

PEN dielectric - LDE Series

• General technical data

Plates	Aluminium layer deposited by evaporation under vacuum.
Winding	Non inductive type - Stacked technology.
Termination	Three layers: Aluminium, Brass and Tin alloy.
Marking	On packing only.
Climatic category	55/125/56

• Electrical characteristics

Working temperature	-55 to 125° C
Rated voltage (V_R)	50Vdc - 63Vdc - 100Vdc - 250Vdc - 400Vdc - 630Vdc - 1000Vdc
Category voltage (V_C)	$V_C = V_R$ up to 105° C Decreasing factor of 1.25% per degree C for temperature from 105 to 125° C
Size range	12.06 to 60.54 (special size upon request)
Capacitance range	1000pF to 4.7µF
Capacitance values	E12 Series
Capacitance tolerance	± 5% (J); ± 10% (K); ± 20% (M)
Dissipation factor (tgδ)	0.8% max. (T=25 ± 5° C; f=1kHz)
Dielectric absorption (%)	0.8%
Insulation resistance	≥ 1GΩ for C ≤ 0.33µF ≥ 400 s for C > 0.33µF Test conditions: Temperature: 25 ± 5° C Voltage charge time: 1min Voltage charge: 10Vdc for $V_R < 100Vdc$ 100Vdc for $V_R ≥ 100Vdc$
Surge voltage test	$1.4 \times V_R$ (2 s at 25 ± 5° C)
Solderability	Coverage ≥ 75% at each end-termination
Max pulse rise time (dv/dt)	100V/µs*

* Higher values available upon request

• Test method and performance

Damp heat (40° C; 93% R.H.; 56 days)	$ \Delta C/C \leq 7\%$ Dissipation factor change: $\leq 50 \cdot 10^{-4}$ Insulation resistance: ≥ 50% of limit value
Endurance (125° C; 2000h; 1.25 V_C)	$ \Delta C/C \leq 5\%$ Dissipation factor change: $\leq 50 \cdot 10^{-4}$ Insulation resistance: ≥ 50% of limit value
Rapid change of temperature (1h at -55° C; 1h at +125° C; cycles No. =1000)	$ \Delta C/C \leq 5\%$ Insulation resistance: ≥ limit value No mechanical damage $\Delta tg\delta: \leq 50 \cdot 10^{-4}$
Resistance to soldering heat	Method: reflow at 230° C max and 50 s more than 210° C Performance: $ \Delta C/C \leq 3\%$; $\Delta tg\delta: \leq 50 \cdot 10^{-4}$; I.R.: ≥ limit value
Bending	Deflection: 1 to 6 mm. No visible damage on the terminations (peeling) No damage on the body (cracking) $ \Delta C/C \leq 1\%$
Long term stability (after two years)	Capacitance change: $ \Delta C/C \leq 3\%$ size ≤ 22.20 $ \Delta C/C \leq 2\%$ size > 22.20
Reliability Ref. MIL HDB 217	Failure rate: ≤ 1 Fit (1 Fit = 1×10^{-9} failures/components × hour)

