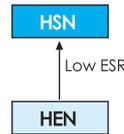


HSN SERIES



- Low ESR, Large Capacitance 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

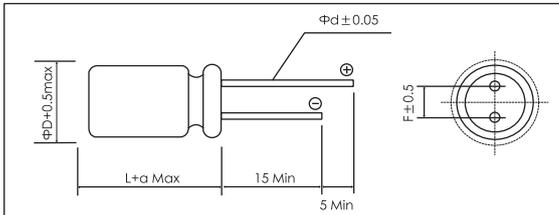


Items	Characteristics
Operating Temperature Range (°C)	-55 ~ +105
Voltage Range (V)	2.5 ~ 6.3
Capacitance Range (μF) (20°C, 120Hz)	390 ~ 1500
Capacitance Tolerance (20°C, 120Hz)	± 20%
Surge Voltage	$U_r \times 1.15$
Leakage Current (μA) ※1	Please see the attached ratings list (20°C, 2min)
Dissipation 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)	$\frac{Z_{+105^\circ\text{C}}}{Z_{+20^\circ\text{C}}} \leq 1.25$ $\frac{Z_{-55^\circ\text{C}}}{Z_{+20^\circ\text{C}}} \leq 1.25$
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

mm



(unit:mm)

Size Code	ΦD±0.5	L	amax	F±0.5	Φd±0.05
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]
390				BAB
560			BAB	
680		BAB		CAC
820		BAB	CAC	CAC
1200			CAC	
1500		CAC		

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 HSN Series

U_r 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)	(mArms)	(%)	(μA)	(mm)	-
2.5 0E	680	5	6630	12	340.0	8 × 11.5	PCROESN681MBAB□□
	820	5	6630	12	410.0	8 × 11.5	PCROESN821MBAB□□
	1500	5	7220	12	750.0	10 × 12.5	PCROESN152MCAC□□
4 0G	560	5	6630	12	448.0	8 × 11.5	PCROGSN561MBAB□□
	820	5	7220	12	656.0	10 × 12.5	PCROGSN821MCAC□□
	1200	5	7220	12	960.0	10 × 12.5	PCROGSN122MCAC□□
6.3 0J	390	5	6630	12	491.4	8 × 11.5	PCROJSN391MBAB□□
	680	5	7220	12	856.8	10 × 12.5	PCROJSN681MCAC□□
	820	5	7220	12	1033.2	10 × 12.5	PCROJSN821MCAC□□

Customer products are available on request.