6	88.5x175	MLC1100V507K#885175
		45	11	33	1.6	65	6.0	140x75	MLC1100V507K#14075
	520	60	10	30	1.5	45	3.4	100x145	MLC1100V527K#100145
	530	48	7	21	2.7	60	3.1	85x197	MLC1100V537K#85197
		53	8	24	2.1	55	3.3	88.5x175	MLC1100V537K#885175
		40	7	21	3.0	90	4.0	116x106	MLC1100V537K#116106
	560	44	11	33	1.7	65	5.9	140x80	MLC1100V567K#14080

* additional information for I_r on page 16

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Rated DC Voltage U_N Max ripple Voltage U_r Non repetitive Surge Volt. U_S	Nominal Capacitance C_N [µF]	Ripple Current at 50°C 1 k–10 kHz I_r* [A RMS]	Peak Current Maximum value $\hat{I}$ [kA]	Surge Current Maximum value I_S [kA]	ESR ESR [mΩ]	ESL ESL [nH]	Thermal Resistance R_{th} [K/W]	Case Size D x L [mm]	Product Code # = variable value, see fixing code in the product code
1100 VDC Ripple Voltage 250 V Surge Voltage 1 650 V	**580**	80	7	20	1.2	50	3.2	100x155	MLCU1100V587K#100155R
		60	10	30	1.6	50	3.1	100x159	MLC1100V587K#100159
		73	14	42	1.0	40	3.6	116x125	MLC1100V587K#116125
	590	52	8	24	2.5	60	2.9	88.5x197	MLC1100V597K#885197
	620	48	7	21	3.2	70	2.7	85x225	MLC1100V627K#85225
		39	7	21	3.5	100	3.6	116x120	MLC1100V627K#116120
	630	44	11	33	1.8	75	5.6	140x87	MLC1100V637K#14087
	650	74	14	42	1.1	40	3.3	116x135	MLC1100V657K#116135
	690	60	10	30	1.7	55	2.9	100x175	MLC1100V697K#100175
	700	51	8	24	2.9	70	2.6	88.5x225	MLC1100V707K#885225
	720	74	14	42	1.2	45	3.0	116x145	MLC1100V727K#116145
		44	11	33	2.0	80	5.0	140x95	MLC1100V727K#14095
	750	48	7	21	3.4	75	2.4	85x252	MLC1100V757K#85252
		75	15	45	1.1	45	3.1	116x145	MLC1100V757K#116145