PEN dielectric - LDE Series

Capacitance values & Voltage range

STANDARD VERSION

Size table

Rated Cap.	Size code	Carrier tape code	H max [mm]	50Vdc/40Vac	63Vdc/40Vac	100Vdc/63Vac			250Vdc/120Vac				
				Part Number	Part Number	Size code	Carrier tape code	H max [mm]	Part Number	Size code	Carrier tape code	H max [mm]	Part Number
1000 pF	18.12	a	1.7	LDECC1100 - A5 -	LDEDC1100 - A5 -	18.12	a	1.7	LDEEC1100 - A5 -	18.12	a	1.7	LDEIC1100 - A5 -
1200 pF	18.12	a	1.7	LDECC1120 - A5 -	LDEDC1120 - A5 -	18.12	a	1.7	LDEEC1120 - A5 -	18.12	a	1.7	LDEIC1120 - A5 -
1500 pF	18.12	a	1.7	LDECC1150 - A5 -	LDEDC1150 - A5 -	18.12	a	1.7	LDEEC1150 - A5 -	18.12	a	1.7	LDEIC1150 - A5 -
1800 pF	18.12	a	1.7	LDECC1180 - A5 -	LDEDC1180 - A5 -	18.12	a	1.7	LDEEC1180 - A5 -	18.12	a	1.7	LDEIC1180 - A5 -
2200 pF	18.12	a	1.7	LDECC1220 - A5 -	LDEDC1220 - A5 -	18.12	a	1.7	LDEEC1220 - A5 -	18.12	a	1.7	LDEIC1220 - A5 -
2700 pF	18.12	a	1.7	LDECC1270 - A5 -	LDEDC1270 - A5 -	18.12	a	1.7	LDEEC1270 - A5 -	18.12	a	1.7	LDEIC1270 - A5 -
3300 pF	18.12	a	1.7	LDECC1330 - A5 -	LDEDC1330 - A5 -	18.12	a	1.7	LDEEC1330 - A5 -	18.12	a	1.7	LDEIC1330 - A5 -
3900 pF	18.12	a	1.7	LDECC1390 - A5 -	LDEDC1390 - A5 -	18.12	a	1.7	LDEEC1390 - A5 -	18.12	a	1.7	LDEIC1390 - A5 -
4700 pF	18.12	a	1.7	LDECC1470 - A5 -	LDEDC1470 - A5 -	18.12	a	1.7	LDEEC1470 - A5 -	18.12	a	1.7	LDEIC1470 - A5 -
5600 pF	18.12	a	1.7	LDECC1560 - A5 -	LDEDC1560 - A5 -	18.12	a	1.7	LDEEC1560 - A5 -	18.12	a	1.7	LDEIC1560 - A5 -
6800 pF	18.12	a	1.7	LDECC1680 - A5 -	LDEDC1680 - A5 -	18.12	a	1.7	LDEEC1680 - A5 -	18.12	a	1.7	LDEIC1680 - A5 -
8200 pF	18.12	a	1.7	LDECC1820 - A5 -	LDEDC1820 - A5 -	18.12	a	1.7	LDEEC1820 - A5 -	18.12	a	1.7	LDEIC1820 - A5 -
0.010 µF	18.12	a	1.7	LDECC2100 - A5 -	LDEDC2100 - A5 -	18.12	a	1.7	LDEEC2100 - A5 -	18.12	a	1.7	LDEIC2100 - A5 -
0.012 µF	18.12	a	1.7	LDECC2120 - A5 -	LDEDC2120 - A5 -	18.12	a	1.7	LDEEC2120 - A5 -	18.12	a	1.7	LDEIC2120 - A5 -
0.015 µF	18.12	a	1.7	LDECC2150 - A5 -	LDEDC2150 - A5 -	18.12	a	1.7	LDEEC2150 - A5 -	18.12	a	1.7	LDEIC2150 - A5 -
0.018 µF	18.12	a	1.7	LDECC2180 - A5 -	LDEDC2180 - A5 -	18.12	a	1.7	LDEEC2180 - A5 -	22.20	a	2.0	LDEID2180 - A5 -
0.022 µF	18.12	a	1.7	LDECC2220 - A5 -	LDEDC2220 - A5 -	18.12	a	1.7	LDEEC2220 - A5 -	22.20	a	2.3	LDEID2220 - A5 -
0.027 µF	18.12	a	1.7	LDECC2270 - A5 -	LDEDC2270 - A5 -	18.12	a	1.7	LDEEC2270 - A5 -	22.20	a	2.7	LDEID2270 - A5 -
0.033 µF	18.12	a	1.7	LDECC2330 - A5 -	LDEDC2330 - A5 -	18.12	a	1.7	LDEEC2330 - A5 -	22.20	a	1.7	LDEID2330 - A5 -
0.039 µF	18.12	a	1.7	LDECC2390 - A5 -	LDEDC2390 - A5 -	18.12	a	1.7	LDEEC2390 - A5 -	22.20	a	1.8	LDEID2390 - A5 -
