

# E61 (DC) Series (DC Cylindrical Metallized Polypropylene Film Capacitors)

## Features

- High voltage range and ultra low inductance capacitors.
- Made in dry technology.
- For DC application.

## Specifications

Item	Specification
Category temperature range	-25 ~ +85°C (Includes self temperature rise)
Storage temperature	-40 ~ +85°C
Rated voltage (U <sub>N</sub> )	500 ~ 4,000Vdc
Terminal (torque)	M6 × 5 (4Nm)
Standards	IEC 61071 : 2007
Dielectric	Polypropylene
Dielectric dissipation factor (tan δ <sub>0</sub> )	2 × 10 <sup>-4</sup>
Capacitance tolerance	±10% (optional ±5%)
Safety devices	-
Impregnant	Solid resin based on vegetable oil, Non PCB
Material of case	Plastic (UL94V-0)
Environmental regulations	Comply with RoHS

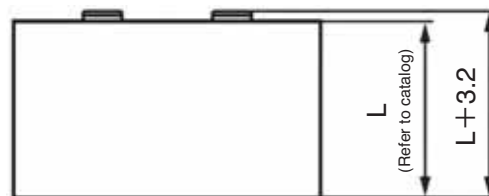
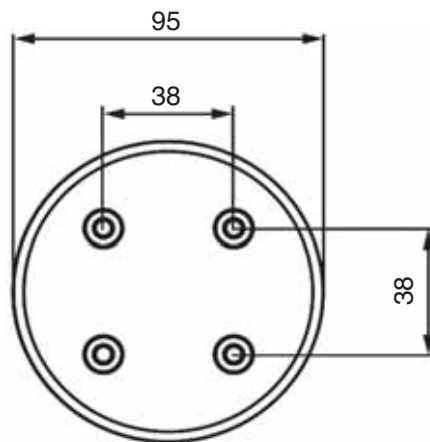
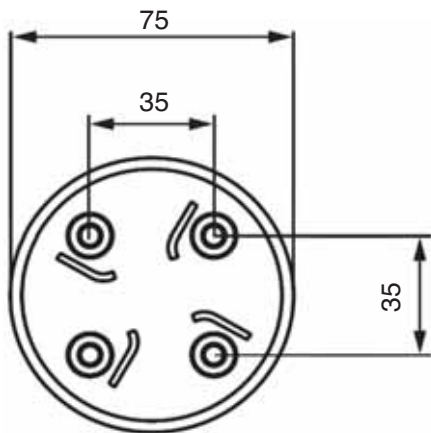
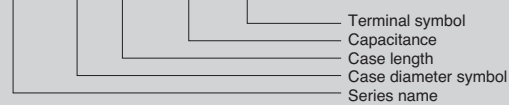


## Dimensions

Item	Specification
Terminal code	P57
Can material	Plastic (UL94V-0)
Terminal	Internal threads M6×5
	Torque : 4Nm I <sub>max</sub> (terminal) : 40A
Degree of protection	IP00
Humidity class	F
Clearance in air	26mm
Creepage distance	26mm