	760	60	10	30	2.0	60	2.5	100x197	MLC1100V767K#100197
	810	73	14	42	1.3	50	2.8	116x159	MLC1100V817K#116159
		43	11	33	2.3	90	4.6	140x106	MLC1100V817K#140106
	900	60	10	30	2.4	70	2.2	100x225	MLC1100V907K#100225
	920	73	14	42	1.4	55	2.6	116x175	MLC1100V927K#116175
		79	22	66	0.8	40	3.9	140x125	MLC1100V927K#140125
	950	43	11	33	2.6	100	4.1	140x120	MLC1100V957K#140120
	1 000	71	14	42	1.7	60	2.3	116x197	MLC1100V108K#116197
		79	22	66	0.8	40	3.9	140x135	MLC1100V108K#140135
	1 100	62	13	39	2.0	70	2.5	116x225	MLC1100V118K#116225
		78	22	66	0.9	45	3.6	140x145	MLC1100V118K#140145
	1 200	77	21	63	1.0	50	3.3	140x159	MLC1100V128K#140159
		71	14	42	1.9	70	2.0	116x225	MLC1100V128K#116225
	1 400	80	15	45	1.5	70	2.0	116x235	MLCU1100V148K#116235S
		78	21	63	1.1	55	2.9	140x175	MLC1100V148K#140175
	1 600	77	22	66	1.2	60	2.8	140x197	MLC1100V168K#140197
	1 900	77	22	66	1.4	70	2.4	140x225	MLC1100V198K#140225
1300 VDC Ripple Voltage 300 V Surge Voltage 1 950 V	**100**	25	3	9	3.8	60	8.1	85x70	MLC1300V107K#8570
	110	25	3	9	4.1	65	7.6	85x75	MLC1300V117K#8575
		26	3	9	3.5	60	8.2	88.5x70	MLC1300V117K#88570
	120	26	3	9	3.8	65	7.6	88.5x75	MLC1300V127K#88575
	130	25	3	9	4.2	65	7.3	85x80	MLC1300V137K#8580
	140	24	3	9	4.8	75	7.0	85x87	MLC1300V147K#8587
		26	3	9	4.0	65	7.2	88.5x80	MLC1300V147K#88580
	150	32	4	12	2.7	60	6.9	100x70	MLC1300V157K#10070
	160	24	3	9	5.4	80	6.3	85x95	MLC1300V167K#8595
		26	3	9	4.3	75	6.7	88.5x87	MLC1300V167K#88587
	170	32	4	12	2.9	65	6.5	100x75	MLC1300V177K#10075
	180	26	3	9	4.8	80	6.0	88.5x95	MLC1300V187K#88595
		31	4	12	3.3	65	6.2	100x80	MLC1300V187K#10080

