HEG SERIES

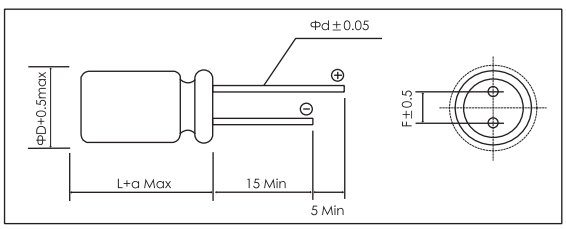
- Low ESR, Large Capacitance 105℃, 2000 hours.
- Low ESR, high ripple current capability
- Applications: DC/DC Converter, Switching Power Supply, LED power etc.
- RoHS Compliant

HEG
↑ Large Capacitance
↑ High ripple current capability
HEN

Items	Characteristics
Operating Temperature Range (℃)	-55 ~ +105
Voltage Range (V)	16 ~ 63
Capacitance Range (μF) (20℃, 120Hz)	150 ~ 2200
Capacitance Tolerance (20℃, 120Hz)	± 20%
Surge Voltage	U_R x 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 125℃.

Dimensions mm



(unit:mm)

Size Code	ΦD±0.5	L	amax	F±0.5	Φd±0.05
B14	8.0	14	1.5	3.5	0.6
B16	8.0	16	1.5	3.5	0.6
C14	10.0	14	2.0	5.0	0.6
C16	10.0	16	2.0	5.0	0.6

Size List

Cap.(μF) \ U_R [S.V] (V)	16 [18]	20 [23]	25 [29]	32 [37]	35 [40]	40 [46]	50 [58]	63 [72]
150								C14
180							C14	C16
220							C14	
270					B14	B14	C14	
330				B14	B16.C14	C14	C16	
390				B14	C14	C14		
470				C14	C14	C16		
560		B14	B14	C14	C16			
680		B14	B16	C16	C16			
820	B14	C14	C14					
1000	B14	C14	C16					
1200	C14	C16	C16					
1500	C14							
1800	C16							
2200	C16							

POLYMER

Ratings for **HEG** 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)	-
16 1C	820	14	4950	12	2624	8×14	PCR1CEG821MB14□□
	1000	14	4950	12	3200	8×14	PCR1CEG102MB14□□
	1200	12	6100	12	3840	10×14	PCR1CEG122MC14□□
	1500	10	6100	12	4800	10×14	PCR1CEG152MC14□□
	1800	10	7000	12	5760	10×16	PCR1CEG182MC16□□
	2200	10	7000	12	7040	10×16	PCR1CEG222MC16□□
20 1D	560	18	4350	12	2240	8×14	PCR1DEG561MB14□□
	680	18	4350	12	2720	8×14	PCR1DEG681MB14□□
	820	16	4650	12	3280	10×14	PCR1DEG821MC14□□
	1000	14	5100	12	4000	10×14	PCR1DEG102MC14□□
	1200	14	5000	12	4800	10×16	PCR1DEG122MC16□□
25 1E	560	16	4600	12	2800	8×14	PCR1EEG561MB14□□
	680	16	4650	12	3400	8×16	PCR1EEG681MB16□□
	820	14	5100	12	4100	10×14	PCR1EEG821MC14□□
	1000	14	5100	12	5000	10×16	PCR1EEG102MC16□□
	1200	14	5910	12	6000	10×16	PCR1EEG122MC16□□
32 1F	330	20	4000	12	2112	8×14	PCR1FEG331MB14□□
	390	18	4350	12	2496	8×14	PCR1FEG391MB14□□
	470	18	4500	12	3008	10×14	PCR1FEG471MC14□□
	560	18	4500	12	3584	10×14	PCR1FEG561MC14□□
	680	18	4690	12	4352	10×16	PCR1FEG681MC16□□
35 1V	270	20	4000	12	1890	8×14	PCR1VEG271MB14□□
	330	20	4100	12	2310	8×16	PCR1VEG331MB16□□
	330	22	4100	12	2310	10×14	PCR1VEG331MC14□□
	390	20	4300	12	2730	10×14	PCR1VEG391MC14□□
	470	18	4500	12	3290	10×14	PCR1VEG471MC14□□
	560	18	4690	12	3920	10×16	PCR1VEG561MC16□□
	680	18	4690	12	4760	10×16	PCR1VEG681MC16□□
40 1G	270	20	4000	12	2160	8×14	PCR1GEG271MB14□□
	330	18	4500	12	2640	10×14	PCR1GEG331MC14□□
	390	18	4500	12	3120	10×14	PCR1GEG391MC14□□
	470	18	4690	12	3760	10×16	PCR1GEG471MC16□□
50 1H	180	22	4100	12	1800	10×14	PCR1HEG181MC14□□
	220	20	4300	12	2200	10×14	PCR1HEG221MC14□□
	270	18	4500	12	2700	10×14	PCR1HEG271MC14□□
	330	20	4950	12	3300	10×16	PCR1HEG331MC16□□
63 1J	150	22	4100	12	1890	10×16	PCR1JEG151MC16□□
	180	20	4950	12	2268	10×16	PCR1JEG181MC16□□

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