HCDB-T

DC-Link Capacitor for PCB (THB Version)



Features

- Metallized polypropylene film
- Plastic case, filled with resin (UL 94 V-0)
- Good self-healing performance
- Low losses and high current capability
- Automotive (AEC-Q200) grade

Typical Applications

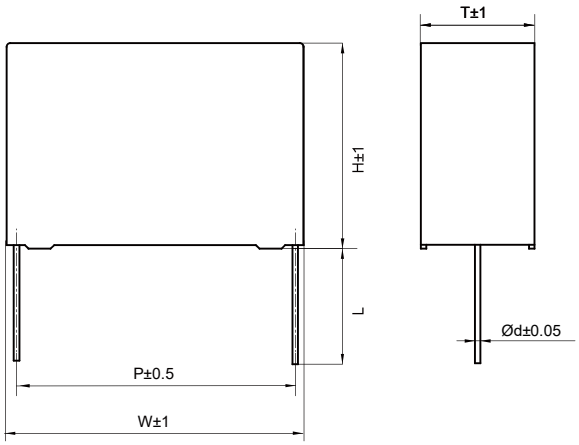
- For use in DC filtering, DC link, power electronics, energy storage, renewable energy grid interface, motor drives, and automotive applications, and with excellent long-term capacitance stability under harsh environments (e.g., high temperature and high humidity)

Safety Approvals

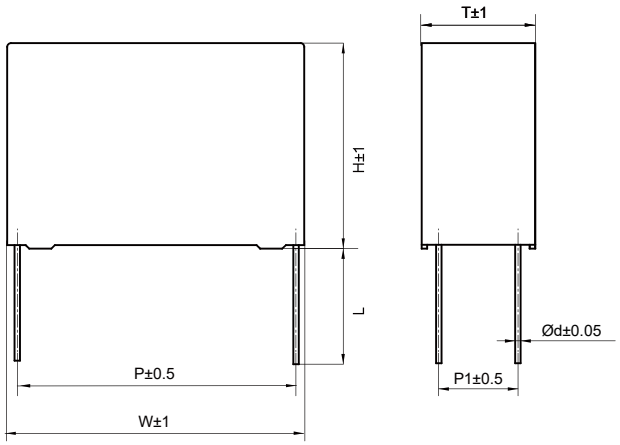
	UL	UL810	0.6μF-135μF,max 3000Vd.c. max 105℃ File No.: E222132,CCN:CZDS2
	TÜV	EN 61071:2017	0.6μF-135μF,μF±5%,±10%,500Vd.c.-1500Vd.c. 40/85/56,40/105/56 File No.: R50516398

Notes: The above certificate No.is just a license No. Please refer to the certificates we supplied for detail information.

Outline Drawing



2Pins



4Pins

Notes: All product dimensions are in mm.
See the Technical Parameters table for details.

Specifications

Reference standards		IEC 61071,GB/T 17702
Rated voltage	U_{NDC}	500Vd.c.~1500Vd.c.
Capacitance range	C_N	0.6μF~140μF
Capacitance tolerance		±5%(J),±10%(K)
Dielectric loss factor	$\tan\delta_d$	0.0002
Insulation resistance (25℃±5℃,100Vd.c.,1min)	IR×C_N	⩾10000s
Climatic category		40/85/56
Operating temperature range(case)	T_{OP}	-40℃~+105℃(85℃~105℃:decreasing factor 1.35% per ℃ for U_{NDC})
Voltage proof between terminals	$U_{t\text{-}t}$	1.5U_{NDC}/10s
Maximum applicable peak to peak ripple voltage	U_{pp}	0.2 x U_{NDC}
Rated temperature	T_R	85℃
Self-inductance	L_s	<1nH per mm of lead spacing
Failure rate	λ	⩽100FIT
THB test (Damp heat test with loading)		Temperature:85±2℃, Humidity:85±2%RH Voltage:U_{NDC}, Duration:1000 hours Capacitance change(ΔC/C):⩽10%(1kHz) Dissipation factor change (Δtanδ):⩽0.02(1kHz)
Over voltage		1.1U_{NDC}(30% of on-load-dur.) 1.15U_{NDC}(30 min/day) 1.2U_{NDC}(5 min/day) 1.3U_{NDC}(1 min/day)

Ordering Information

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
H	C	D	B	-	T	/	1	U	1	0	0	4	K	B	0	1	0	0	0	C	0	0	0

Series code

Rated voltage

2H=500Vd.c.
1U=600Vd.c.
1V=700Vd.c.
2K=800Vd.c.
1X=900Vd.c.
3A=1000Vd.c.
1M=1100Vd.c.
3L=1200Vd.c.
2M=1300Vd.c.
3M=1400Vd.c.
4M=1500Vd.c.

Rated capacitance

For example:
1004=100×10⁴pF
=1μF

Capacitance tolerance

J=±5%
M=±10%

Pitch

B=27.5mm
F=37.5mm
M=52.5mm

Lead QTY

0=2pins
A=4pins,P1=20.3mm
B=4pins,P1=10.2mm

Lead diameter

1=0.8mm
2=1.0mm
3=1.2mm

Internal code

Lead form and packaging code

See table 1

Table 1: Lead Form and Packaging Code

Digit 21		Digit 22~23		Digit 24	
Code	Explanation	Code	Explanation	Code	Explanation
C	Straight Lead[1)]	00	Standard lead length(5.5 mm)	0	Lead length tolerance±0.5 mm
		35	Lead length 3.5 mm[2)]		

Notes: 1) Other lead form and packaging options are available upon customer request.
2) If the lead length is 4.5 mm, the code is C450, etc.

