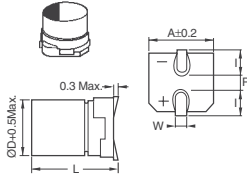




## HB Series Aluminum Electrolytic Capacitors, Surface Mount Type



**Features:** • General Purpose • Life Time: 2000H @105°C • High CV Volumetric Efficiency • Tape and Reel Packaging for Automatic Placement  
**Specifications:** • Operating Temperature Range: -40°C – 105°C • Capacitance Tolerance: ±20% (120Hz, 20°C) • Leakage Current:  $I \leq 0.01CV$  or  $3(\mu A)$  whichever is greater measured after a 2 minute application of rated working voltage at 20°C • Low Temperature Characteristics: Impedance ratio (120Hz)  
**Following specified values:**

Impedance 120Hz	Working Voltage						
	4V	6.3V	10V	16V	25V	35V	50V
-25°C/20°C	7	4	3	2	2	2	2
-40°C/20°C	15	8	6	4	4	3	3

Size Code	Dimensions - mm					
	D	L	A	I	W	P
B	4.0	5.8	4.3	1.8	0.65 ±0.1	1.0
C	5.0	5.8	5.3	2.2	0.65 ±0.1	1.5
D	6.3	5.8	6.6	2.6	0.65 ±0.1	1.8

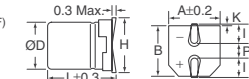
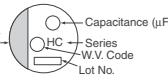
Rated W.V. (VDC)	Nom. Cap. (µF)	tan δ ≤ Spec. Values (120Hz, 20°C)	Max. Leak. Current (µA)	Size Code	Max. Ripple Cur. 120Hz, 105°C (mA rms)	Digi-Key Part No.	Cut Tape Pricing			Digi-Key Part No.	Tape and Reel		Panasonic Part No.
							1	50	100		Qty.	Pricing	
<b>HB Long Life High Reliability Series: -40°C - 105°C (2000 Hour Life)</b>													
4	47	0.50	3.0	B	34	PCE3023CT-ND	.37	10.58	17.64	PCE3023TR-ND	2,000	63.50/M	EEV-HB0G470R
	100	0.50	4.0	C	61	PCE3024CT-ND	.44	12.61	21.02	PCE3024TR-ND	1,000	79.89	EEV-HB0G101R
	220	0.50	8.8	D	82	PCE3025CT-ND	.52	14.87	24.78	PCE3025TR-ND	1,000	94.18	EEV-HB0G221P
6.3	22	0.30	3.0	B	26	PCE3026CT-ND	.37	10.58	17.64	PCE3026TR-ND	2,000	63.50/M	EEV-HB0J220R
	33	0.30	3.0	B	29	PCE3027CT-ND	.37	10.58	17.64	PCE3027TR-ND	2,000	63.50/M	EEV-HB0J330R
	47	0.30	3.0	C	46	PCE3028CT-ND	.44	12.61	21.02	PCE3028TR-ND	1,000	79.89	EEV-HB0J470R
10	100	0.30	6.3	D	71	PCE3029CT-ND	.52	14.87	24.78	PCE3029TR-ND	1,000	94.18	EEV-HB0J101P
	33	0.22	3.3	C	43	PCE3030CT-ND	.44	12.61	21.02	PCE3030TR-ND	1,000	79.89	EEV-HB1A330R
	10	0.16	3.0	B	28	PCE3031CT-ND	.37	10.58	17.64	PCE3031TR-ND	2,000	63.50/M	EEV-HB1C100R
16	22	0.16	3.5	C	39	PCE3032CT-ND	.44	12.61	21.02	PCE3032TR-ND	1,000	79.89	EEV-HB1C220R
	47	0.16	7.5	D	70	PCE3033CT-ND	.52	14.87	24.78	PCE3033TR-ND	1,000	94.18	EEV-HB1C470P
	10	0.14	3.0	B	22	PCE3034CT-ND	.37	10.58	17.64	PCE3034TR-ND	2,000	63.50/M	EEV-HB1E4R7R
25	6.8	0.14	3.0	B	25	PCE3035CT-ND	.37	10.58	17.64	PCE3035TR-ND	2,000	63.50/M	EEV-HB1E6R8R
	10	0.14	3.0	C	28	PCE3036CT-ND	.89	28.42	51.15	PCE3036TR-ND	1,000	227.18	EEV-HB1E100R
	22	0.14	5.5	D	55	PCE3037CT-ND	.93	31.39	57.00	PCE3037TR-ND	1,000	256.09	EEV-HB1E220P
	33	0.14	8.3	D	65	PCE3038CT-ND	.52	14.87	24.78	PCE3038TR-ND	1,000	94.18	EEV-HB1E330P
35	10	0.12	3.5	C	28	PCE3039CT-ND	.44	12.61	21.02	PCE3039TR-ND	1,000	79.89	EEV-HB1V100R
	22	0.12	7.7	D	55	PCE3040CT-ND	.52	14.87	24.78	PCE3040TR-ND	1,000	94.18	EEV-HB1V220P
50	0.1	0.12	3.0	B	1	PCE3041CT-ND	.37	10.58	17.64	PCE3041TR-ND	2,000	63.50/M	EEV-HB1HR10R
	0.22	0.12	3.0	B	2	PCE3042CT-ND	.37	10.58	17.64	PCE3042TR-ND	2,000	63.50/M	EEV-HB1HR22R
	0.33	0.12	3.0	B	3	PCE3043CT-ND	.37	10.58	17.64	PCE3043TR-ND	2,000	63.50/M	EEV-HB1HR33R
	0.47	0.12	3.0	B	5	PCE3044CT-ND	.37	10.58	17.64	PCE3044TR-ND	2,000	63.50/M	EEV-HB1HR47R
	1	0.12	3.0	B	10	PCE3045CT-ND	.37	10.58	17.64	PCE3045TR-ND	2,000	63.50/M	EEV-HB1HR10R
	2.2	0.12	3.0	B	16	PCE3046CT-ND	.37	10.58	17.64	PCE3046TR-ND	2,000	63.50/M	EEV-HB1HR2R
	3.3	0.12	3.0	B	16	PCE3047CT-ND	.37	10.58	17.64	PCE3047TR-ND	2,000	63.50/M	EEV-HB1HR3R
	4.7	0.12	3.0	C	23	PCE3048CT-ND	.44	12.61	21.02	PCE3048TR-ND	1,000	79.89	EEV-HB1HR47R
	6.8	0.12	3.4	C	23	PCE3049CT-ND	.52	14.87	24.78	PCE3049TR-ND	1,000	94.18	EEV-HB1HR6R
	10.0	0.12	5.0	D	35	PCE3050CT-ND	.52	14.87	24.78	PCE3050TR-ND	1,000	94.18	EEV-HB1H100P