0.047 µF	18.12	b	2.3	LDECC2470 - A5 -	LDEDC2470 - A5 -	18.12	b	2.3	LDEEC2470 - A5 -	22.20	a	1.8	LDEID2470 - A5 -
0.056 µF	18.12	b	1.9	LDECC2560 - A5 -	LDEDC2560 - A5 -	18.12	b	1.9	LDEEC2560 - A5 -	22.20	a	2.0	LDEID2560 - A5 -
0.068 µF	18.12	b	1.9	LDECC2680 - A5 -	LDEDC2680 - A5 -	18.12	b	1.9	LDEEC2680 - A5 -	22.20	a	2.4	LDEID2680 - A5 -
0.082 µF	18.12	b	2.1	LDECC2820 - A5 -	LDEDC2820 - A5 -	18.12	b	2.1	LDEEC2820 - A5 -	28.24	a	2.3	LDEIE2820 - A5 -
0.10 µF	18.12	b	2.3	LDECC3100 - A5 -	LDEDC3100 - A5 -	18.12	b	2.3	LDEEC3100 - A5 -	28.24	a	2.4	LDEIE3100 - A5 -
0.12 µF	18.12	a	1.7	LDECC3120 - A5 -	LDEDC3120 - A5 -	22.20	a	2.3	LDEED3120 - A5 -	28.24	a	2.7	LDEIE3120 - A5 -
0.15 µF	18.12	a	1.7	LDECC3150 - A5 -	LDEDC3150 - A5 -	22.20	a	1.9	LDEED3150 - A5 -	28.24	a	3.3	LDEIE3150 - A5 -
0.18 µF	18.12	b	2.2	LDECC3180 - A5 -	LDEDC3180 - A5 -	22.20	a	2.0	LDEED3180 - A5 -	40.30	a	2.5	LDEIF3180 - A5 -
0.22 µF	18.12	b	2.3	LDECC3220 - A5 -	LDEDC3220 - A5 -	22.20	a	2.3	LDEED3220 - A5 -	40.30	a	2.8	LDEIF3220 - A5 -
0.27 µF	22.20	a	1.7	LDECD3270 - A5 -	LDEDD3270 - A5 -	22.20	b	2.7	LDEED3270 - A5 -	40.30	a	3.2	LDEIF3270 - A5 -
0.33 µF	22.20	a	1.8	LDECD3330 - A5 -	LDEDD3330 - A5 -	22.20	b	3.2	LDEED3330 - A5 -	40.30	a	3.5	LDEIF3330 - A5 -
0.39 µF	22.20	a	2.1	LDECD3390 - A5 -	LDEDD3390 - A5 -	28.24	a	2.5	LDEEE3390 - A5 -	50.40	a	2.9	LDEIG3390 - A5 -
0.47 µF	22.20	a	2.3	LDECD3470 - A5 -	LDEDD3470 - A5 -	28.24	a	2.9	LDEEE3470 - A5 -	50.40	a	3.3	LDEIG3470 - A5 -
0.56 µF	22.20	b	2.7	LDECD3560 - A5 -	LDEDD3560 - A5 -	28.24	a	3.4	LDEEE3560 - A5 -	50.40	b	3.9	LDEIG3560 - A5 -
0.68 µF	22.20	b	3.1	LDECD3680 - A5 -	LDEDD3680 - A5 -	28.24	a	3.6	LDEEE3680 - A5 -	60.54	a	3.0	LDEIH3680 - A5 -
0.82 µF	28.24	a	2.6	LDECE3820 - A5 -	LDEDE3820 - A5 -	40.30	a	2.5	LDEEF3820 - A5 -	60.54	a	3.4	LDEIH3820 - A5 -
1.0 µF	28.24	a	3.0	LDECE4100 - A5 -	LDEDE4100 - A5 -	40.30	a	3.0	LDEEF4100 - A5 -	60.54	b	4.1	LDEIH4100 - A5 -
1.2 µF	28.24	a	3.5	LDECE4120 - A5 -	LDEDE4120 - A5 -	50.40	a	2.8	LDEEG4120 - A5 -				
1.5 µF	50.40	a	2.9	LDECG4150 - A5 -	LDEDG4150 - A5 -	50.40	a	2.9	LDEEG4150 - A5 -				
1.8 µF	50.40	a	3.1	LDECG4180 - A5 -	LDEDG4180 - A5 -	50.40	a	3.1	LDEEG4180 - A5 -				
2.2 µF	50.40	a	3.7	LDECG4220 - A5 -	LDEDG4220 - A5 -	50.40	a	3.7	LDEEG4220 - A5 -				
2.7 µF	50.40	b	4.5	LDECG4270 - A5 -	LDEDG4270 - A5 -	60.54	a	3.2	LDEEH4270 - A5 -				
3.3 µF	60.54	a	3.6	LDECH4330 - A5 -	LDEDH4330 - A5 -	60.54	a	3.6	LDEEH4330 - A5 -				
3.9 µF	60.54	a	4.2	LDECH4390 - A5 -	LDEDH4390 - A5 -	60.54	a	4.2	LDEEH4390 - A5 -				
4.7 µF	60.54	b	5.0	LDECH4470 - A5 -	LDEDH4470 - A5 -	60.54	b	5.0	LDEEH4470 - A5 -				

