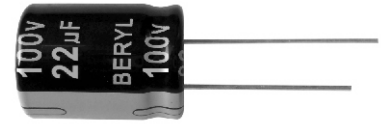


HU Series

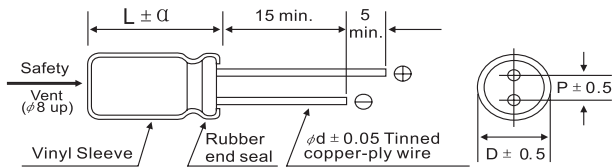
- For automobile and other high temperature applications
- Endurance with ripple current : 125°C 5000hours
- Downsize, long life, low impedance and better low temperature characteristics
- RoHS Compliant



■ 規格表 SPECIFICATIONS

項目 Items	特性參數 Characteristics		
使用溫度範圍 Category Temperature Range	-40 ~ +125°C		
額定工作電壓範圍 Rated Voltage Range	10 ~ 100V		
靜電容量允許偏差 Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)		
漏電流 Leakage Current	I ≤ 0.03CV or 4 μA, Which is smaller after application of rated Voltage for 2 minutes. 施加額定工作電壓2分鐘後讀數, 二者取小值 I: 漏電流 (μA), C: 靜電容量 (μF)、額定電壓 (V)		
損耗角正切值 tan δ Dissipation Factor	Rated voltage(V)	10 16 25 35 50 63 80 100	
	tan δ (Max.)	0.20 0.16 0.14 0.12 0.10 0.10 0.08 0.08	
標稱容量超過1000 μF, 則每增加1000 μF, 損耗角正切值增加0.02. When nominal capacitance exceeds 1000 μF, add 0.02 to the value above for each 1000 μF increase. (at 20°C, 120Hz)			
低溫特性 Low temperature Characteristics (Max. Impedance Ratio)	電容器低溫的阻抗比值, 不應超過下表所列出的值 Impedance ratio values must not exceed values listed in below table.		
	Rated voltage(V)	10 16 25 35 50 63 80 100	
	Z(-25°C)/Z(+20°C)	3 2 2 2 2 2 2 2	
Z(-40°C)/Z(+20°C)	6 4 4 4 4 4 4 4	(at 120Hz)	
耐久性 Endurance	施加額定工作電壓和額定紋波電流經下表規定時間, 恢復到20°C後, 產品性能應滿足以下要求 The following specifications shall be satisfied when the capacitors are restored to 20°C after application of rated voltage with rated ripple current for the specified period of time.		
	Life time	Φ8:2000hours Φ10:3000hours ≥ Φ13:5000hours	
	Capacitance change	≅ ±30% of the initial value	
	D.F.(tan δ)	≅ 300% of the specified value	
	Leakage current	≅ The specified value	
高溫儲存特性 Shelf Life	125°C存放1000小時, 恢復到20°C後, 產品性能應滿足以下要求 The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours at 125°C without voltage applied.		
	Capacitance change	≅ ±30% of the initial value	
	D.F.(tan δ)	≅ 300% of the specified value	
	Leakage current	≅ The specified value	

■ 外形圖 DIMENSIONS (mm)



ΦD	6.3	8	10	13	16
P	2.5	3.5	5.0	5.0	7.5
Φd	0.5	0.5	0.6	0.6	0.8

α	(L < 20) 1.5
	(L ≥ 20) 2.0

- (10~100V) 頻率系數 Frequency Coefficient

Rated Voltage(V)	Frequency(Hz)	120	1k	10k	100k
	Capacitance (μF)				
10 ~ 100	4.7 ~ 100	0.40	0.75	0.90	1.00
	220 ~ 470	0.50	0.85	0.94	1.00
	1,000	0.60	0.87	0.95	1.00
	2,200 ~ 3,300	0.75	0.90	0.95	1.00
	4700	0.85	0.95	0.98	1.00

HU Series

■ 尺寸與最大紋波電流一覽表 STANDARD RATINGS

wv(V) Cap(μF)	10(1A)			16(1C)			25(1E)			35(1V)		
	ΦD×L	Impedance	Rated ripple current	ΦD×L	Impedance	Rated ripple current	ΦD×L	Impedance	Rated ripple current	ΦD×L	Impedance	Rated ripple current
100				8 × 12	0.31	341	8 × 12	0.31	341	8 × 12	0.31	341
220	8 × 12	0.31	341	10 × 13	0.14	622	10 × 13	0.14	622	10 × 13	0.14	622
330	10 × 13	0.14	621	10 × 13	0.14	622	10 × 16	0.093	792	10 × 16	0.093	792
470	10 × 13	0.14	621	10 × 16	0.093	792	10 × 20	0.074	952	10 × 20	0.074	952
1,000	10 × 20	0.074	951	13 × 20	0.057	1,082	13 × 25	0.039	1,352	13 × 20	0.057	1,082
2,200	13 × 25	0.039	1,351	16 × 26	0.029	1,623	16 × 32	0.023	1,863	16 × 25	0.028	1,623
3,300	16 × 26	0.029	1,623	16 × 32	0.023	1,863						
4,700	16 × 32	0.023	1,863									

wv(V) Cap(μF)	50(1H)			63(1J)			80(1K)			100(2A)		
	ΦD×L	Impedance	Rated ripple current	ΦD×L	Impedance	Rated ripple current	ΦD×L	Impedance	Rated ripple current	ΦD×L	Impedance	Rated ripple current
4.7										8 × 12	1.9	131
10	8 × 12	0.74	181							8 × 12	1.4	151
22	8 × 12	0.49	251							10 × 13	0.79	482
33	8 × 12	0.49	281	8 × 12	1.49	151	8 × 12	1.49	151	10 × 3	0.79	482
47	8 × 12	0.49	281	10 × 13	0.58	531	10 × 13	0.79	482	10 × 16	0.54	632
100	10 × 13	0.19	522	10 × 16	0.40	691	10 × 20	0.38	792	13 × 20	0.24	992
220	10 × 20	0.097	882	13 × 20	0.15	1,051	13 × 25	0.17	1,242	16 × 26	0.09	1,503
330	13 × 20	0.080	992	13 × 25	0.11	1,292	13 × 30	0.15	1,392	16 × 32	0.077	1,793
470	13 × 25	0.058	1,152	13 × 30	0.096	1,462	16 × 25	0.09	1,503			
1,000	16 × 32	0.030	1,593	16 × 32	0.057	1,853						

Rated Ripple current : (mArms) at 125°C, 100KHz
 Impedance : (Ω max. at 20°C, 100KHz)
 Case Size : ΦD×L(mm)