* additional information for I_r on page 16

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Rated DC Voltage U_N Max ripple Voltage U_r Non repetitive Surge Volt. U_S	**Nominal Capacitance** **C_N** [µF]	**Ripple Current** at 50°C 1 k–10 kHz **I_r*** [A RMS]	**Peak Current** Maximum value **$\hat{I}$** [kA]	**Surge Current** Maximum value **I_S** [kA]	**ESR** **ESR** [mΩ]	**ESL** **ESL** [nH]	**Thermal Resistance** **R_{th}** [K/W]	**Case Size** **D x L** [mm]	**Product Code** # = variable value, see fixing code in the product code
1300 VDC Ripple Voltage 300 V Surge Voltage 1 950 V	**190**	24	3	9	6.0	90	5.6	85x106	MLC1300V197K#85106
	200	25	3	9	5.7	90	5.5	88.5x106	MLC1300V207K#885106
	210	47	6	18	1.9	40	4.7	85x125	MLC1300V217K#85125
		31	4	12	3.5	75	5.8	100x87	MLC1300V217K#10087
		39	6	18	2.1	60	5.9	116x70	MLC1300V217K#11670
	220	23	3	9	7.0	100	5.2	85x120	MLC1300V227K#85120
	230	47	6	18	2.0	40	4.3	85x135	MLC1300V237K#85135
		50	7	21	1.7	40	4.6	88.5x125	MLC1300V237K#885125
		39	6	18	2.3	65	5.5	116x75	MLC1300V237K#11675
	240	25	3	9	6.5	100	4.8	88.5x120	MLC1300V247K#885120
		31	4	12	3.8	80	5.2	100x95	MLC1300V247K#10095
	250	49	7	21	1.9	40	4.3	88.5x135	MLC1300V257K#885135
	260	47	6	18	2.2	45	4.0	85x145	MLC1300V267K#85145
		39	6	18	2.5	65	5.2	116x80	MLC1300V267K#11680
	270	30	4	12	4.4	90	4.8	100x106	MLC1300V277K#100106
	280	49	7	21	2.0	45	4.1	88.5x145	MLC1300V287K#885145
	290	46	6	18	2.4	50	3.8	85x159	MLC1300V297K#85159
		38	6	18	2.7	75	4.9	116x87	MLC1300V297K#11687
	300	47	6	18	2.4	50	3.7	88.5x155	MLC1300V307K#885155
		59	9	27	1.4	40	3.9	100x125	MLC1300V307K#100125
	310	42	9	27	1.7	60	6.5	140x70	MLC1300V317K#14070
	320	49	7	21	2.2	50	3.7	88.5x159	MLC1300V327K#885159
		30	4	12	5.1	100	4.2	100x120	MLC1300V327K#100120
	330	46	6	18	2.7	55	3.4	85x175	MLC1300V337K#85175
		59	9	27	1.5	40	3.6	100x135	MLC1300V337K#100135
		38	6	18	3.0	80	4.5	116x95	MLC1300V337K#11695
	350	43	9	27	1.7	65	6.2	140x75	MLC1300V357K#14075
	360	49	7	21	2.5	55	3.3	88.5x175	MLC1300V367K#885175
	370	59	9	27	1.7	45	3.3	100x145	MLC1300V377K#100145
	380	46	6	18	3.1	60	3.0	85x197	MLC1300V387K#85197
		38	6	18	3.4	90	3.9	116x106	MLC1300V387K#116106
		42	9	27	1.9	65	5.8	140x80	MLC1300V387K#14080
	410	48	7	21	2.9	60	2.9	88.5x197	MLC1300V417K#885197
	420	59	9	27	1.8	50	3.1	100x159	MLC1300V427K#100159
		70	12	36	1.1	40	3.5	116x125	MLC1300V427K#116125
	430	42	9	27	2.1	75	5.3	140x87	MLC1300V437K#14087
	450	45	6	18	3.5	70	2.7	85x225	MLC1300V457K#85225
		37	6	18	3.9	100	3.6	116x120	MLC1300V457K#116120
	460	70	12	36	1.2	40	3.3	116x135	MLC1300V467K#116135
	470	57	9	27	2.0	55	2.9	100x175	MLC1300V477K#100175
	480	47	7	21	3.3	70	2.7	88.5x225	MLC1300V487K#885225
	490	69	12	36	1.3	45	3.2	116x140	MLC1300V497K#116140
		41	9	27	2.3	80	5.1	140x95	MLC1300V497K#14095
	520	70	12	36	1.3	45	3.0	116x145	MLC1300V527K#116145