Technical Parameters

$U_{N,85℃}$=500Vd.c.; $U_{N,105℃}$=350Vd.c.													
C_N(μF)	W (mm)	H (mm)	T (mm)	P (mm)	P1 (mm)	d (mm)	dv/dt (V/μs)	Î(A)	tanδ(×10^{-4}) 1kHz	tanδ(×10^{-4}) 10kHz	ESR@10kHz (mΩ)	I_{max}(A)	Ordering Information
3.0	32.0	20.0	11.0	27.5	-	0.8	65	195	10	100	20.8	4.5	HCDB-T/2H3004+B01000****
3.5	32.0	20.0	11.0	27.5	-	0.8	65	228	10	100	17.8	4.9	HCDB-T/2H3504+B01000****
4.0	32.0	22.0	13.0	27.5	-	0.8	65	260	10	100	15.6	5.4	HCDB-T/2H4004+B01000****
5.0	32.0	22.0	13.0	27.5	-	0.8	65	325	10	100	12.5	6.0	HCDB-T/2H5004+B01000****
8.0	32.0	28.0	14.0	27.5	-	0.8	65	520	10	100	7.8	8.3	HCDB-T/2H8004+B01000****
10.0	32.0	30.0	16.0	27.5	-	0.8	65	650	10	100	6.2	10.7	HCDB-T/2H1005+B01000****
12.0	32.0	33.0	18.0	27.5	-	0.8	65	780	10	100	5.2	11.8	HCDB-T/2H1205+B01000****
15.0	32.0	37.0	22.0	27.5	-	0.8	65	975	10	100	4.2	14.5	HCDB-T/2H1505+B01000****
18.0	32.0	37.0	22.0	27.5	-	0.8	65	1170	10	100	3.5	15.8	HCDB-T/2H1805+B01000****
15.0	42.0	32.0	17.0	37.5	-	1.0	30	450	15	150	8.9	10.0	HCDB-T/2H1505+F02000****
18.0	42.0	33.0	18.0	37.5	-	1.0	30	540	15	150	7.4	10.9	HCDB-T/2H1805+F02000****
22.0	42.0	37.0	22.0	37.5	-	1.0	30	660	15	150	6.1	13.3	HCDB-T/2H2205+F02000****
25.0	42.0	37.0	22.0	37.5	-	1.0	30	750	15	150	5.3	14.2	HCDB-T/2H2505+F02000****
30.0	42.0	44.0	24.0	37.5	10.2	1.0	30	900	15	150	4.4	16.7	HCDB-T/2H3005+FB2000****
35.0	42.0	44.0	24.0	37.5	10.2	1.0	30	1050	15	150	3.8	18.1	HCDB-T/2H3505+FB2000****
40.0	42.0	45.0	30.0	37.5	20.3	1.2	30	1200	15	150	3.3	21.2	HCDB-T/2H4005+FA3000****
45.0	42.0	45.0	30.0	37.5	20.3	1.2	30	1350	15	150	3.0	22.5	HCDB-T/2H4505+FA3000****
50.0	57.5	45.0	25.0	52.5	10.2	1.2	15	750	35	350	5.8	17.9	HCDB-T/2H5005+MB3000****
60.0	57.5	45.0	25.0	52.5	10.2	1.2	15	900	35	350	4.9	19.6	HCDB-T/2H6005+MB3000****
70.0	57.5	45.0	30.0	52.5	20.3	1.2	15	1050	35	350	4.2	21.2	HCDB-T/2H7005+MA3000****
80.0	57.5	50.0	35.0	52.5	20.3	1.2	15	1200	35	350	3.6	24.4	HCDB-T/2H8005+MA3000****
90.0	57.5	50.0	35.0	52.5	20.3	1.2	15	1350	35	350	3.2	25.9	HCDB-T/2H9005+MA3000****
105.0	57.0	50.0	40.0	52.5	20.3	1.2	15	1575	35	350	2.8	28.0	HCDB-T/2H1056+MA3000****
120.0	57.5	55.0	45.0	52.5	20.3	1.2	15	1800	35	350	2.4	31.9	HCDB-T/2H1206+MA3000****
135.0	57.5	55.0	45.0	52.5	20.3	1.2	15	2025	35	350	2.2	33.9	HCDB-T/2H1356+MA3000****

Notes: 1) "+" means capacitance tolerance,J=±5%,K=±10%;
2)"****" means lead form and packaging code (See table 1).

