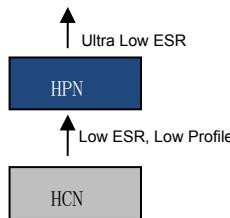


- Low ESR, Large profile 105°C, 2000 hours.
- Ultra Low ESR, high ripple current capability
- Applications: DC/DC Converter, Switching Power Supply, Back up Power Supplies for CPU etc.
- RoHS Compliant

HPNA



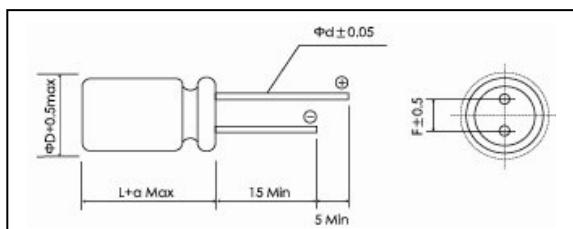
Items	Characteristics
<b>Operating Temperature Range (°C)</b>	-55 ~ +105
<b>Voltage Range (V)</b>	2.5 ~ 16
<b>Capacitance Range (<math>\mu\text{F}</math>) (20°C, 120Hz)</b>	150~1000
<b>Capacitance Tolerance (20°C, 120Hz)</b>	$\pm 20\%$
<b>Surge Voltage</b>	$UR \times 1.15$
<b>Leakage Current (<math>\mu\text{A}</math>) <sup>※1</sup></b>	Please see the attached ratings list (20°C, 2min)
<b>Dissipation Factor (20°C, 120Hz)</b>	Please see the attached ratings list
<b>Equivalent Series Resistance(20°C, 100kHz)</b>	Please see the attached ratings list
<b>Temperature Characteristics (Max Impedance Ratio at 100kHz)</b>	$Z_{+105^\circ\text{C}}/Z_{+20^\circ\text{C}} \leq 1.25$ $Z_{-55^\circ\text{C}}/Z_{+20^\circ\text{C}} \leq 1.25$
<b>Endurance</b>	<b>2000h, Rated voltage applied at 105°C</b> Capacitance change: within $\pm 20\%$ of the initial measured value Dissipation Factor (Tan δ): $\leq 150\%$ of initial specified value ESR: $\leq 150\%$ of initial specified value DC Leakage Current: $\leq$ the initial specified value
<b>Damp heat(Steady state)</b>	<b>1000h, No-applied voltage 60°C, 90~95% RH</b> Capacitance change: within $\pm 20\%$ of the initial measured value Dissipation Factor (Tan δ): $\leq 150\%$ of initial specified value ESR: $\leq 150\%$ of initial specified value DC Leakage Current: $\leq$ the initial specified value (after voltage processing)
<b>Resistance to soldering heat</b>	<b>Flow method (260 ± 5°C x 10s)</b> Capacitance change: within $\pm 5\%$ of the initial measured value Dissipation Factor (Tan δ): $\leq$ the initial specified value ESR: $\leq$ the initial specified value DC Leakage Current: $\leq$ 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°C.

## Dimensions

mm

(unit:mm)



Size Code	$\Phi D \pm 0.5$	L	a <sub>max</sub>	F $\pm 0.5$	$\Phi d \pm 0.5$
F08	6.3	8.0	1.0	2.5	0.5
B08	8.0	8.0	1.0	3.5	0.6

## Size List

UR [S.V] (V) Cap.( $\mu\text{F}$ )	2.5 [2.9]	4 [4.6]	6.3 [7.2]	10 [12]	16 [18]
<b>150</b>					F08.B08
<b>180</b>					B08
<b>220</b>					B08
<b>270</b>				F08	B08
<b>330</b>				B08	B08
<b>390</b>				B08	
<b>470</b>			F08.B08	B08	
<b>560</b>	B08	B08	B08		
<b>680</b>	B08	B08	B08		
<b>820</b>	B08	B08	B08		
<b>1,000</b>	B08				



## Ratings for HPN Series

U <sub>R</sub> Code	Rated Capacitance 20°C, 120Hz	Max ESR 20°C, 100kHz	Rated Ripple Current 105°C, 100kHz	Dissipation Factor 20°C, 120Hz	Leakage Current 20°C, 2min	Size ΦD×L	P/N
(v)	(μF)	(mΩ)	(mA rms)	(%)	(μA)	(mm)	-
2.5 0E	560	7	6100	8	500.0	8x8	PCR0EHN561MB08□□
	680	7	6100	8	500.0	8X8	PCR0EHN681MB08□□
	820	7	6100	8	500.0	8X8	PCR0EHN821MB08□□
	1000	7	6100	8	500.0	8x8	PCR0EHN102MB08□□
4 0G	560	7	6100	8	500.0	8x8	PCR0GH N561MB08□□
	680	7	6100	8	544.0	8X8	PCR0GHN681MB08□□
	820	7	6100	8	656.0	8x8	PCR0GHN821MB08□□
6.3 0J	470	8	4700	10	592.2	6.3x8	PCR0JHN471MF08□□
	470	8	5700	8	592.2	8X8	PCR0JHN471MB08□□
	560	8	5700	8	705.6	8x8	PCR0JHN561MB08□□
	680	8	5700	8	856.8	8x8	PCR0JHN681MB08□□
	820	8	5700	8	1033.2	8x8	PCR0JHN821MB08□□
10 1A	270	15	3820	8	540.0	6.3x8	PCR1AHN271MF08□□
	330	10	5000	8	660.0	8x8	PCR1AHN331MB08□□
	390	10	5000	8	780.0	8x8	PCR1AHN391MB08□□
	470	8	5700	8	940.0	8X8	PCR1AHN471MB08□□
16 1C	150	15	3820	8	480.0	6.3x8	PCR1CHN151MF08□□
	150	15	4080	8	480.0	8x8	PCR1CHN151MB08□□
	180	10	5000	8	576.0	8X8	PCR1CHN181MB08□□
	220	10	5000	8	704.0	8X8	PCR1CHN221MB08□□
	270	10	5000	8	864.0	8x8	PCR1CHN271MB08□□
	330	10	5000	8	1056.0	8x8	PCR1CHN331MB08□□

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