* additional information for I_r on page 16

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Rated DC Voltage U_N Max ripple Voltage U_r Non repetitive Surge Volt. U_S	**Nominal Capacitance** **C_N** **[µF]**	**Ripple Current** at 50°C 1 k–10 kHz **I_r*** [A RMS]	**Peak Current** Maximum value **Î** [kA]	**Surge Current** Maximum value **I_S** [kA]	**ESR** **ESR** [mΩ]	**ESL** **ESL** [nH]	**Thermal Resistance** **R_{th}** [K/W]	**Case Size** **D x L** [mm]	**Product Code** # = variable value, see fixing code in the product code
1 300 VDC Ripple Voltage 300 V Surge Voltage 1 950 V	**550**	57	9	27	2.3	60	2.6	100x197	MLC1300V557K#100197
		40	9	27	2.6	90	4.7	140x106	MLC1300V557K#140106
	570	54	8	24	2.9	70	2.3	100x225	MLC1300V577K#100225
	580	70	12	36	1.4	50	2.8	116x159	MLC1300V587K#116159
	630	75	18	54	0.9	40	3.9	140x125	MLC1300V637K#140125
	650	57	9	27	2.6	70	2.3	100x225	MLC1300V657K#100225
		40	9	27	3.0	100	4.1	140x120	MLC1300V657K#140120
	660	69	12	36	1.6	55	2.6	116x175	MLC1300V667K#116175
	700	75	18	54	0.9	40	3.9	140x135	MLC1300V707K#140135
	760	69	12	36	1.8	60	2.3	116x197	MLC1300V767K#116197
	770	74	18	54	1.0	45	3.6	140x145	MLC1300V777K#140145
	870	74	18	54	1.1	50	3.3	140x159	MLC1300V877K#140159
	900	69	13	39	2.1	70	2.0	116x225	MLC1300V907K#116225
	990	74	18	54	1.2	55	3.0	140x175	MLC1300V997K#140175
	1 100	73	18	54	1.4	60	2.6	140x197	MLC1300V118K#140197
	1 300	72	18	54	1.6	70	2.4	140x225	MLC1300V138K#140225
1500 VDC Ripple Voltage 350 V Surge Voltage 2 250 V	**70**	23	2	6	4.6	60	8.0	85x70	MLC1500V706K#8570
	80	23	2	6	4.8	65	7.7	85x75	MLC1500V806K#8575
		25	3	9	4.0	60	7.8	88.5x70	MLC1500V806K#88570
	90	23	3	9	5.1	65	7.1	85x80	MLC1500V906K#8580
		25	3	9	4.3	65	7.2	88.5x75	MLC1500V906K#88575
	100	22	2	6	5.7	75	7.0	85x87	MLC1500V107K#8587
		24	3	9	4.7	65	7.2	88.5x80	MLC1500V107K#88580
	110	22	2	6	6.5	80	6.1	85x95	MLC1500V117K#8595
		24	3	9	5.2	75	6.5	88.5x87	MLC1500V117K#88587
		30	4	12	3.1	60	6.9	100x70	MLC1500V117K#10070
	120	30	4	12	3.4	65	6.3	100x75	MLC1500V127K#10075
	130	22	3	9	7.3	90	5.5	85x106	MLC1500V137K#85106
		24	3	9	5.6	80	6.0	88.5x95	MLC1500V137K#88595
		29	4	12	3.8	65	6.1	100x80	MLC1500V137K#10080
	150	43	5	15	2.2	50	4.7	85x125	MLC1500V157K#85125
		24	3	9	6.4	90	5.3	88.5x106	MLC1500V157K#885106
		29	4	12	4.0	75	5.7	100x87	MLC1500V157K#10087
		37	5	15	2.5	60	5.7	116x70	MLC1500V157K#11670
	160	22	3	9	8.1	100	4.9	85x120	MLC1500V167K#85120
		43	5	15	2.4	50	4.3	85x135	MLC1500V167K#85135
		36	5	15	2.7	65	5.5	116x75	MLC1500V167K#11675
	170	23	3	9	7.7	100	4.8	88.5x120	MLC1500V177K#885120
		47	6	18	2.0	50	4.4	88.5x125	MLC1500V177K#885125
		29	4	12	4.5	80	5.1	100x95	MLC1500V177K#10095
	180	43	5	15	2.6	50	4.0	85x145	MLC1500V187K#85145
		46	6	18	2.2	50	4.2	88.5x135	MLC1500V187K#885135
		36	5	15	2.9	65	5.1	116x80	MLC1500V187K#11680
	190	28	4	12	5.2	90	4.7	100x106	MLC1500V197K#100106

