Type MEC-DL
DC Filter Capacitor

Shizuki™ MEC-DL capacitors are designed with PCB board mounting in mind. Their lead spacing and compact size are conducive for low inductance (<1nH per mm of lead spacing). They are available with a single lead or dual leads depending on the current or application requirements.

Applications include but are not limited to: frequency converters, solar power inverters and DC filtering applications.

General Specifications

Parameter	Value
Capacitance	7μF – 100μF
Tolerance	±5%, ±10%
Rated Voltage	450, 850, 950, 1100, 1300 VDC
Temperature Range (operational)	-40/85C
Temperature Range (Storage)	-40/105C
RMS Current	Up to 20 Arms
Standards	IEC61071
Case	PBT UL-94V-0 Standard
Fill Material	Epoxy
Terminals	Tin Plated Copper Wire
Mounting Position	PCB Through Hole
Tan δ	2×10^{-4} Polypropylene
Terminal to Terminal Test	1.5 x Un 10 seconds
Terminal to Case Test	$U_{T\text{-}CASE}$ = 2000 Vrms @ 50 Hz for 10 seconds
Reliability	100 FIT

Applications

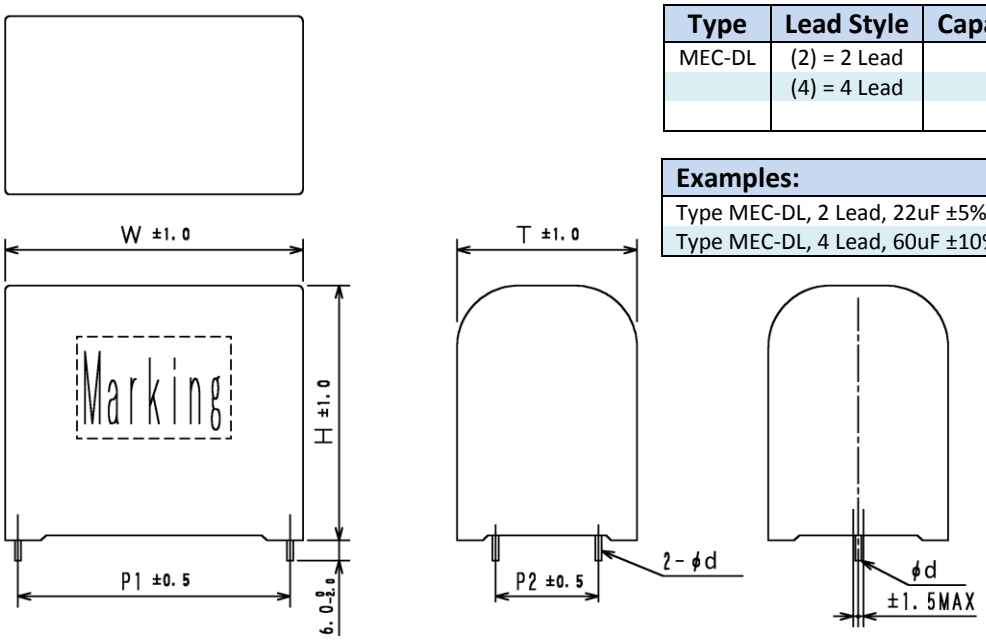
DC Filtering
Frequency Converters
Solar Inverters
Micro Inverters