Tolerance: J (±5%); K (±10%); M (±20%) _____
 Packing: N (Tape); M (Loose) _____
 Internal use _____

Size conversion and tolerances

Size code	12.06	12.10	18.12	22.20	28.24	40.30	50.40	60.54
L (mm)	3.2 ±0.3	3.2 ±0.3	4.5 ±0.5	5.7 ±0.5	7.1 ±0.5	10.2 ±0.6	12.7 ±0.6	15.2 ±0.6
W (mm)	1.6 ±0.3	2.5 ±0.3	3.2 ±0.5	5.1 ±0.5	6.1 ±0.5	7.6 ±0.8	10.2 ±0.8	13.7 ±0.8

PEN dielectric - LDE Series
High Voltage Series

• Capacitance values & Voltage range

Rated Cap.	400Vdc/160Vac				630Vdc/200Vac				1000Vdc/250Vac	
	Size code	Carrier tape code	H max [mm]	Part Number	size code	Carrier tape code	H max [mm]	Part Number	size code	H max [mm]
1000 pF					22.20	a	1.7	LDEPD1100 - A5 - -	22.20	1.7
1200 pF					22.20	a	1.7	LDEPD1120 - A5 - -	22.20	1.7
1500 pF					22.20	a	2.0	LDEPD1150 - A5 - -	22.20	2.0
1800 pF					22.20	a	2.3	LDEPD1180 - A5 - -	22.20	2.3
2200 pF					22.20	a	1.8	LDEPD1220 - A5 - -	22.20	1.8
2700 pF					22.20	a	2.0	LDEPD1270 - A5 - -	22.20	2.0
3300 pF					22.20	a	2.3	LDEPD1330 - A5 - -	22.20	2.4
3900 pF					22.20	a	1.7	LDEPD1390 - A5 - -	22.20	2.7
4700 pF					22.20	a	1.7	LDEPD1470 - A5 - -	22.20	3.2
5600 pF					22.20	a	1.8	LDEPD1560 - A5 - -	22.20	3.6
6800 pF					22.20	a	2.0	LDEPD1680 - A5 - -	22.20	4.3
8200 pF					22.20	a	2.3	LDEPD1820 - A5 - -	28.24	2.9
0.010 µF					22.20	a	2.7	LDEPD2100 - A5 - -	28.24	3.4
0.012 µF					22.20	b	3.1	LDEPD2120 - A5 - -	28.24	4.0
0.015 µF	22.20	a	1.8	LDEMD2150 - A5 - -	22.20	c	3.8	LDEPD2150 - A5 - -	28.24	4.9
0.018 µF	22.20	a	1.9	LDEMD2180 - A5 - -	22.20	c	4.3	LDEPD2180 - A5 - -	40.30	3.1
0.022 µF	22.20	a	2.3	LDEMD2220 - A5 - -	28.24	a	3.1	LDEPE2220 - A5 - -	40.30	3.3
0.027 µF	22.20	a	2.7	LDEMD2270 - A5 - -	28.24	a	3.5	LDEPE2270 - A5 - -	40.30	4.0
0.033 µF	22.20	b	3.1	LDEMD2330 - A5 - -	28.24	b	4.4	LDEPE2330 - A5 - -	40.30	4.7
0.039 µF	22.20	c	3.6	LDEMD2390 - A5 - -	28.24	c	5.1	LDEPE2390 - A5 - -	50.40	3.2
0.047 µF	22.20	c	4.2	LDEMD2470 - A5 - -	40.30	a	3.1	LDEPF2470 - A5 - -	50.40	3.6
0.056 µF	28.24	a	3.1	LDEME2560 - A5 - -	40.30	a	3.6	LDEPF2560 - A5 - -	50.40	4.3
0.068 µF	28.24	a	3.5	LDEME2680 - A5 - -	40.30	b	4.3	LDEPF2680 - A5 - -	50.40	5.1
0.082 µF	28.24	b	4.3	LDEME2820 - A5 - -	40.30	c	5.0	LDEPF2820 - A5 - -	60.54	3.7
0.10 µF	28.24	c	5.1	LDEME3100 - A5 - -	40.30	c	5.5	LDEPF3100 - A5 - -	60.54	4.5
0.12 µF	40.30	a	3.4	LDEMF3120 - A5 - -	50.40	b	4.3	LDEPG3120 - A5 - -		
0.15 µF	40.30	b	4.2	LDEMF3150 - A5 - -	50.40	c	5.2	LDEPG3150 - A5 - -		
0.18 µF	40.30	c	4.9	LDEMF3180 - A5 - -	50.40	c	5.7	LDEPG3180 - A5 - -		
0.22 µF	50.40	a	3.5	LDEMG3220 - A5 - -	60.54	b	4.8	LDEPH3220 - A5 - -		
0.27 µF	50.40	b	4.4	LDEMG3270 - A5 - -	60.54	c	5.5	LDEPH3270 - A5 - -		
0.33 µF	50.40	c	5.2	LDEMG3330 - A5 - -						
0.39 µF	60.54	a	3.9	LDEMH3390 - A5 - -						
0.47 µF	60.54	b	4.5	LDEMH3470 - A5 - -						
0.56 µF	60.54	c	5.3	LDEMH3560 - A5 - -						

IN PROGRESS

Tolerance: J (± 5%); K (± 10%); M (± 20%)
Packing: N (Tape); M (Loose)
Internal use

