

# E53H (DC) Series

(DC Cylindrical Metallized Polypropylene Film Capacitors)

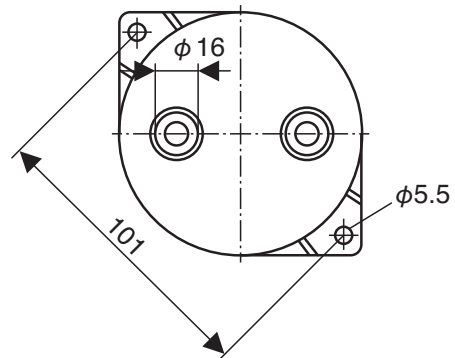
## Features

- High voltage range and ultra low inductance capacitors.
- Made in dry technology.
- Robust studs with M8 thread allows for radial connection.

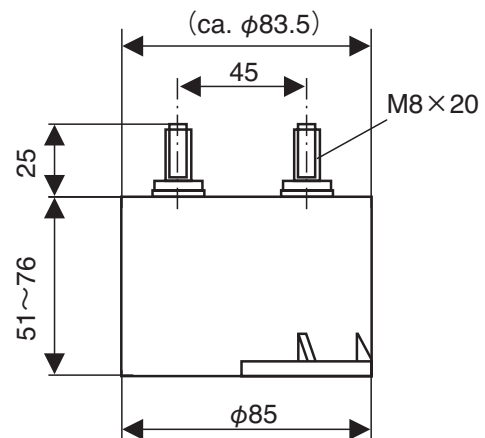
## Specifications

Item	Specification
Category temperature range	-25 ~ +70°C (+85°C / Includes self temperature rise)
Storage temperature	-40 ~ +85°C
Rated voltage (UN)	600 ~ 2,200Vdc
Terminal (torque)	M8 × 20 (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

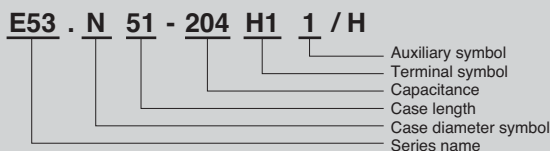
## Dimensions



Item	Specification
Terminal code	H1
Can material	Plastic (UL94V-0)
Terminal	Radial thread M8×20
	Torque : 4Nm
	I <sub>max</sub> (terminal) : 100A
Degree of protection	IP00
Humidity class	F