Technical Parameters

$U_{N,85℃}$=600Vd.c.; $U_{N,105℃}$=420Vd.c.													
C_N(μF)	W (mm)	H (mm)	T (mm)	P (mm)	P1 (mm)	d (mm)	dv/dt (V/μs)	Î(A)	tanδ(×10^{-4}) 1kHz	tanδ(×10^{-4}) 10kHz	ESR@10kHz (mΩ)	I_{max}(A)	Ordering Information
3.0	32.0	20.0	11.0	27.5	-	0.8	65	195	10	100	18.6	4.7	HCDB-T/1U3004+B01000****
4.0	32.0	22.0	13.0	27.5	-	0.8	65	260	10	100	14.0	5.7	HCDB-T/1U4004+B01000****
5.0	32.0	25.0	13.0	27.5	-	0.8	65	325	10	100	11.2	7.0	HCDB-T/1U5004+B01000****
6.0	32.0	28.0	14.0	27.5	-	0.8	65	390	10	100	9.3	7.6	HCDB-T/1U6004+B01000****
7.0	32.0	30.0	16.0	27.5	-	0.8	65	455	10	100	8.0	8.2	HCDB-T/1U7004+B01000****
8.0	32.0	30.0	16.0	27.5	-	0.8	65	520	10	100	7.0	10.2	HCDB-T/1U8004+B01000****
9.0	32.0	33.0	18.0	27.5	-	0.8	65	585	10	100	6.2	10.8	HCDB-T/1U9004+B01000****
10.0	32.0	33.0	18.0	27.5	-	0.8	65	650	10	100	5.6	11.4	HCDB-T/1U1005+B01000****
12.0	32.0	37.0	22.0	27.5	-	0.8	65	780	10	100	4.7	13.7	HCDB-T/1U1205+B01000****
15.0	32.0	37.0	22.0	27.5	-	0.8	65	975	10	100	3.7	15.3	HCDB-T/1U1505+B01000****
20.0	42.0	37.0	22.0	37.5	-	1.0	30	600	20	175	5.9	13.5	HCDB-T/1U2005+F02000****
22.0	42.0	37.0	22.0	37.5	-	1.0	30	660	20	175	5.4	14.1	HCDB-T/1U2205+F02000****
25.0	42.0	44.0	24.0	37.5	-	1.0	30	750	20	175	4.8	16.2	HCDB-T/1U2505+F02000****
28.0	42.0	44.0	24.0	37.5	10.2	1.0	30	840	20	175	4.2	17.1	HCDB-T/1U2805+FB2000****
30.0	42.0	44.0	24.0	37.5	10.2	1.0	30	900	20	175	4.0	17.7	HCDB-T/1U3005+FB2000****
35.0	42.0	45.0	30.0	37.5	20.3	1.2	30	1050	20	175	3.4	21.0	HCDB-T/1U3505+FA3000****
38.0	42.0	45.0	30.0	37.5	20.3	1.2	30	1140	20	175	3.1	21.9	HCDB-T/1U3805+FA3000****
40.0	42.0	46.0	35.0	37.5	20.3	1.2	30	1200	20	175	3.0	23.6	HCDB-T/1U4005+FA3000****
45.0	42.0	46.0	35.0	37.5	20.3	1.2	30	1350	20	175	2.6	25.0	HCDB-T/1U4505+FA3000****
45.0	57.5	45.0	25.0	52.5	10.2	1.2	15	675	35	350	5.8	18.0	HCDB-T/1U4505+MB3000****
50.0	57.5	45.0	30.0	52.5	20.3	1.2	15	750	35	350	5.2	19.0	HCDB-T/1U5005+MA3000****
55.0	57.5	45.0	30.0	52.5	20.3	1.2	15	825	35	350	4.7	19.9	HCDB-T/1U5505+MA3000****
60.0	57.5	50.0	35.0	52.5	20.3	1.2	15	900	35	350	4.3	22.4	HCDB-T/1U6005+MA3000****
65.0	57.5	50.0	35.0	52.5	20.3	1.2	15	975	35	350	4.0	23.3	HCDB-T/1U6505+MA3000****
75.0	57.5	50.0	35.0	52.5	20.3	1.2	15	1125	35	350	3.5	25.1	HCDB-T/1U7505+MA3000****
80.0	57.0	50.0	40.0	52.5	20.3	1.2	15	1200	35	350	3.2	25.9	HCDB-T/1U8005+MA3000****
90.0	57.0	50.0	40.0	52.5	20.3	1.2	15	1350	35	350	2.9	27.5	HCDB-T/1U9005+MA3000****
95.0	57.5	55.0	45.0	52.5	20.3	1.2	15	1425	35	350	2.7	28.2	HCDB-T/1U9505+MA3000****
100.0	57.5	55.0	45.0	52.5	20.3	1.2	15	1500	35	350	2.6	30.9	HCDB-T/1U1006+MA3000****
105.0	57.5	55.0	45.0	52.5	20.3	1.2	15	1575	35	350	2.5	31.6	HCDB-T/1U1056+MA3000****

Notes: 1) "+" means capacitance tolerance,J=±5%,K=±10%;
2)"****" means lead form and packaging code (See table 1).

Technical Parameters

$U_{N,85℃}$=700Vd.c.; $U_{N,105℃}$=500Vd.c.													
C_N(μF)	W (mm)	H (mm)	T (mm)	P (mm)	P1 (mm)	d (mm)	dv/dt (V/μs)	Î(A)	tanδ(×10^{-4}) 1kHz	tanδ(×10^{-4}) 10kHz	ESR@10kHz (mΩ)	I_{max}(A)	Ordering Information
2.0	32.0	20.0	11.0	27.5	-	0.8	65	130	10	100	25.3	4.1	HCDB-T/1V2004+B01000****
3.0	32.0	22.0	13.0	27.5	-	0.8	65	195	10	100	16.9	5.2	HCDB-T/1V3004+B01000****
4.0	32.0	25.0	13.0	27.5	-	0.8	65	260	10	100	12.7	6.5	HCDB-T/1V4004+B01000****
5.0	32.0	28.0	14.0	27.5	-	0.8	65	325	10	100	10.1	7.3	HCDB-T/1V5004+B01000****
6.0	32.0	30.0	16.0	27.5	-	0.8	65	390	10	100	8.4	9.2	HCDB-T/1V6004+B01000****
7.0	32.0	33.0	18.0	27.5	-	0.8	65	455	10	100	7.2	10.0	HCDB-T/1V7004+B01000****
8.0	32.0	33.0	18.0	27.5	-	0.8	65	520	10	100	6.3	10.7	HCDB-T/1V8004+B01000****
9.0	32.0	37.0	22.0	27.5	-	0.8	65	585	10	100	5.6	12.4	HCDB-T/1V9004+B01000****
10.0	32.0	37.0	22.0	27.5	-	0.8	65	650	10	100	5.1	13.1	HCDB-T/1V1005+B01000****
12.0	32.0	37.0	22.0	27.5	-	0.8	65	780	10	100	4.2	14.4	HCDB-T/1V1204+B01000****
10.0	42.0	32.0	17.0	37.5	-	1.0	30	300	20	175	10.7	9.1	HCDB-T/1V1005+F02000****
12.0	42.0	33.0	18.0	37.5	-	1.0	30	360	20	175	8.9	9.9	HCDB-T/1V1205+F02000****
18.0	42.0	37.0	22.0	37.5	-	1.0	30	540	20	175	6.0	13.5	HCDB-T/1V1805+F02000****
30.0	42.0	45.0	30.0	37.5	20.3	1.2	30	900	20	175	3.6	20.5	HCDB-T/1V3005+FA3000****
35.0	57.5	45.0	25.0	52.5	10.2	1.2	15	525	35	350	6.7	16.8	HCDB-T/1V3505+MB3000****
40.0	57.5	45.0	30.0	52.5	20.3	1.2	15	600	35	350	5.8	17.9	HCDB-T/1V4005+MA3000****
45.0	57.5	45.0	30.0	52.5	20.3	1.2	15	675	35	350	5.2	19.0	HCDB-T/1V4505+MA3000****
50.0	57.5	50.0	35.0	52.5	20.3	1.2	15	750	35	350	4.7	20.0	HCDB-T/1V5005+MA3000****
55.0	57.5	50.0	35.0	52.5	20.3	1.2	15	825	35	350	4.3	22.6	HCDB-T/1V5505+MA3000****
70.0	57.0	50.0	40.0	52.5	20.3	1.2	15	1050	35	350	3.3	25.5	HCDB-T/1V7005+MA3000****
80.0	57.5	55.0	45.0	52.5	20.3	1.2	15	1200	35	350	2.9	29.1	HCDB-T/1V8005+MA3000****