↑
ITU compliance

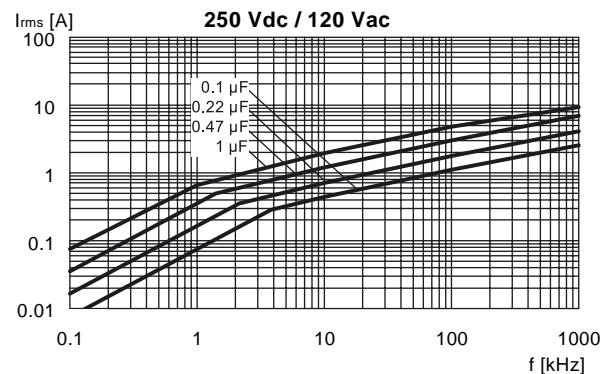
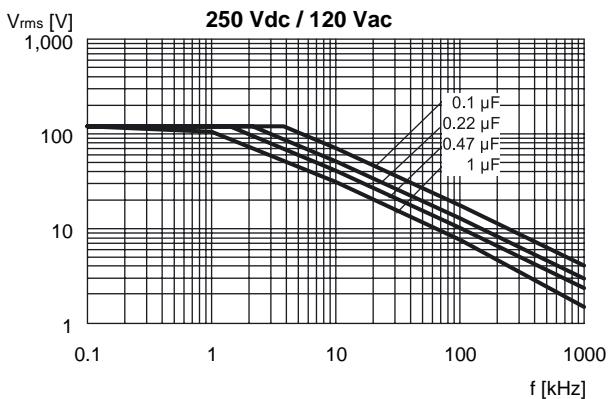
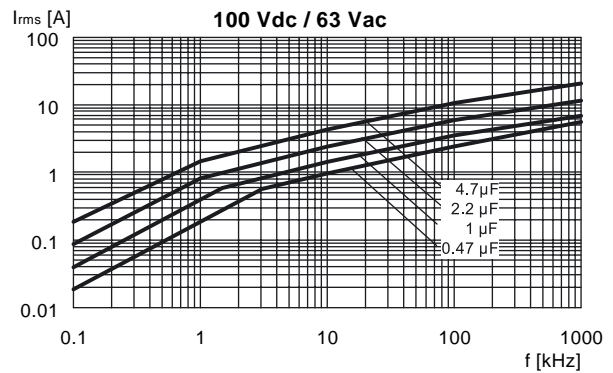
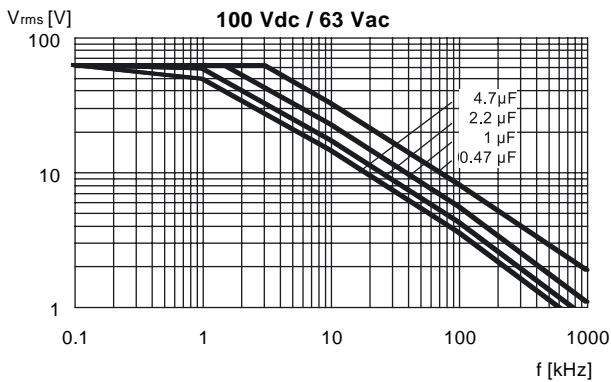
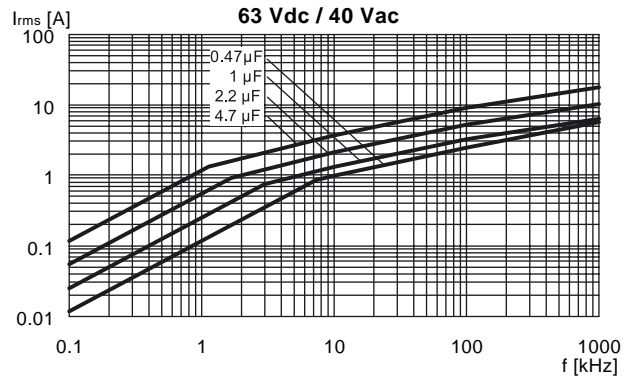
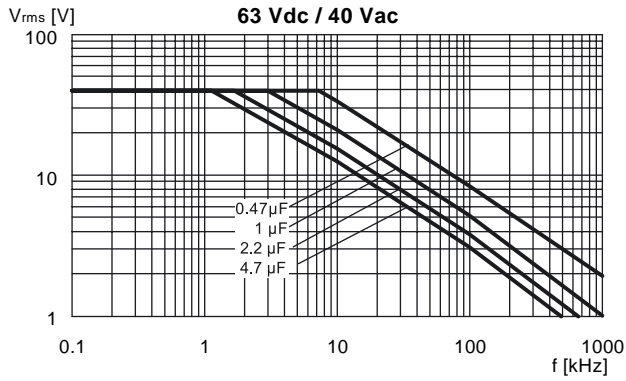


Size conversion and tolerances

Size code	22.20	28.24	40.30	50.40	60.54
L (mm)	5.7 ± 0.5	7.1 ± 0.5	10.2 ± 0.6	12.7 ± 0.6	15.2 ± 0.6
W (mm)	5.1 ± 0.5	6.1 ± 0.5	7.6 ± 0.8	10.2 ± 0.8	13.7 ± 0.8

PEN dielectric - LDE Series

MAX. VOLTAGE (Vr.m.s.) AND CURRENT (Ir.m.s.) VERSUS FREQUENCY
(sinusoidal wave-form / *T_h ≤ 85°C)



Measure carried out in free air condition.

