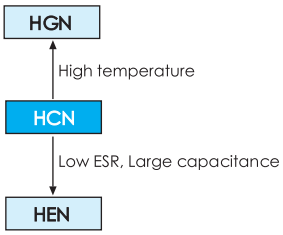
HCN SERIES

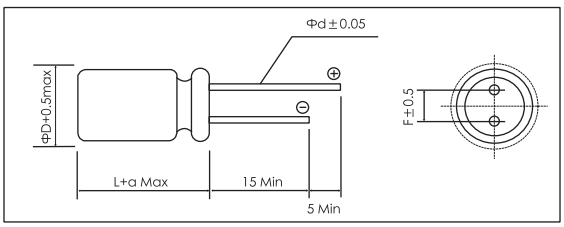
- Standard 105℃, 2000 hours
- Low ESR, high ripple current capability
- Applications: DC/DC Converter, Switching Power Supply, Back up Power Supplies for CPU etc.
- RoHS Compliant



Items	Characteristics
Operating Temperature Range (℃)	-55 ~ +105
Voltage Range (V)	2.5 ~ 35
Capacitance Range (μF) (20℃, 120Hz)	10 ~ 1500
Capacitance Tolerance (20℃, 120Hz)	± 20%
Surge Voltage	$U_R \times 1.15$
Leakage Current (μA) ※1	Please see the attached ratings list (20℃, 2min)
Dissipation Factor (20℃, 120Hz)	Please see the attached ratings list
Equivalent Series Resistance (20℃, 100kHz)	Please see the attached ratings list
Temperature Characteristics (Max Impedance Ratio at 100kHz)	$Z_{+105℃} / Z_{+20℃} \leqslant 1.25$ $Z_{-55℃} / Z_{+20℃} \leqslant 1.25$
Endurance	**2000h, Rated voltage applied at 105℃** Capacitance change: within ± 20% of the initial measured value Dissipation Factor (Tan δ): ⩽150% of initial specified value ESR: ⩽150% of initial specified value DC Leakage Current: ⩽ the initial specified value
Damp heat(Steady state)	**1000h, No-applied voltage 60℃, 90~95% RH** Capacitance change: within ± 20% of the initial measured value Dissipation Factor (Tan δ): ⩽150% of initial specified value ESR: ⩽150% of initial specified value DC Leakage Current: ⩽ the initial specified value (after voltage processing)
Resistance to soldering heat	**Flow method (260±5℃×10s)** Capacitance change: within ± 5% of the initial measured value Dissipation Factor (Tan δ): ⩽the initial specified value ESR: ⩽the initial specified value DC Leakage Current: ⩽ the initial specified value (after voltage processing)

※1 In case of some problems for measured values, measure after applying rated voltage for 120 minutes at 105℃.

Dimensions mm



(unit:mm)

Size Code	ΦD±0.5	L	amax	F±0.5	Φd±0.05
F08	6.3	8	1.0	2.5	0.5
F10	6.3	10	1.0	2.5	0.5
B08	8.0	8	1.5	3.5	0.6
BAB	8.0	11.5	1.5	3.5	0.6
CAC	10.0	12.5	1.5	5.0	0.6

Size List

Cap.(μF) \ U_R [S.V] (V)	2.5 [2.9]	4 [4.6]	6.3 [7.2]	10 [12]	16 [18]	20 [23]	25 [29]	35 [40]
10							F08	B08
15							F10	
18								BAB
22							B08	
33						F10	BAB	CAC
47				F10		B08	BAB	
56							CAC	
68				F10			BAB	
100				F10	F10.BAB	BAB.CAC	CAC	
150				F10	B08.BAB.CAC	CAC		
180					BAB			
220			F10	F10.CAC	B08.BAB			
270		F10		BAB	CAC			
330			F05.F10	BAB	CAC			
390	F10	F10	BAB					
470			BAB	CAC				
560		BAB		CAC				
680	BAB		CAC					
820	BAB	CAC	CAC					
1000		CAC	CAC					
1200	CAC	CAC						
1500	CAC							