* additional information for I_r on page 16

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Rated DC Voltage U_N Max ripple Voltage U_r Non repetitive Surge Volt. U_S	**Nominal Capacitance** **C_N** [µF]	**Ripple Current** at 50°C 1 k–10 kHz **I_r*** [A RMS]	**Peak Current** Maximum value **$\hat{I}$** [kA]	**Surge Current** Maximum value **I_S** [kA]	**ESR** **ESR** [mΩ]	**ESL** **ESL** [nH]	**Thermal Resistance** **R_{th}** [K/W]	**Case Size** **D x L** [mm]	**Product Code** # = variable value, see fixing code in the product code
1500 VDC Ripple Voltage 350 V Surge Voltage 2 250 V	**200**	42	5	15	2.9	50	3.8	85x159	MLC1500V207K#85159
		45	6	18	2.4	50	4.0	88.5x145	MLC1500V207K#885145
		34	5	15	3.2	75	5.2	116x87	MLC1500V207K#11687
	210	54	7	21	1.7	50	3.9	100x125	MLC1500V217K#100125
	230	42	5	15	3.2	55	3.4	85x175	MLC1500V237K#85175
		46	6	18	2.6	50	3.6	88.5x159	MLC1500V237K#885159
		28	4	12	5.9	100	4.2	100x120	MLC1500V237K#100120
		34	5	15	3.5	80	4.7	116x95	MLC1500V237K#11695
		40	8	24	1.8	60	6.8	140x70	MLC1500V237K#14070
	240	54	7	21	1.8	50	3.8	100x135	MLC1500V247K#100135
	250	40	8	24	2.0	65	6.2	140x75	MLC1500V257K#14075
	260	45	6	18	2.9	55	3.3	88.5x175	MLC1500V267K#885175
		53	7	21	2.0	50	3.5	100x145	MLC1500V267K#100145
	270	42	5	15	3.6	60	3.0	85x197	MLC1500V277K#85197
		34	5	15	3.9	90	4.3	116x106	MLC1500V277K#116106
	280	40	8	24	2.1	65	5.8	140x80	MLC1500V287K#14080
	300	45	6	18	3.3	60	2.9	88.5x197	MLC1500V307K#885197
		54	7	21	2.1	50	3.2	100x159	MLC1500V307K#100159
		66	10	30	1.3	50	3.4	116x125	MLC1500V307K#116125
	320	42	5	15	4.2	70	2.6	85x225	MLC1500V327K#85225
		34	5	15	4.5	100	3.7	116x120	MLC1500V327K#116120
		40	8	24	2.3	75	5.3	140x87	MLC1500V327K#14087
	330	42	5	15	4.2	70	2.6	85x225	MLCU1500V337K#85225
		66	10	30	1.4	50	3.2	116x135	MLC1500V337K#116135
	340	53	7	21	2.3	55	3.0	100x175	MLC1500V347K#100175
	350	44	6	18	3.8	70	2.7	88.5x225	MLC1500V357K#885225
	360	39	8	24	2.5	80	5.1	140x95	MLC1500V367K#14095
	370	65	10	30	1.5	50	3.1	116x145	MLC1500V377K#116145
	390	53	8	24	2.7	60	2.6	100x197	MLC1500V397K#100197
	400	38	8	24	2.9	90	4.7	140x106	MLC1500V407K#140106
	410	65	10	30	1.7	50	2.8	116x159	MLC1500V417K#116159
	460	52	8	24	3.1	70	2.3	100x225	MLC1500V467K#100225
		71	16	48	1.0	50	3.9	140x125	MLC1500V467K#140125
	470	65	10	30	1.8	55	2.5	116x175	MLC1500V477K#116175
	480	38	8	24	3.3	100	4.1	140x120	MLC1500V487K#140120
	510	71	16	48	1.0	50	3.9	140x135	MLC1500V517K#140135
	540	64	10	30	2.1	60	2.3	116x197	MLC1500V547K#116197
	570	71	16	48	1.1	50	2.5	140x145	MLC1500V577K#140145
	640	64	10	30	2.4	70	2.0	116x225	MLC1500V647K#116225
		71	16	48	1.2	50	3.2	140x159	MLC1500V647K#140159
	720	70	16	48	1.3	55	3.1	140x175	MLC1500V727K#140175
	810	69	16	48	1.5	60	2.8	140x197	MLC1500V817K#140197
	960	69	16	48	1.8	70	2.3	140x225	MLC1500V967K#140225

* additional information for I_r on page 16

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› Life Time Table · Brauchbarkeitsdauer – Tabelle