Note: *T_h = max. ambient temperature surrounding the capacitor or hottest contact point (i.e. tracks), whichever is higher, in the worst operation conditions in °C.

PEN dielectric - LDE Series

Capacitance values & Voltage range

MINIATURE VERSION

Size table

Rated Cap.	50Vdc/40Vac			63Vdc/40Vac			100Vdc/63Vac				250Vdc/120Vac			
	Size code	Carrier tape code	H max [mm]	Part Number	Part Number	Size code	Carrier tape code	H max [mm]	Part Number	Size code	Carrier tape code	H max [mm]	Part Number	
1000 pF	12.06	-	1.1	LDECA1100 - A0-	LDEDA1100 - A0-	12.06	-	1.1	LDEEA1100 - A0-	12.06	-	1.1	LDEIA1100 - A0-	
1200 pF	12.06	-	1.1	LDECA1120 - A0-	LDEDA1120 - A0-	12.06	-	1.1	LDEEA1120 - A0-	12.06	-	1.1	LDEIA1120 - A0-	
1500 pF	12.06	-	1.1	LDECA1150 - A0-	LDEDA1150 - A0-	12.06	-	1.1	LDEEA1150 - A0-	12.06	-	1.1	LDEIA1150 - A0-	
1800 pF	12.06	-	1.1	LDECA1180 - A0-	LDEDA1180 - A0-	12.06	-	1.1	LDEEA1180 - A0-	12.06	-	1.1	LDEIA1180 - A0-	
2200 pF	12.06	-	1.1	LDECA1220 - A0-	LDEDA1220 - A0-	12.06	-	1.1	LDEEA1220 - A0-	12.06	-	1.1	LDEIA1220 - A0-	
2700 pF	12.06	-	1.1	LDECA1270 - A0-	LDEDA1270 - A0-	12.06	-	1.1	LDEEA1270 - A0-	12.06	-	1.1	LDEIA1270 - A0-	
3300 pF	12.06	-	1.1	LDECA1330 - A0-	LDEDA1330 - A0-	12.06	-	1.1	LDEEA1330 - A0-	12.06	-	1.1	LDEIA1330 - A0-	
3900 pF	12.06	-	1.1	LDECA1390 - A0-	LDEDA1390 - A0-	12.06	-	1.1	LDEEA1390 - A0-	12.06	-	1.1	LDEIA1390 - A0-	
4700 pF	12.06	-	1.2	LDECA1470 - A0-	LDEDA1470 - A0-	12.06	-	1.2	LDEEA1470 - A0-	12.06	-	1.2	LDEIA1470 - A0-	
5600 pF	12.06	-	1.1	LDECA1560 - A0-	LDEDA1560 - A0-	12.06	-	1.1	LDEEA1560 - A0-	12.10	-	1.6	LDEIA1560 - A0-	
6800 pF	12.06	-	1.1	LDECA1680 - A0-	LDEDA1680 - A0-	12.06	-	1.1	LDEEA1680 - A0-	12.10	-	1.6	LDEIB1680 - A0-	
8200 pF	12.06	-	1.1	LDECA1820 - A0-	LDEDA1820 - A0-	12.06	-	1.1	LDEEA1820 - A0-	12.10	-	1.8	LDEIB1820 - A0-	
0.010 µF	12.06	-	1.1	LDECA2100 - A0-	LDEDA2100 - A0-	12.06	-	1.1	LDEEA2100 - A0-	12.10	-	2.0	LDEIB2100 - A0-	
0.012 µF	12.06	-	1.1	LDECA2120 - A0-	LDEDA2120 - A0-	12.06	-	1.1	LDEEA2120 - A0-	12.10	-	2.0	LDEIB2120 - A0-	
0.015 µF	12.06	-	1.2	LDECA2150 - A0-	LDEDA2150 - A0-	12.06	-	1.2	LDEEA2150 - A0-					
0.018 µF	12.06	-	1.1	LDECA2180 - A0-	LDEDA2180 - A0-	12.10	-	1.4	LDEEB2180 - A0-	18.12	a	1.9	LDEIC2180 - A0-	