## HC Series Aluminum Electrolytic Capacitors, Surface Mount Type



Negative Polarity Marking (-)



Following specified values:

Impedance 120Hz	Working Voltage					Rated Voltage Mark
	6.3V	10V	16V	25V	35V	
-25°C/20°C	3	3	2	2	2	J 6.3V A 10V C 16V E 25V V 35V
-40°C/20°C	8	5	4	3	3	

Size Code	Dimensions - mm							
	D	L	A,B	H	I	W	P	K
B	4.0	5.8	4.3	5.5 Max.	1.8	0.65 ±0.1	1.0	0.35
C	5.0	5.8	5.3	6.5 Max.	2.2	0.65 ±0.1	1.5	0.35
D	6.3	5.8	6.6	7.8 Max.	2.6	0.65 ±0.1	1.8	0.35
D8	6.3	7.7	6.6	7.8 Max.	2.6	0.65 ±0.1	1.8	0.35
F	8.0	10.2	8.3	10.0 Max.	3.4	0.90 ±0.2	3.1	0.70 ±0.2
G	10.0	10.2	10.3	12.0 Max.	3.5	0.90 ±0.2	4.6	0.70 ±0.2

**Specifications:** • Category Temperature Range: -40°C – 105°C • Capacitance Tolerance: ±20% (120Hz, 20°C)  
 • Rated Voltage: 6.3, 10, 16, 25, 35 • Surge Voltage: 8, 13, 20, 32, 44 • Life Time: 3000 – 5000H @8, @10