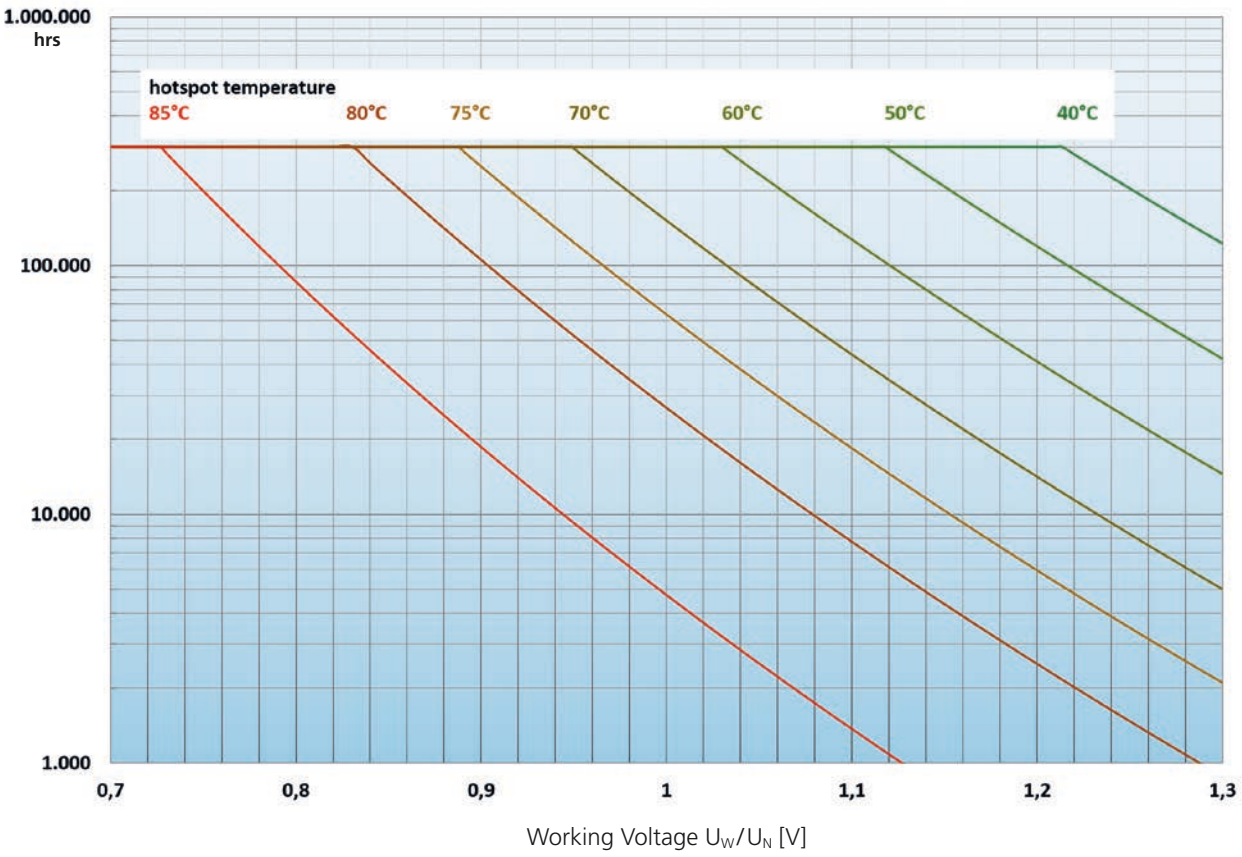
Lifetime as function of ratio between the effective working voltage Uw and the rated DC voltage U_N													
$T_{HOTSPOT}$	x 0.7	x 0.75	x 0.8	x 0.85	x 0.9	x 0.95	x 1.0	x 1.05	x 1.1	x 1.15	x 1.2	x 1.25	x 1.30
40°C	300	300	300	300	300	300	300	300	300	300	300	204	123
45°C	300	300	300	300	300	300	300	300	300	300	203	120	72
50°C	300	300	300	300	300	300	300	300	300	208	120	70	42
55°C	300	300	300	300	300	300	300	300	217	122	70	41	25
60°C	300	300	300	300	300	300	300	233	128	71	41	24	15
65°C	300	300	300	300	300	300	258	137	75	42	24	14	9
70°C	300	300	300	300	300	295	151	80	44	25	14	8	5
75°C	300	300	300	300	251	124	64	33	19	11	6	3.5	2
80°C	300	300	300	221	105	52	27	14	8	4	2.5	1.5	
85°C	300	199	86	39	19	9	5	2.5	1.5				

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



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

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