0.022 µF	12.06	-	1.1	LDECA2220 - A0-	LDEDA2220 - A0-	12.10	-	1.5	LDEEB2220 - A0-	18.12	b	2.2	LDEIC2220 - A0-	
0.027 µF	12.06	-	1.1	LDECA2270 - A0-	LDEDA2270 - A0-	12.10	-	1.5	LDEEB2270 - A0-	18.12	b	2.5	LDEIC2270 - A0-	
0.033 µF	12.06	-	1.2	LDECA2330 - A0-	LDEDA2330 - A0-	12.10	-	1.5	LDEEB2330 - A0-	18.12	b	2.6	LDEIC2330 - A0-	
0.039 µF	12.10	-	2.0	LDECB2390 - A0-	LDEDB2390 - A0-	12.10	-	2.0	LDEEB2390 - A0-					
0.047 µF	12.10	-	2.1	LDECB2470 - A0-	LDEDB2470 - A0-	12.10	-	2.1	LDEEB2470 - A0-					
0.056 µF	12.10	-	1.6	LDECB2560 - A0-	LDEDB2560 - A0-									
0.068 µF	12.10	-	1.8	LDECB2680 - A0-	LDEDB2680 - A0-									
0.082 µF	12.10	-	2.0	LDECB2820 - A0-	LDEDB2820 - A0-					22.20	b	2.8	LDEID2820 - A0-	
0.10 µF	12.10	-	2.1	LDECB3100 - A0-	LDEDB3100 - A0-					22.20	b	3.3	LDEID3100 - A0-	
0.12 µF						18.12	b	2.6	LDEEC3120 - A0-	22.20	c	4.0	LDEID3120 - A0-	
0.15 µF														
0.18 µF										28.24	b	3.9	LDEIE3180 - A0-	
0.22 µF										28.24	b	4.5	LDEIE3220 - A0-	
0.27 µF										28.24	c	5.4	LDEIE3270 - A0-	
0.33 µF														
0.39 µF						22.20	c	3.6	LDEED3390 - A0-	40.30	b	4.4	LDEIF3390 - A0-	
0.47 µF						22.20	c	4.2	LDEED3470 - A0-	40.30	c	5.3	LDEIF3470 - A0-	
0.56 µF						22.20	c	4.4	LDEED3560 - A0-	40.30	c	5.7	LDEIF3560 - A0-	
0.68 µF										50.40	b	4.5	LDEIG3680 - A0-	
0.82 µF	22.20	c	3.7	LDECD3820 - A0-	LDEDD3820 - A0-	28.24	b	4.5	LDEEE3820 - A0-	50.40	c	5.5	LDEIG3820 - A0-	
1.0 µF	22.20	c	4.2	LDECD4100 - A0-	LDEDD4100 - A0-	28.24	c	5.4	LDEEE4100 - A0-					
1.2 µF						40.30	b	3.5	LDEEF4120 - A0-	60.54	b	4.8	LDEIH4120 - A0-	
1.5 µF	28.24	b	4.1	LDECE4150 - A0-	LDEDE4150 - A0-	40.30	b	4.4	LDEEF4150 - A0-	60.54	c	5.7	LDEIH4150 - A0-	
1.8 µF	28.24	c	4.9	LDECE4180 - A0-	LDEDE4180 - A0-	40.30	c	5.2	LDEEF4180 - A0-					
2.2 µF						40.30	c	5.6	LDEEF4220 - A0-					
2.7 µF	40.30	b	3.9	LDECF4270 - A0-	LDEDF4270 - A0-	50.40	c	4.5	LDEEG4270 - A0-					
3.3 µF	40.30	c	4.5	LDECF4330 - A0-	LDEDF4330 - A0-	50.40	c	5.5	LDEEG4330 - A0-					
3.9 µF	40.30	c	5.2	LDECF4390 - A0-	LDEDF4390 - A0-	50.40	c	5.7	LDEEG4390 - A0-					
4.7 µF	50.40	b	3.8	LDECG4470 - A0-	LDEDG4470 - A0-									