Rated W.V. (VDC)	Nom. Cap. (µF)	tan δ ≤ Spec. Values (120Hz, 20°C)	Max. Leak. Current (µA)	Size Code	Max. Ripple Cur. 100KHz, 105°C (mA rms)	Digi-Key Part No.	Cut Tape Pricing			Digi-Key Part No.	Tape and Reel		Panasonic Part No.
							1	50	100		Qty.	Pricing	
<b>HC Series: -40°C - 105°C (3000 – 5000 Hour Life)</b>													
6.3	22	0.30	3.0	B	26	PCE3739CT-ND	.40	11.30	18.84	PCE3739TR-ND	2,000	66.47/M	EEE-HC0J220R
	47	0.30	3.0	C	46	PCE3740CT-ND	.47	13.48	22.47	PCE3740TR-ND	1,000	83.82	EEE-HC0J470R
	100	0.30	6.3	D	71	PCE3741CT-ND	.55	15.91	26.52	PCE3741TR-ND	1,000	98.73	EEE-HC0J101P
	220	0.30	13.8	D8	101	PCE3742CT-ND	.58	17.33	30.33	PCE3742TR-ND	900	114.96	EEE-HC0J221XP
	330	0.30	20.7	F	230	PCE3743CT-ND	.70	22.45	40.41	PCE3743TR-ND	500	104.77	EEE-HC0J331P
10	1000	0.50	63.0	G	313	PCE3744CT-ND	.83	26.30	47.34	PCE3744TR-ND	500	122.67	EEE-HC0J102P
	33	0.26	3.3	C	43	PCE3745CT-ND	.40	11.30	18.84	PCE3745TR-ND	1,000	70.16	EEE-HC1A330R
	220	0.26	22.0	F	160	PCE3746CT-ND	.70	22.45	40.41	PCE3746TR-ND	500	104.77	EEE-HC1A221P
	10	0.20	3.0	B	28	PCE3747CT-ND	.40	11.30	18.84	PCE3747TR-ND	2,000	66.47/M	EEE-HC1C100R
	22	0.20	3.5	C	39	PCE3748CT-ND	.47	13.48	22.47	PCE3748TR-ND	1,000	83.82	EEE-HC1C220R
16	47	0.20	7.5	D	70	PCE3749CT-ND	.55	15.91	26.52	PCE3749TR-ND	1,000	98.73	EEE-HC1C470P
	100	0.20	16.0	D8	81	PCE3750CT-ND	.58	17.33	30.33	PCE3750TR-ND	900	114.96	EEE-HC1C101XP
	470	0.20	75.2	G	340	PCE3751CT-ND	.83	26.30	47.34	PCE3751TR-ND	500	122.67	EEE-HC1C471P
	33	0.16	8.2	D	65	PCE3752CT-ND	.47	13.48	22.47	PCE3752TR-ND	1,000	83.82	EEE-HC1E330P
25	47	0.16	11.7	D8	65	PCE3753CT-ND	.58	17.33	30.33	PCE3753TR-ND	900	114.96	EEE-HC1E470XP
	100	0.16	25.0	F	130	PCE3754CT-ND	.70	22.45	40.41	PCE3754TR-ND	500	104.77	EEE-HC1E101P
	330	0.16	82.5	G	238	PCE3755CT-ND	.83	26.30	47.34	PCE3755TR-ND	500	122.67	EEE-HC1E331P
35	4.7	0.14	3.0	B	15	PCE3756CT-ND	.40	11.30	18.84	PCE3756TR-ND	2,000	66.47/M	EEE-HC1V4R7R
	10	0.14	3.5	C	28	PCE3757CT-ND	.47	13.48	22.47	PCE3757TR-ND	1,000	83.82	EEE-HC1V100R
	22	0.14	7.7	D	55	PCE3758CT-ND	.55	15.91	26.52	PCE3758TR-ND	1,000	98.73	EEE-HC1V220P
	33	0.14	11.5	D8	57	PCE3759CT-ND	.58	17.33	30.33	PCE3759TR-ND	900	114.96	EEE-HC1V330XP
220	0.14	77.0	G	220	PCE3760CT-ND	.83	26.30	47.34	PCE3760TR-ND	500	122.67	EEE-HC1V221P	

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