HCN SERIES

Ratings for **HCN** Series

U_R Code	Rated Capacitance 20℃,120Hz	Max ESR 20℃,100kHz	Rated Ripple Current 105℃,100kHz	Dissipation Factor 20℃,120Hz	Leakage Current 20℃,2min	Size ΦD x L	P/N
(V)	(μF)	(mΩ)	(mArms)	(%)	(μA)	(mm)	-
2.5 0E	390	20	3200	8	195.0	6.3×10	PCR0ECN391MF10□□
	680	10	5230	12	340.0	8×11.5	PCR0ECN681MBAB□□
	820	10	5230	12	410.0	8×11.5	PCR0ECN821MBAB□□
	1200	8	5500	12	600.0	10×12.5	PCR0ECN122MCAC□□
	1500	8	5500	12	750.0	10×12.5	PCR0ECN152MCAC□□
4 0G	270	20	3200	8	216.0	6.3×10	PCR0GCN271MF10□□
	390	20	3300	8	312.0	6.3×10	PCR0GCN391MF10□□
	560	10	5230	12	448.0	8×11.5	PCR0GCN561MBAB□□
	820	8	5500	12	656.0	10×12.5	PCR0GCN821MCAC□□
	1000	8	5500	12	800.0	10×12.5	PCR0GCN102MCAC□□
	1200	8	5500	12	960.0	10×12.5	PCR0GCN122MCAC□□
6.3 0J	220	20	3200	8	277.2	6.3×10	PCR0JCN221MF10□□
	330	20	2700	8	415.8	6.3×5	PCR0JCN331MF05□□
	330	20	3300	12	415.8	6.3×10	PCR0JCN331MF10□□
	390	12	4770	12	491.4	8×11.5	PCR0JCN391MBAB□□
	470	12	4770	12	592.2	8×11.5	PCR0JCN471MBAB□□
	680	10	5500	12	642.6	10×12.5	PCR0JCN681MCAC□□
	820	10	5500	12	774.9	10×12.5	PCR0JCN821MCAC□□
	1000	10	5500	12	945.0	10×12.5	PCR0JCN102MCAC□□
10 1A	47	25	2900	8	94.0	6.3×10	PCR1ACN470MF10□□
	68	25	2900	8	136.0	6.3×10	PCR1ACN680MF10□□
	100	25	2900	8	200.0	6.3×10	PCR1ACN101MF10□□
	150	25	2900	12	300.0	6.3×10	PCR1ACN151MF10□□
	220	25	2900	12	440.0	6.3×10	PCR1ACN221MF10□□
	270	14	4420	12	540.0	8×11.5	PCR1ACN271MBAB□□
	330	14	4420	12	660.0	8×11.5	PCR1ACN331MBAB□□
	220	10	5500	12	330.0	10×12.5	PCR1ACN221MCAC□□
	470	10	5500	12	705.0	10×12.5	PCR1ACN471MCAC□□
	560	12	5300	12	840.0	10×12.5	PCR1ACN561MCAC□□
16 1C	100	24	2900	12	320.0	6.3×10	PCR1CCN101MF10□□
	150	16	4000	12	480.0	8×8	PCR1CCN151MB08□□
	220	16	4000	12	704.0	8×8	PCR1CCN221MB08□□
	100	16	4360	12	320.0	8×11.5	PCR1CCN101MBAB□□
	150	16	4360	12	480.0	8×11.5	PCR1CCN151MBAB□□
	180	16	4360	12	576.0	8×11.5	PCR1CCN181MBAB□□
	220	16	4360	12	704.0	8×11.5	PCR1CCN221MBAB□□
	150	10	5500	12	360.0	10×12.5	PCR1CCN151MCAC□□
	270	14	5050	12	648.0	10×12.5	PCR1CCN271MCAC□□
	330	14	5050	12	792.0	10×12.5	PCR1CCN331MCAC□□
20 1D	33	48	2200	12	132.0	6.3×10	PCR1DCN330MF10□□
	47	30	2800	12	188.0	8×8	PCR1DCN470MB08□□
	100	24	3320	12	400.0	8×11.5	PCR1DCN101MBAB□□
	100	20	4320	12	400.0	10×12.5	PCR1DCN101MCAC□□
	150	20	4320	12	600.0	10×12.5	PCR1DCN151MCAC□□
25 1E	10	50	2000	12	50.0	6.3×8	PCR1ECN100MF08□□
	15	48	2200	12	75.0	6.3×10	PCR1ECN150MF10□□
	22	30	2800	12	110.0	8×8	PCR1ECN220MB08□□
	33	24	3600	12	165.0	8×11.5	PCR1ECN330MBAB□□
	47	24	3320	12	235.0	8×11.5	PCR1ECN470MBAB□□
	68	24	3320	12	340.0	8×11.5	PCR1ECN680MBAB□□
	56	20	3800	12	280.0	10×12.5	PCR1ECN560MCAC□□
	100	20	4320	12	500.0	10×12.5	PCR1ECN101MCAC□□
35 1V	10	50	2300	12	175.0	8×8	PCR1VCN100MB08□□
	18	34	2830	12	315.0	8×11.5	PCR1VCN180MBAB□□
	33	30	3270	12	577.5	10×12.5	PCR1VCN330MCAC□□

Customer products are available on request.

Frequency coefficient for ripple current

Frequency	120Hz ⩽ f < 1kHz	1kHz ⩽ f < 10kHz	10kHz ⩽ f < 100kHz	100kHz ⩽ f < 500kHz
Coefficient	0.05	0.3	0.7	1