$U_{N,85℃}$=800Vd.c.; $U_{N,105℃}$=560Vd.c.													
C_N(μF)	W (mm)	H (mm)	T (mm)	P (mm)	P1 (mm)	d (mm)	dv/dt (V/μs)	Î(A)	tanδ(×10^{-4}) 1kHz	tanδ(×10^{-4}) 10kHz	ESR@10kHz (mΩ)	I_{max}(A)	Ordering Information
2.0	32.0	22.0	13.0	27.5	-	0.8	65	130	10	95	22.7	4.5	HCDB-T/2K2004+B01000****
4.0	32.0	28.0	14.0	27.5	-	0.8	65	260	10	95	11.3	6.9	HCDB-T/2K4004+B01000****
6.0	32.0	33.0	18.0	27.5	-	0.8	65	390	10	95	7.6	9.8	HCDB-T/2K6004+B01000****
9.0	32.0	37.0	22.0	27.5	-	0.8	65	585	10	95	5.0	13.1	HCDB-T/2K9004+B01000****
7.0	42.0	30.0	16.0	37.5	-	1.0	30	210	18	160	13.7	7.4	HCDB-T/2K7004+F02000****
8.0	42.0	32.0	17.0	37.5	-	1.0	30	240	18	160	12.0	8.6	HCDB-T/2K8004+F02000****
9.0	42.0	33.0	18.0	37.5	-	1.0	30	270	18	160	10.6	9.1	HCDB-T/2K9004+F02000****

Notes: 1) "+" means capacitance tolerance,J=±5%,K=±10%;
2)"****" means lead form and packaging code (See table 1).

Technical Parameters

$U_{N,85℃}$=800Vd.c.; $U_{N,105℃}$=560Vd.c.													
C_N(μF)	W (mm)	H (mm)	T (mm)	P (mm)	P1 (mm)	d (mm)	dv/dt (V/μs)	Î(A)	tanδ(×10^{-4})		ESR@10kHz (mΩ)	I_{max}(A)	Ordering Information
									1kHz	10kHz			
10.0	42.0	37.0	22.0	37.5	-	1.0	30	300	18	160	9.6	10.6	HCDB-T/2K1005+F02000****
12.0	42.0	37.0	22.0	37.5	-	1.0	30	360	18	160	8.0	11.6	HCDB-T/2K1205+F02000****
15.0	42.0	44.0	24.0	37.5	10.2	1.0	30	450	18	160	6.4	14.0	HCDB-T/2K1505+FB2000****
20.0	42.0	45.0	30.0	37.5	20.3	1.2	30	600	18	160	4.8	17.7	HCDB-T/2K2005+FA3000****
25.0	57.5	45.0	25.0	52.5	10.2	1.2	15	375	33	320	8.3	15.0	HCDB-T/2K2505+MB3000****
30.0	57.5	45.0	30.0	52.5	20.3	1.2	15	450	33	320	6.9	16.4	HCDB-T/2K3005+MA3000****
35.0	57.5	45.0	30.0	52.5	20.3	1.2	15	525	33	320	5.9	17.8	HCDB-T/2K3505+MA3000****
40.0	57.5	50.0	35.0	52.5	20.3	1.2	15	600	33	320	5.2	20.4	HCDB-T/2K4005+MA3000****
45.0	57.5	50.0	35.0	52.5	20.3	1.2	15	675	33	320	4.6	21.7	HCDB-T/2K4505+MA3000****
50.0	57.0	50.0	40.0	52.5	20.3	1.2	15	750	33	320	4.2	22.9	HCDB-T/2K5005+MA3000****
55.0	57.0	50.0	40.0	52.5	20.3	1.2	15	825	33	320	3.8	24.0	HCDB-T/2K5505+MA3000****
65.0	57.5	55.0	45.0	52.5	20.3	1.2	15	975	33	320	3.2	27.8	HCDB-T/2K6505+MA3000****