MEC-DL Specifications

Cap [µF]	I_{RMS} (10kHz) [A_{RMS}]	ESR (10kHz) [mΩ]	dV/dt [V/µs]	Max Tan δ (1kHz)	Lead Style	"W" [mm]	"H" [mm]	"T" [mm]	"P1" [mm]	"P2" [mm]	ød [mm]
450 VDC		**675 Vsurge**									
27	11	5.8	27	0.2%	2	43	37.0	28	37.5	-	1.0
30	12	5.2	27	0.2%	2	43	37.0	28	37.5	-	1.0
30	12	5.2	27	0.2%	4	43	37.0	28	37.5	10.2	1.2
35	13	4.5	27	0.2%	2	43	42.5	28	37.5	-	1.0
35	13	4.5	27	0.2%	4	43	42.5	28	37.5	10.2	1.2
40	15	3.9	27	0.2%	2	43	42.5	28	37.5	-	1.0
40	15	3.9	27	0.2%	4	43	42.5	28	37.5	10.2	1.2
45	16	3.5	27	0.2%	2	43	45.0	30	37.5		1.0
45	16	3.5	27	0.2%	4	43	45.0	30	37.5	10.2	1.2
50	17	3.1	27	0.2%	2	43	45.0	30	37.5	-	1.0
50	17	3.1	27	0.2%	4	43	45.0	30	37.5	10.2	1.2
55	14	5.9	18	0.3%	2	58	45.0	30	52.5	-	1.2
60	15	5.4	18	0.3%	2	58	45.0	30	52.5	-	1.2
70	16	4.6	18	0.3%	2	58	45.0	30	52.5	-	1.2
75	17	4.3	18	0.3%	2	58	50.0	35	52.5	-	1.2
80	18	4.0	18	0.3%	2	58	50.0	35	52.5	-	1.2
80	18	4.0	18	0.3%	4	58	50.0	35	52.5	20.3	1.2
100	21	3.2	18	0.3%	2	58	50.0	35	52.5	-	1.2
100	21	3.2	18	0.3%	4	58	50.0	35	52.5	20.3	1.2
850 VDC		**1275 Vsurge**									
22	12	5.4	36	0.2%	2	43	42.5	28	37.5	-	1.0
22	12	5.4	36	0.2%	4	43	42.5	28	37.5	10.2	1.2
25	14	4.7	36	0.2%	2	43	45.0	30	37.5	-	1.0
25	14	4.7	36	0.2%	4	43	45.0	30	37.5	10.2	1.2
27	14	4.4	36	0.2%	2	43	45.0	30	37.5	-	1.0
27	14	4.4	36	0.2%	4	43	45.0	30	37.5	10.2	1.2
30	12	8.1	24	0.2%	2	58	45.0	30	52.5	-	1.2
35	13	6.9	24	0.2%	2	58	45.0	30	52.5	-	1.2
40	14	6.1	24	0.2%	2	58	50.0	35	52.5	-	1.2
45	16	5.4	24	0.2%	2	58	50.0	35	52.5	-	1.2
45	16	5.4	24	0.2%	4	58	50.0	35	52.5	20.3	1.2
50	17	4.9	24	0.2%	2	58	50.0	35	52.5	-	1.2
50	17	4.9	24	0.2%	4	58	50.0	35	52.5	20.3	1.2
55	18	4.4	24	0.3%	2	58	50.0	35	52.5	-	1.2
55	18	4.4	24	0.3%	4	58	50.0	35	52.5	20.3	1.2
950 VDC		**1425 Vsurge**									
12	9	8.7	40	0.2%	2	43	37.0	28	37.5	-	1.0
15	11	7.0	40	0.2%	2	43	42.5	28	37.5	-	1.0
15	11	7.0	40	0.2%	4	43	42.5	28	37.5	10.2	1.2
16	11	6.6	40	0.2%	2	43	42.5	28	37.5	-	1.0
16	11	6.6	40	0.2%	4	43	42.5	28	37.5	10.2	1.2
20	13	5.3	40	0.2%	2	43	45.0	30	37.5	-	1.0
20	13	5.3	40	0.2%	4	43	45.0	30	37.5	10.2	1.2
25	11	8.6	27	0.2%	2	58	45.0	30	52.5	-	1.2
30	13	7.2	27	0.2%	2	58	45.0	30	52.5	-	1.2
40	16	5.4	27	0.2%	2	58	50.0	35	52.5	-	1.2
40	16	5.4	27	0.2%	4	58	50.0	35	52.5	20.3	1.2

Cap [µF]	I_{RMS} (10kHz) [A_{RMS}]	ESR (10kHz) [mΩ]	dV/dt [V/µs]	Max Tan δ (1kHz)	Lead Style	"W" [mm]	"H" [mm]	"T" [mm]	"P1" [mm]	"P2" [mm]	ød [mm]
1100 VDC		**1650 Vsurge**									
10	9	8.4	64	0.2%	2	43	37.0	28	37.5	-	1.0
10	9	8.4	64	0.2%	4	43	37.0	28	37.5	10.2	1.2
12	11	7.0	64	0.2%	2	43	42.5	28	37.5	-	1.0
12	11	7.0	64	0.2%	4	43	42.5	28	37.5	10.2	1.2
14	12	6.0	64	0.2%	2	43	42.5	28	37.5	-	1.0
14	12	6.0	64	0.2%	4	43	42.5	28	37.5	10.2	1.2
16	13	5.2	64	0.2%	2	43	45.0	30	37.5	-	1.0
16	13	5.2	64	0.2%	4	43	45.0	30	37.5	10.2	1.2
20	11	8.9	41	0.2%	2	58	45.0	30	52.5	-	1.2
22	12	8.1	41	0.2%	2	58	45.0	30	52.5	-	1.2
25	13	7.1	41	0.2%	2	58	50.0	35	52.5	-	1.2
30	15	5.9	41	0.2%	2	58	50.0	35	52.5	-	1.2
30	15	5.9	41	0.2%	4	58	50.0	35	52.5	20.3	1.2
1300 VDC		**1950 Vsurge**									
7	9	10.0	77	0.2%	2	43	37.0	28	37.5	-	1.0
7	9	10.0	77	0.2%	4	43	37.0	28	37.5	10.2	1.2
8	9	8.8	77	0.2%	2	43	37.0	28	37.5	-	1.0
8	9	8.8	77	0.2%	4	43	37.0	28	37.5	10.2	1.2
11	12	6.4	77	0.2%	2	43	45.0	30	37.5	-	1.0
11	12	6.4	77	0.2%	4	43	45.0	30	37.5	10.2	1.2
12	9	12.4	50	0.2%	2	58	45.0	30	52.5	-	1.2
15	11	9.9	50	0.2%	2	58	45.0	30	52.5	-	1.2
20	13	7.5	50	0.2%	2	58	50.0	35	52.5	-	1.2
20	13	7.5	50	0.2%	4	58	50.0	35	52.5	20.3	1.2
22	14	6.8	50	0.2%	2	58	50.0	35	52.5	-	1.2
22	14	6.8	50	0.2%	4	58	50.0	35	52.5	20.3	1.2

Dimensions [mm]:



Ordering Information:

Type	Lead Style	Capacitance	Tolerance	Voltage
MEC-DL	(2) = 2 Lead	7	5 = ±5%	450
	(4) = 4 Lead	↕	10 = ±10%	↕
		100		1300

Examples:	Order Code
Type MEC-DL, 2 Lead, 22uF ±5%, 850 VDC	MEC-DL(2) 22-5-850
Type MEC-DL, 4 Lead, 60uF ±10%, 1100 VDC	MEC-DL(4) 60-10-1100