Numbering system: e.g. E61, 500VDC, 190 μF, φ75×56Lmm, P57 terminal

**E61 . M 56 - 194 P57 / H**



Circuitry

## Standard Value and Case Size

Rated Capacitance $C_N$ [ $\mu\text{F}$ ]	Case size		Series resistance (reference) $R_s$ [ $\text{m}\Omega$ ]	Thermal resistance (reference) $R_{th}$ [ $\text{K/W}$ ]	Max current $I_{max}$ [Arms]	Max peak current $\hat{I}$ [kA]	Max surge current $I_s$ [kA]	Self inductance (reference) $ESL$ [nH]	Weight [kg]	Part number
	$\phi D$ [mm]	$L$ [mm]								
<b>Rated voltage <math>U_N</math>: 500Vdc Us: 750V Ur: 170V <math>U_{TT}</math>: 750Vdc</b>										
208	75	56	0.79	7.5	50	2.6	8	15	0.3	E61.M56-214P57/H
358	95	56	0.64	4.7	70	4	13	20	0.48	E61.P56-364P57/H
542	95	83	0.57	3.1	80	8	26	25	0.7	E61.P83-544P57/H
645	95	83	0.84	3.1	70	4	13	25	0.7	E61.P83-654P57/H
<b>Rated voltage <math>U_N</math>: 700Vdc Us: 1,050V Ur: 200V <math>U_{TT}</math>: 1,050Vdc</b>										
154	75	56	0.85	7.5	50	2.2	7	15	0.3	E61.M56-154P57/H
265	95	56	0.67	4.7	65	4	11	20	0.48	E61.P56-274P57/H
402	95	83	0.58	3.1	80	8	22	25	0.7	E61.P83-404P57/H
480	95	83	0.89	3.1	70	4	11	25	0.7	E61.P83-484P57/H
<b>Rated voltage <math>U_N</math>: 900Vdc Us: 1,350V Ur: 260V <math>U_{TT}</math>: 1,350Vdc</b>										
118	75	56	0.91	7.5	45	2	6	15	0.3	E61.M56-124P57/H
203	95	56	0.7	4.7	65	3	10	20	0.48	E61.P56-204P57/H
308	95	83	0.6	3.1	80	6	20	25	0.7	E61.P83-314P57/H
367	95	83	0.95	3.1	70	3	10	25	0.7	E61.P83-374P57/H
<b>Rated voltage <math>U_N</math>: 1,100Vdc Us: 1,650V Ur: 300V <math>U_{TT}</math>: 1,650Vdc</b>										
83.5	75	56	1.01	7.5	40	1.6	5	15	0.3	E61.M56-843P57/H
144	95	56	0.76	4.7	60	2.8	8	20	0.48	E61.P56-144P57/H
218	95	83	0.62	3.1	80	5.6	16	25	0.7	E61.P83-224P57/H
260	95	83	1.05	3.1	65	2.8	8	25	0.7	E61.P83-264P57/H
<b>Rated voltage <math>U_N</math>: 1,300Vdc Us: 1,950V Ur: 300V <math>U_{TT}</math>: 1,950Vdc</b>										
56	75	56	1.13	7.5	40	1.3	4	15	0.3	E61.M56-563P57/H
96	95	56	0.84	4.7	60	2.3	7	20	0.48	E61.P56-963P57/H
145	95	83	0.65	3.1	75	4.6	14	25	0.7	E61.P83-154P57/H
173	95	83	1.17	3.1	60	2.3	7	25	0.7	E61.P83-174P57/H
<b>Rated voltage <math>U_N</math>: 2,000Vdc Us: 3,000V Ur: 400V <math>U_{TT}</math>: 3,000Vdc</b>										
24	75	56	1.42	7.5	35	0.9	2.8	15	0.3	E61.M56-243P57/H
41.5	95	56	1.0	4.7	50	1.6	5	20	0.48	E61.P56-423P57/H
63	95	83	0.71	3.1	75	3.2	10	25	0.7	E61.P83-633P57/H
72	95	83	1.48	3.1	55	1.5	5	25	0.7	E61.P83-723P57/H
<b>Rated voltage <math>U_N</math>: 2,200Vdc Us: 3,300V Ur: 400V <math>U_{TT}</math>: 3,300Vdc</b>										
18	75	56	1.62	7.5	35	0.8	2.3	15	0.3	E61.M56-183P57/H
31	95	56	1.12	4.7	50	1.3	4	20	0.48	E61.P56-313P57/H
50	95	83	0.73	3.1	70	3	10	25	0.7	E61.P83-503P57/H
58	95	83	1.68	3.1	50	1.4	4	25	0.7	E61.P83-583P57/H
<b>Rated voltage <math>U_N</math>: 2,600Vdc Us: 3,900V Ur: 500V <math>U_{TT}</math>: 3,900Vdc</b>										
12	75	56	1.24	7.5	35	1.3	4	15	0.3	E61.M56-123P57/H
21	95	56	0.89	4.7	50	2.2	7	20	0.48	E61.P56-213P57/H
40	95	83	1.23	3.1	50	2.2	7	25	0.7	E61.P83-403P57/H
<b>Rated voltage <math>U_N</math>: 3,300Vdc Us: 4,950V Ur: 700V <math>U_{TT}</math>: 4,950Vdc</b>										
7	75	56	1.42	7.5	30	1	3	15	0.3	E61.M56-702P57/H
12.5	95	56	0.98	4.7	45	1.8	5	20	0.48	E61.P56-133P57/H
24	95	83	1.39	3.1	50	1.8	5	25	0.7	E61.P83-243P57/H
<b>Rated voltage <math>U_N</math>: 3,600Vdc Us: 5,400V Ur: 800V <math>U_{TT}</math>: 5,400Vdc</b>										
6	75	56	1.52	7.5	25	0.9	2.8	15	0.3	E61.M56-602P57/H
10	95	56	1.09	4.7	40	1.5	5	20	0.48	E61.P56-103P57/H
20.5	95	83	1.48	3.1	45	1.6	5	25	0.7	E61.P83-213P57/H
<b>Rated voltage <math>U_N</math>: 4,000Vdc Us: 6,000V Ur: 800V <math>U_{TT}</math>: 6,000Vdc</b>										
3.5	75	56	1.92	7.5	25	0.7	2	15	0.3	E61.M56-352P57/H
6.5	95	56	1.24	4.7	40	1.3	4	20	0.48	E61.P56-652P57/H
13	95	83	1.78	3.1	45	1.3	4	25	0.7	E61.P83-133P57/H