$U_{N,85℃}$=900Vd.c.; $U_{N,105℃}$=630Vd.c.													
C_N(μF)	W (mm)	H (mm)	T (mm)	P (mm)	P1 (mm)	d (mm)	dv/dt (V/μs)	Î(A)	tanδ(×10^{-4})		ESR@10kHz (mΩ)	I_{max}(A)	Ordering Information
									1kHz	10kHz			
1.5	32.0	22.0	13.0	27.5	-	0.8	70	105	9	90	28.9	4	HCDB-T/1X1504+B01000****
2.5	32.0	28.0	14.0	27.5	-	0.8	70	175	9	90	14.1	6.2	HCDB-T/1X2504+B01000****
3.0	32.0	30.0	16.0	27.5	-	0.8	70	210	9	90	11.7	7.8	HCDB-T/1X3004+B01000****
4.0	32.0	33.0	18.0	27.5	-	0.8	70	280	9	90	8.8	9.0	HCDB-T/1X4004+B01000****
5.0	32.0	37.0	22.0	27.5	-	0.8	70	350	9	90	7.0	11.1	HCDB-T/1X5004+B01000****
6.0	32.0	37.0	22.0	27.5	-	0.8	70	420	9	90	5.9	12.2	HCDB-T/1X6004+B01000****
6.0	42.0	33.0	18.0	37.5	-	1.0	35	210	17	150	12.5	8.4	HCDB-T/1X6004+F02000****
7.0	42.0	37.0	22.0	37.5	-	1.0	35	245	17	150	10.8	10.0	HCDB-T/1X7004+F02000****
8.0	42.0	37.0	22.0	37.5	-	1.0	35	280	17	150	9.4	10.7	HCDB-T/1X8004+F02000****
9.0	42.0	37.0	22.0	37.5	-	1.0	35	315	17	150	8.4	11.4	HCDB-T/1X9004+F02000****
12.0	42.0	44.0	24.0	37.5	10.2	1.0	35	420	17	150	6.3	14.1	HCDB-T/1X1205+FB2000****
15.0	42.0	45.0	30.0	37.5	20.3	1.2	35	525	17	150	5.0	17.3	HCDB-T/1X1505+FA3000****
20.0	42.0	50.0	35.0	37.5	20.3	1.2	35	700	17	150	3.8	20.9	HCDB-T/1X2005+FA3000****
25.0	42.0	55.0	40.0	37.5	20.3	1.2	35	875	17	150	3.0	24.4	HCDB-T/1X2505+FA3000****
20.0	57.5	45.0	25.0	52.5	10.2	1.2	15	300	30	300	8.3	15.1	HCDB-T/1X2005+MB3000****
25.0	57.5	50.0	35.0	52.5	20.3	1.2	15	375	30	300	6.6	18.1	HCDB-T/1X2505+MA3000****
30.0	57.5	50.0	35.0	52.5	20.3	1.2	15	450	30	300	5.5	19.9	HCDB-T/1X3005+MA3000****
35.0	57.0	50.0	40.0	52.5	20.3	1.2	15	525	30	300	4.7	21.4	HCDB-T/1X3505+MA3000****
40.0	57.5	55.0	45.0	52.5	20.3	1.2	15	600	30	300	4.1	24.5	HCDB-T/1X4005+MA3000****
45.0	57.5	55.0	45.0	52.5	20.3	1.2	15	675	30	300	3.7	25.9	HCDB-T/1X4505+MA3000****

Notes: 1) "+" means capacitance tolerance,J=±5%,K=±10%;
2)"****" means lead form and packaging code (See table 1).

Technical Parameters

$U_{N,85℃}$=1000Vd.c.; $U_{N,105℃}$=700Vd.c.													
C_N(μF)	W (mm)	H (mm)	T (mm)	P (mm)	P1 (mm)	d (mm)	dv/dt (V/μs)	Î(A)	tanδ(×10^{-4})		ESR@10kHz (mΩ)	I_{max}(A)	Ordering Information
									1kHz	10kHz			
1.0	32.0	22.0	13.0	27.5	-	0.8	75	75	8	80	32.6	3.7	HCDB-T/3A1004+B01000****
2.0	32.0	28.0	14.0	27.5	-	0.8	75	150	8	80	16.3	5.8	HCDB-T/3A2004+B01000****
3.0	32.0	33.0	18.0	27.5	-	0.8	75	225	8	80	10.9	8.1	HCDB-T/3A3004+B01000****
4.0	32.0	37.0	22.0	27.5	-	0.8	75	300	8	80	8.1	10.3	HCDB-T/3A4004+B01000****
5.0	32.0	37.0	22.0	27.5	-	0.8	75	375	8	80	6.5	11.6	HCDB-T/3A5004+B01000****
5.0	42.0	33.0	18.0	37.5	-	1.0	37	185	15	140	13.9	8.0	HCDB-T/3A5004+F02000****
6.0	42.0	37.0	22.0	37.5	-	1.0	37	222	15	140	11.5	9.7	HCDB-T/3A6004+F02000****
7.0	42.0	37.0	22.0	37.5	-	1.0	37	259	15	140	9.9	10.4	HCDB-T/3A7004+F02000****
8.0	42.0	44.0	24.0	37.5	10.2	1.0	37	296	15	140	8.7	12.0	HCDB-T/3A8004+FB2000****
9.0	42.0	44.0	24.0	37.5	10.2	1.0	37	333	15	140	7.7	12.7	HCDB-T/3A9004+FB2000****
10.0	42.0	44.0	24.0	37.5	10.2	1.0	37	370	15	140	6.9	13.4	HCDB-T/3A1005+FB2000****
12.0	42.0	45.0	30.0	37.5	20.3	1.2	37	444	15	140	5.8	16.1	HCDB-T/3A1205+FA3000****
15.0	57.5	45.0	25.0	52.5	10.2	1.2	17	255	28	280	10.1	13.6	HCDB-T/3A1505+MB3000****
20.0	57.5	45.0	30.0	52.5	20.3	1.2	17	340	28	280	7.6	15.7	HCDB-T/3A2005+MA3000****
25.0	57.5	50.0	35.0	52.5	20.3	1.2	17	425	28	280	6.1	18.9	HCDB-T/3A2505+MA3000****
30.0	57.0	50.0	40.0	52.5	20.3	1.2	17	510	28	280	5.1	20.7	HCDB-T/3A3005+MA3000****
35.0	57.5	55.0	45.0	52.5	20.3	1.2	17	595	28	280	4.3	23.9	HCDB-T/3A3505+MA3000****
38.0	57.5	55.0	45.0	52.5	20.3	1.2	17	646	28	280	4.0	24.9	HCDB-T/3A3805+MA3000****