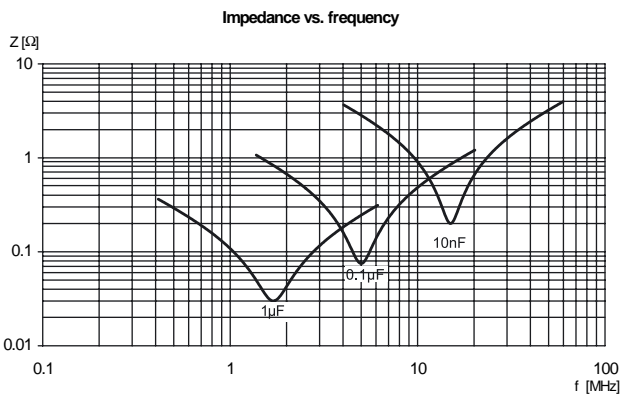
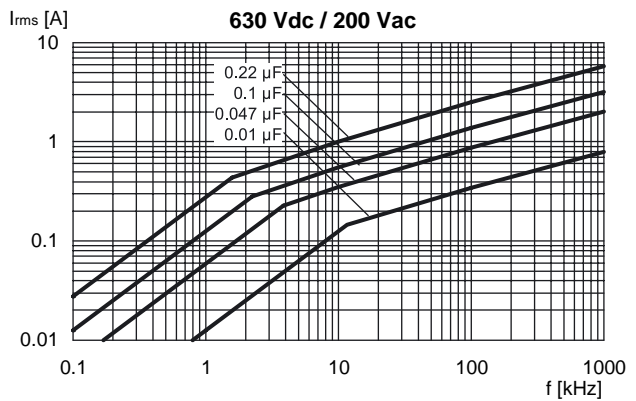
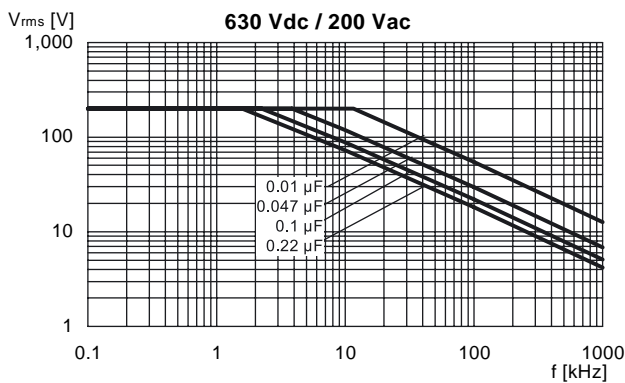
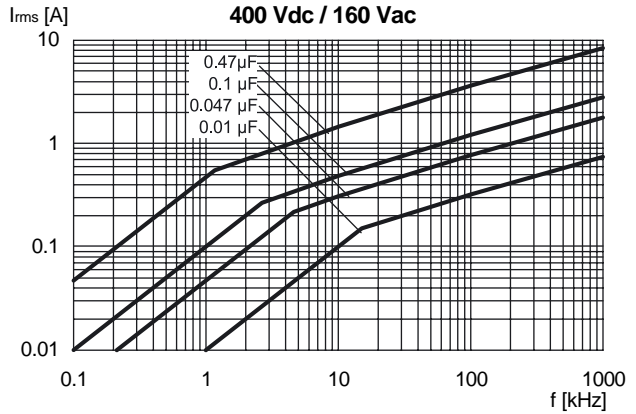
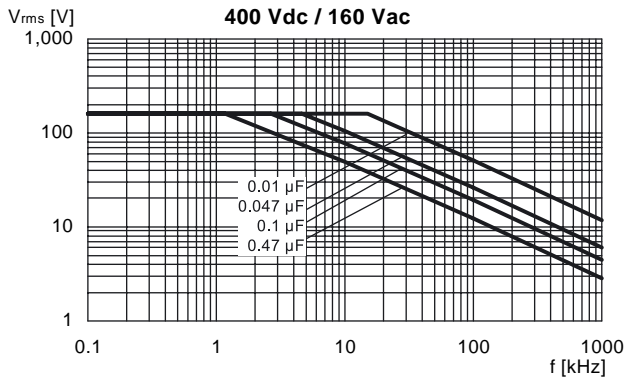
Tolerance: J (± 5%); K (± 10%); M (± 20%) _____
 Packing: N (Tape); M (Loose) _____
 Internal use _____

Size conversion and tolerances

Size code	12.06	12.10	18.12	22.20	28.24	40.30	50.40	60.54
L (mm)	3.2 ± 0.3	3.2 ± 0.3	4.5 ± 0.5	5.7 ± 0.5	7.1 ± 0.5	10.2 ± 0.6	12.7 ± 0.6	15.2 ± 0.6
W (mm)	1.6 ± 0.3	2.5 ± 0.3	3.2 ± 0.5	5.1 ± 0.5	6.1 ± 0.5	7.6 ± 0.8	10.2 ± 0.8	13.7 ± 0.8

PEN dielectric - LDE Series

MAX. VOLTAGE (Vr.m.s.) AND CURRENT (Ir.m.s.) VERSUS FREQUENCY
(sinusoidal wave-form / *T_h ≤ 85°C)



Measure carried out in free air condition.

Note: *T_h = max. ambient temperature surrounding the capacitor or hottest contact point (i.e. tracks), whichever is higher, in the worst operation conditions in °C.