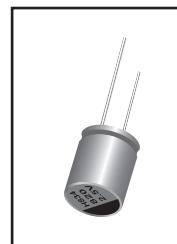
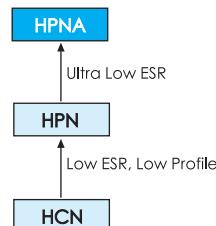


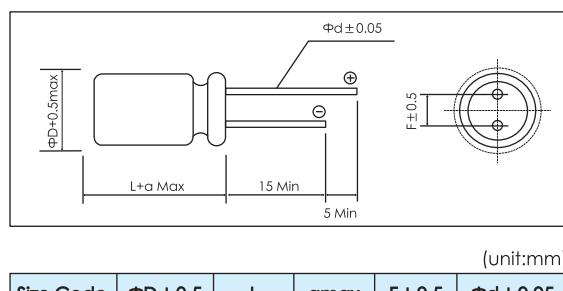
- Ultra Low ESR, Low Profile 105°C, 2000 hours
- High ripple current capability
- Applications: DC/DC Converter, Switching Power Supply, Back up Power Supplies for CPU etc.
- RoHS Compliant



Items	Characteristics
Operating Temperature Range (°C)	-55 ~ +105
Voltage Range (V)	2.5 ~ 6.3
Capacitance Range (μF) (20°C, 120Hz)	470 ~ 1000
Capacitance Tolerance (20°C, 120Hz)	± 20%
Surge Voltage	$U_R \times 1.15$
Leakage Current (μA) ×1	Please see the attached ratings list (20°C, 2min)
Dissipation Factor (20°C, 120Hz)	Please see the attached ratings list
Equivalent Series Resistance (20°C, 100kHz)	Please see the attached ratings list
Temperature Characteristics (Max Impedance Ratio at 100kHz)	$Z_{+105^\circ\text{C}} / Z_{+20^\circ\text{C}} \leq 1.25$ $Z_{-55^\circ\text{C}} / Z_{+20^\circ\text{C}} \leq 1.25$
Endurance	2000h, Rated voltage applied at 105°C 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°C, 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°C × 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°C.

## Dimensions



## Size List

Cap.(μF)	U <sub>R</sub> [S.V] (V)	2.5 [2.9]	4 [4.6]	6.3 [7.2]
470				B08
560	B08	B08		B08
680			B08	
820	B08	B08		
1000	B08			

## 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

## Ratings for HPNA 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 Φ D x L	P/N
(V)	(μF)	(mΩ)	(mA rms)	(%)	(μA)	(mm)	-
2.5 OE	560	6	6100	8	500.0	8×8	PCR0ENA561MB08□□
	820	6	6100	8	500.0	8×8	PCR0ENA821MB08□□
	1000	6	6100	8	500.0	8×8	PCR0ENA102MB08□□
4 0G	560	6	6100	8	500.0	8×8	PCR0GNA561MB08□□
	680	6	6100	8	544.0	8×8	PCR0GNA681MB08□□
	820	6	6100	8	656.0	8×8	PCR0GNA821MB08□□
6.3 0J	470	7	6100	8	592.2	8×8	PCR0JNA471MB08□□
	560	7	6100	8	705.6	8×8	PCR0JNA561MB08□□

Customer products are available on request.