$U_{N,85℃}$=1100Vd.c.; $U_{N,105℃}$=770Vd.c.													
C_N(μF)	W (mm)	H (mm)	T (mm)	P (mm)	P1 (mm)	d (mm)	dv/dt (V/μs)	Î(A)	tanδ(×10^{-4})		ESR@10kHz (mΩ)	I_{max}(A)	Ordering Information
									1kHz	10kHz			
0.6	32.0	20.0	11.0	27.5	-	0.8	75	45	8	80	50.5	2.9	HCDB-T/1M6003+B01000****
1.5	32.0	28.0	14.0	27.5	-	0.8	75	113	8	80	20.2	5.2	HCDB-T/1M1504+B01000****
3.0	32.0	33.0	18.0	27.5	-	0.8	75	225	8	80	10.1	8.4	HCDB-T/1M3004+B01000****
3.5	32.0	37.0	22.0	27.5	-	0.8	75	263	8	80	8.7	10.0	HCDB-T/1M3504+B01000****
4.0	32.0	37.0	22.0	27.5	-	0.8	75	300	8	80	7.6	10.7	HCDB-T/1M4004+B01000****
4.0	42.0	33.0	18.0	37.5	-	1.0	38	152	15	140	16.1	7.4	HCDB-T/1M4004+F02000****
4.5	42.0	37.0	22.0	37.5	-	1.0	38	171	15	140	14.3	8.7	HCDB-T/1M4504+F02000****
5.0	42.0	37.0	22.0	37.5	-	1.0	38	190	15	140	12.8	9.2	HCDB-T/1M5004+F02000****
6.0	42.0	37.0	22.0	37.5	-	1.0	38	228	15	140	10.7	10.0	HCDB-T/1M6004+F02000****
7.0	42.0	44.0	24.0	37.5	10.2	1.0	38	266	15	140	9.2	11.7	HCDB-T/1M7004+FB2000****
8.0	42.0	44.0	24.0	37.5	10.2	1.0	38	304	15	140	8.0	12.5	HCDB-T/1M8004+FB2000****
9.0	42.0	45.0	30.0	37.5	20.3	1.2	38	342	15	140	7.1	14.5	HCDB-T/1M9004+FA3000****
10.0	42.0	45.0	30.0	37.5	20.3	1.2	38	380	15	140	6.4	15.3	HCDB-T/1M1005+FA3000****
12.0	42.0	46.0	35.0	37.5	20.3	1.2	38	456	15	140	5.4	17.6	HCDB-T/1M1205+FA3000****
13.0	42.0	46.0	35.0	37.5	20.3	1.2	38	494	15	140	4.9	18.3	HCDB-T/1M1305+FA3000****
14.0	42.0	50.0	35.0	37.5	20.3	1.2	38	532	15	140	4.6	19.0	HCDB-T/1M1405+FA3000****
15.0	42.0	50.0	35.0	37.5	20.3	1.2	38	570	15	140	4.3	19.6	HCDB-T/1M1505+FA3000****
15.0	57.5	45.0	30.0	52.5	20.3	1.2	18	270	28	280	9.4	14.1	HCDB-T/1M1505+MA3000****
20.0	57.5	50.0	35.0	52.5	20.3	1.2	18	360	28	280	7.0	17.6	HCDB-T/1M2005+MA3000****
25.0	57.0	50.0	40.0	52.5	20.3	1.2	18	450	28	280	5.6	19.7	HCDB-T/1M2505+MA3000****
30.0	57.5	55.0	45.0	52.5	20.3	1.2	18	540	28	280	4.7	23.0	HCDB-T/1M3005+MA3000****

Notes: 1) "+" means capacitance tolerance,J=±5%,K=±10%;
2)"****" means lead form and packaging code (See table 1).

Technical Parameters

$U_{N,85℃}$=1200Vd.c.; $U_{N,105℃}$=850Vd.c.													
C_N(μF)	W (mm)	H (mm)	T (mm)	P (mm)	P1 (mm)	d (mm)	dv/dt (V/μs)	Î(A)	tanδ(×10^{-4})		ESR@10kHz (mΩ)	I_{max}(A)	Ordering Information
									1kHz	10kHz			
0.8	32.0	22.0	13.0	27.5	-	0.8	90	72	8	60	35.5	3.6	HCDB-T/3L8003+B01000****
1.2	32.0	28.0	14.0	27.5	-	0.8	90	108	8	60	23.6	4.8	HCDB-T/3L1204+B01000****
1.5	32.0	28.0	14.0	27.5	-	0.8	90	135	8	60	18.9	5.3	HCDB-T/3L1504+B01000****
2.0	32.0	30.0	16.0	27.5	-	0.8	90	180	8	60	14.2	7.1	HCDB-T/3L2004+B01000****
2.2	32.0	33.0	18.0	27.5	-	0.8	90	198	8	60	12.9	7.5	HCDB-T/3L2204+B01000****
3.0	32.0	37.0	22.0	27.5	-	0.8	90	270	8	60	9.5	9.6	HCDB-T/3L3004+B01000****
3.3	32.0	37.0	22.0	27.5	-	0.8	90	297	8	60	8.6	10.1	HCDB-T/3L3304+B01000****
4.0	42.0	37.0	22.0	37.5	-	1.0	45	180	13	100	15.0	8.5	HCDB-T/3L4004+F02000****
5.0	42.0	37.0	22.0	37.5	-	1.0	45	225	13	100	12.0	9.5	HCDB-T/3L5004+F02000****
6.0	42.0	44.0	24.0	37.5	10.2	1.0	45	270	13	100	10.0	11.2	HCDB-T/3L6004+FB2000****
7.0	42.0	44.0	24.0	37.5	10.2	1.0	45	315	13	100	8.5	12.1	HCDB-T/3L7004+FB2000****
8.0	42.0	45.0	30.0	37.5	20.3	1.2	45	360	13	100	7.5	14.2	HCDB-T/3L8004+FA3000****
9.0	42.0	45.0	30.0	37.5	20.3	1.2	45	405	13	100	6.6	15.0	HCDB-T/3L9004+FA3000****
10.0	42.0	46.0	35.0	37.5	20.3	1.2	45	450	13	100	6.0	16.6	HCDB-T/3L1005+FA3000****
12.0	42.0	50.0	35.0	37.5	20.3	1.2	45	540	13	100	5.0	18.2	HCDB-T/3L1205+FA3000****
12.0	57.5	45.0	25.0	52.5	10.2	1.2	23	276	24	200	10.9	13.1	HCDB-T/3L1205+MB3000****
15.0	57.5	50.0	35.0	52.5	20.3	1.2	23	345	24	200	8.7	15.8	HCDB-T/3L1505+MA3000****
20.0	57.0	50.0	40.0	52.5	20.3	1.2	23	460	24	200	6.5	18.2	HCDB-T/3L2005+MA3000****
25.0	57.5	55.0	45.0	52.5	20.3	1.2	23	575	24	200	5.2	21.8	HCDB-T/3L2505+MA3000****