Numbering system: e.g. E53H, 600VDC, 200 μF, φ85×51Lmm, H1terminal



## Standard Value and Case Size

Rated Capacitance $C_N$ [ $\mu$ F]	Case size		Rated ripple voltage $U_r$ [V]	Surge voltage $U_s$ [V]	Series resistance (reference) $R_s$ [m $\Omega$ ]	Max current $I_{max}$ [Arms]	Max peak current $\hat{i}$ [kA]	Max surge current $I_s$ [kA]	$ESL$ [nH]	Clearance in air $L$ [mm]	Creepage distance $K$ [mm]	Weight [kg]	MOQ [pcs]	Part number
	$\phi D$ [mm]	$L$ [mm]												
<b>Rated voltage <math>U_N</math> : 600Vdc    <math>U_s</math> : 900V    <math>U_{TT}</math> : 900Vdc</b>														
200	85	51	100	0.75	6.1	60	3.3	9.9	30	29	33	0.36	344	E53.N51-204H11/H
280	85	64	100	0.84	4.8	60	3.5	10.5	35	29	33	0.45	256	E53.N64-284H10/H
400	85	76	100	1.1	4.1	60	3.3	9.9	40	29	29	0.53	176	E53.N76-404H11/H
<b>Rated voltage <math>U_N</math> : 700Vdc    <math>U_s</math> : 1,050V    <math>U_{TT}</math> : 1,050Vdc</b>														
150	85	51	160	0.7	6.1	60	2.9	8.7	30	29	33	0.36	344	E53.N51-154H11/H
200	85	64	160	0.92	4.8	60	2.9	8.7	35	29	33	0.45	264	E53.N64-204H10/H
300	85	76	160	1.2	4.1	60	2.9	8.7	40	29	29	0.53	176	E53.N76-304H11/H
<b>Rated voltage <math>U_N</math> : 900Vdc    <math>U_s</math> : 1,350V    <math>U_{TT}</math> : 1,350Vdc</b>														
120	85	51	200	0.84	6.1	60	2.6	7.9	30	29	33	0.36	344	E53.N51-124H11/H
150	85	64	200	1	4.8	60	2.5	7.5	35	29	33	0.45	272	E53.N64-154H11/H
240	85	76	200	1.3	4.1	60	2.6	7.8	40	29	29	0.53	176	E53.N76-244H11/H
<b>Rated voltage <math>U_N</math> : 1,100Vdc    <math>U_s</math> : 1,650V    <math>U_{TT}</math> : 1,650Vdc</b>														
75	85	51	250	1.0	6.1	60	2.0	6	30	29	33	0.36	360	E53.N51-753H11/H
100	85	64	250	0.9	4.8	60	2.0	6.2	35	29	33	0.45	280	E53.N64-104H10/H
150	85	76	250	1.5	4.1	75	2.0	6.1	40	29	29	0.53	200	E53.N76-154H11/H
<b>Rated voltage <math>U_N</math> : 1,300Vdc    <math>U_s</math> : 1,950V    <math>U_{TT}</math> : 1,950Vdc</b>														
50	85	51	300	1.1	6.1	70	1.6	4.8	30	29	33	0.36	368	E53.N51-503H11/H
68	85	64	300	1.3	4.8	70	1.7	5.1	35	29	33	0.45	256	E53.N64-683H10/H
100	85	76	300	1.5	4.1	60	1.6	4.8	40	29	29	0.53	176	E53.N76-104H11/H
<b>Rated voltage <math>U_N</math> : 1,500Vdc    <math>U_s</math> : 2,250V    <math>U_{TT}</math> : 2,250Vdc</b>														
37.5	85	51	300	1.2	6.1	60	1.4	4	30	29	33	0.36	344	E53.N51-383H11/H
50	85	64	300	1.5	4.8	60	1.4	4.2	35	29	33	0.45	256	E53.N64-503H10/H
75	85	76	300	2	4.1	60	1.4	4.2	40	29	29	0.53	200	E53.N76-753H11/H
<b>Rated voltage <math>U_N</math> : 1,800Vdc    <math>U_s</math> : 2,700V    <math>U_{TT}</math> : 2,700Vdc</b>														
30	85	51	400	0.73	6.1	60	1.3	3.9	30	29	33	0.36	344	E53.N51-303H11/H
40	85	64	400	1.6	4.8	60	1.3	3.9	35	29	33	0.45	256	E53.N64-403H10/H
60	85	76	400	2.1	4.1	50	1.3	3.9	40	29	29	0.53	176	E53.N76-603H11/H
<b>Rated voltage <math>U_N</math> : 2,000Vdc    <math>U_s</math> : 3,000V    <math>U_{TT}</math> : 3,000Vdc</b>														
13	85	51	400	1.6	6.1	55	0.64	1.92	30	29	33	0.36	344	E53.N51-133H10/H
30	85	64	400	1.3	4.8	55	1.1	3.3	35	29	33	0.45	256	E53.N64-303H10/H
43	85	76	400	1.8	4.1	50	1	3	40	29	29	0.53	176	E53.N76-433H10/H
<b>Rated voltage <math>U_N</math> : 2,200Vdc    <math>U_s</math> : 3,300V    <math>U_{TT}</math> : 3,300Vdc</b>														
24.5	85	64	600	1.4	4.8	55	0.99	2.97	35	29	33	0.45	256	E53.N64-253H10/H
35	85	76	600	1.9	4.1	50	0.94	2.82	40	29	29	0.53	200	E53.N76-353H10/H