$U_{N,85℃}$=1400Vd.c.; $U_{N,105℃}$=980Vd.c.													
C_N(μF)	W (mm)	H (mm)	T (mm)	P (mm)	P1 (mm)	d (mm)	dv/dt (V/μs)	Î(A)	tanδ(×10^{-4})		ESR@10kHz (mΩ)	I_{max}(A)	Ordering Information
									1kHz	10kHz			
0.8	32.0	25.0	13.0	27.5	-	0.8	100	80	8	60	31.5	4.1	HCDB-T/3M8003+B01000****
1.0	32.0	28.0	14.0	27.5	-	0.8	100	100	8	60	25.2	4.6	HCDB-T/3M1004+B01000****
1.5	32.0	30.0	16.0	27.5	-	0.8	100	150	8	60	16.8	6.5	HCDB-T/3M1504+B01000****
2.0	32.0	33.0	18.0	27.5	-	0.8	100	200	8	60	12.6	7.6	HCDB-T/3M2004+B01000****
2.5	32.0	37.0	22.0	27.5	-	0.8	100	250	8	60	10.1	9.3	HCDB-T/3M2504+B01000****
3.0	42.0	37.0	22.0	37.5	-	1.0	50	150	12	90	17.6	7.8	HCDB-T/3M3004+F02000****
4.0	42.0	37.0	22.0	37.5	-	1.0	50	200	12	90	13.2	9.0	HCDB-T/3M4004+F02000****
5.0	42.0	44.0	24.0	37.5	10.2	1.0	50	250	12	90	10.6	10.9	HCDB-T/3M5004+FB2000****
6.0	42.0	45.0	30.0	37.5	20.3	1.2	50	300	12	90	8.8	13.1	HCDB-T/3M6004+FA3000****
8.0	42.0	46.0	35.0	37.5	20.3	1.2	50	400	12	90	6.6	15.8	HCDB-T/3M8004+FA3000****
10.0	42.0	50.0	35.0	37.5	20.3	1.2	50	500	12	90	5.3	17.7	HCDB-T/3M1005+FA3000****
10.0	57.5	45.0	30.0	52.5	20.3	1.2	25	250	22	180	11.5	12.8	HCDB-T/3M1005+MA3000****
12.0	57.5	50.0	35.0	52.5	20.3	1.2	25	300	22	180	9.6	15.1	HCDB-T/3M1205+MA3000****
15.0	57.5	50.0	35.0	52.5	20.3	1.2	25	375	22	180	7.7	16.9	HCDB-T/3M1505+MA3000****
16.0	57.0	50.0	40.0	52.5	20.3	1.2	25	400	22	180	7.2	17.4	HCDB-T/3M1605+MA3000****
18.0	57.5	55.0	45.0	52.5	20.3	1.2	25	450	22	180	6.4	19.7	HCDB-T/3M1805+MA3000****
20.0	57.5	55.0	45.0	52.5	20.3	1.2	25	500	22	180	5.7	20.8	HCDB-T/3M2005+MA3000****

Notes: 1) "+" means capacitance tolerance,J=±5%,K=±10%;
2)"****" means lead form and packaging code (See table 1).

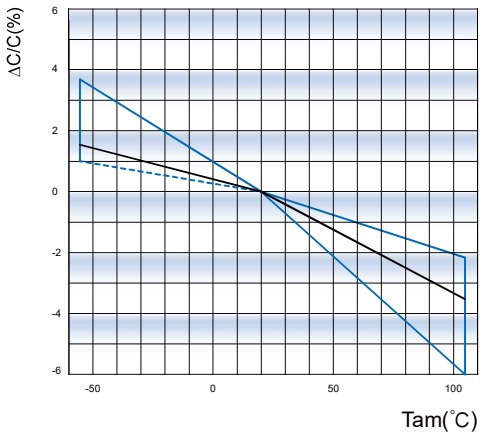
Technical Parameters

$U_{N,85℃}$=1500Vd.c.; $U_{N,105℃}$=1050Vd.c.													
C_N(μF)	W (mm)	H (mm)	T (mm)	P (mm)	P1 (mm)	d (mm)	dv/dt (V/μs)	Î(A)	tanδ(×10^{-4})		ESR@10kHz (mΩ)	I_{max}(A)	Ordering Information
									1kHz	10kHz			
0.8	32.0	28.0	14.0	27.5	-	0.8	100	80	8	60	28.5	4.4	HCDB-T/4M8003+B01000****
1.5	32.0	33.0	18.0	27.5	-	0.8	100	150	8	60	15.2	6.9	HCDB-T/4M1504+B01000****
2.0	32.0	37.0	22.0	27.5	-	0.8	100	200	8	60	11.4	8.7	HCDB-T/4M2004+B01000****
2.2	32.0	37.0	22.0	27.5	-	0.8	100	220	8	60	10.4	9.2	HCDB-T/4M2204+B01000****
2.5	42.0	37.0	22.0	37.5	-	1.0	50	125	12	90	18.9	7.6	HCDB-T/4M2504+F02000****
3.0	42.0	37.0	22.0	37.5	-	1.0	50	150	12	90	15.8	8.3	HCDB-T/4M3004+F02000****
4.0	42.0	44.0	24.0	37.5	10.2	1.0	50	200	12	90	11.8	10.3	HCDB-T/4M4004+FB2000****
5.0	42.0	45.0	30.0	37.5	20.3	1.2	50	250	12	90	9.5	12.6	HCDB-T/4M5004+FA3000****
5.5	42.0	45.0	30.0	37.5	20.3	1.2	50	275	12	90	8.6	13.2	HCDB-T/4M5504+FA3000****
6.0	42.0	46.0	35.0	37.5	20.3	1.2	50	300	12	90	7.9	14.5	HCDB-T/4M6004+FA3000****
7.0	42.0	50.0	35.0	37.5	20.3	1.2	50	350	12	90	6.8	15.6	HCDB-T/4M7004+FA3000****
8.0	42.0	55.0	40.0	37.5	20.3	1.2	50	400	12	90	5.9	17.5	HCDB-T/4M8004+FA3000****
8.0	57.5	45.0	30.0	52.5	20.3	1.2	25	200	22	180	12.8	12.1	HCDB-T/4M8004+MA3000****
10.0	57.5	50.0	35.0	52.5	20.3	1.2	25	250	22	180	10.2	14.6	HCDB-T/4M1005+MA3000****
12.0	57.0	50.0	40.0	52.5	20.3	1.2	25	300	22	180	8.5	16.0	HCDB-T/4M1205+MA3000****
15.0	57.5	55.0	45.0	52.5	20.3	1.2	25	375	22	180	6.8	19.0	HCDB-T/4M1505+MA3000****

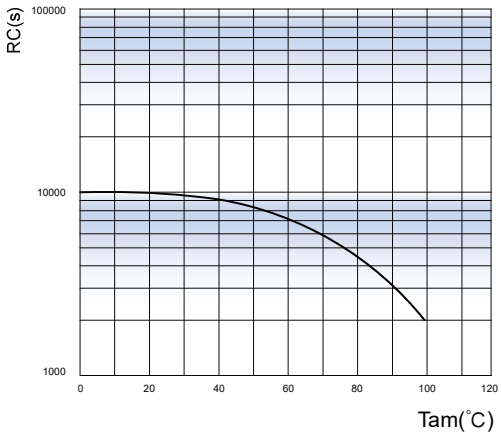
Notes: 1) "+" means capacitance tolerance,J=±5%,K=±10%;
2)"****" means lead form and packaging code (See table 1).

Characteristic Curve (Typical)

Capacitance versus temperature

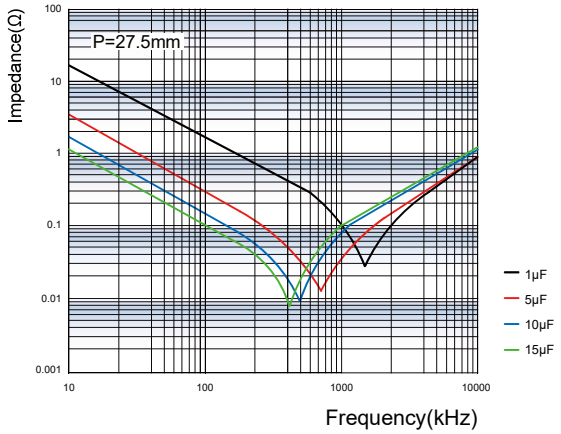


Insulation resistance versus temperature

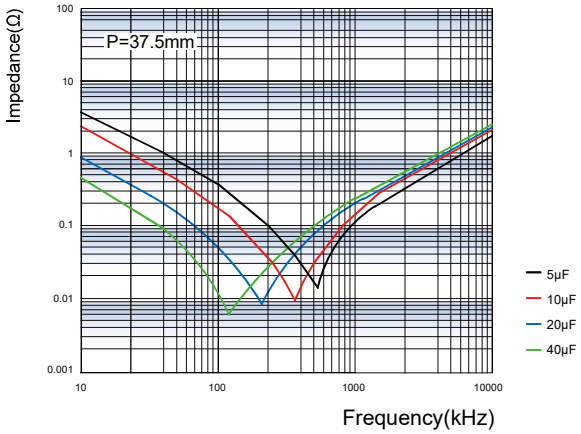


Characteristic Curve (Typical)

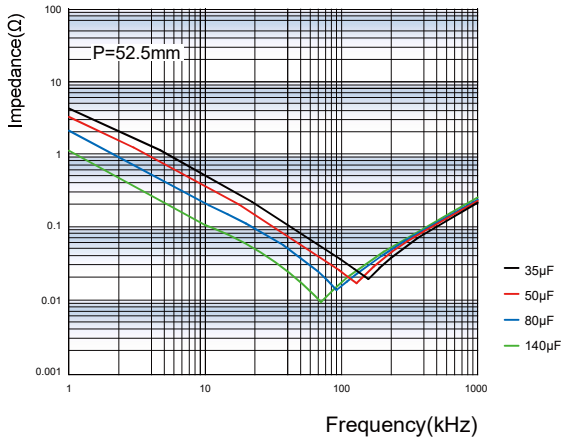
Impedance versus frequency



Impedance versus frequency



Impedance versus frequency



DC current versus temperature

