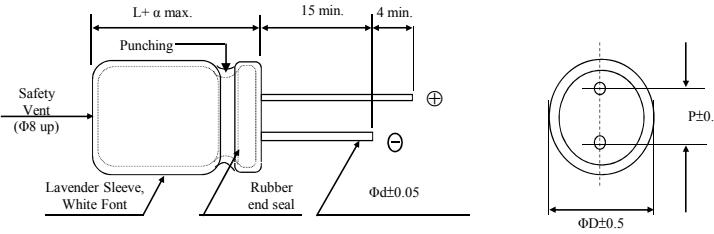


## FOR APPROVAL

**DIMENSIONS(mm)**

ΦD	5	6.3
L	11	11
α	1.0	1.0
P	2.0	2.5
Φd	0.5	0.5



Customer:		Electrolytic Capacitors HGN Series									Su'scon	
Ozdisan											Code	
Electric Characteristics:												
Ozdisan	Su'scon	Cap. (uF)	Cap. Tol. (%)	Rate Volt. (V-DC)	Surge Volt. (V-DC)	Oper. Temp. (°C)	Nominal Case Size D*L(mm)	Leakage Current Max (uA)	D.F. MAX (%)	R.C 100KHz (mA rms)	I.M.P 100KHz at 25°C (Ω)Max	Load Life ( Hours )
P/N	P/N	100	±20	25	32	105	6.3*11	25	15	340	0.280	5000
	HGN025M101E11PKKKS00A	4.7	±20	50	63	105	5*11	3	10	120	4.80	5000

**REMARKS:**

1. Leakage Current Test: 6.3V ~100V at 20°C for 2 minutes ;
2. Operating temperature: 6.3V~50V -55°C ~ +105°C ;63V~100V -40°C ~ +105°C ;
3. Dissipation Factor Test: at 20°C, 120 Hz.
4. Capacitance Test: at 20°C, 120 Hz.
5. Ripple Current Test : at 105°C, 100K Hz ;
6. Load Life: subjected to DC voltage with the rated ripple current is applied at 105°C.
- 6.3~10V ΦD≤6.3Φ 4000 hours,ΦD=8,10Φ 6000 hours,ΦD≥12.5Φ 8000 hours;  
 16~100V ΦD≤6.3Φ 5000 hours,ΦD=8,10Φ 7000 hours,ΦD≥12.5Φ 10000 hours.

**Capacitance Change:**

Within±25% of initial value;

**tanδ:**

200% or less of initial specified value;

According to the specified value which stated in the catalogue to do the life testing;

**Leakage Current:**

Initial specified value or less;

**7. Shelf Life:**

The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours 105°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to them 4.1 of JIS C5101-4.

**Capacitance Change :**

Within±25% of initial value;

**tanδ:**

200% or less of initial specified value;

**Leakage Current :**

Initial specified value or less.

**8. when have characteristic requested:**

Load life & shelf life test and etc., judgment standard reference to our catalogue.

**●SPECIFICATION**

Leakage Current 洩漏電流	$I \leq 0.01CV$ or $3(uA)$ (After 2 minutes application of DC working voltage, at 20°C )								
Dissipation Factor 散逸因素 (損失角) (tan δ)	Measurement Frequency:120Hz. Temperature: 20°C								
Rate Voltage(V)	6.3	10	16	25	35	50	63	100	
tanδ ( MAX ) 0.24 0.20 0.16 0.15 0.12 0.10 0.09 0.08									

When nominal capacitance over 1000μF, tanδ shall be added 0.02 to the listed value with increase of every 1000μF.

Standards 參照標準 JIS C-5101-4(IEC 60384)

**●RIPPLE CURRENT COEFFICIENTS**

Capacitance(uf)	Frequency(Hz)				
	50	120	300	1K	100K
≤33	0.50	0.55	0.70	0.90	1.00
47~330	0.60	0.70	0.85	0.95	1.00
470~1000	0.65	0.75	0.90	0.98	1.00
1200~18000	0.70	0.80	0.95	1.00	1.00

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise.

When long life performance is required in actual use, the rms ripple current has to be reduced.

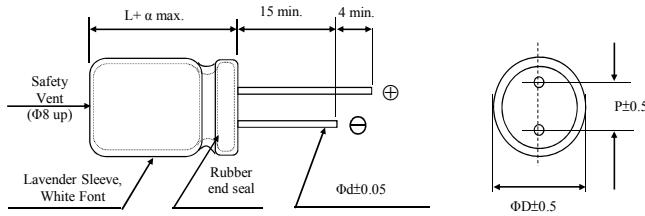
Production date:2023.04.17

**DONG GUAN KUAN KUN ELECTRONIC CO., LTD**  
 YIN HE INDUSTRIAL ZONE, QING XI TOWN, TEL: +86-769-87318000  
 DONG GUAN CITY, GUAN DONG CHINA (P.R.O.C) FAX: +86-769-87318008

**FOR APPROVAL**

**DIMENSIONS(mm)**

ΦD	10
L	16
α	2.0
P	5.0
Φd	0.6



Customer:	Ozdisan	Electrolytic Capacitors										Su'scon	
		HGN Series										Code	

Electric Characteristics:

Ozdisan	Suscon	Cap. (uF)	Cap. Tol. (%)	Rate Volt. (V-DC)	Surge Volt. (V-DC)	Oper. Temp. (°C)	Nominal Case Size D*L(mm)	Leakage Current Max (uA)	D.F. MAX (%)	R.C 100KHz (mA rms)	I.M.P 100KHz at 25°C(Ω)Max	Load Life ( Hours )	
P/N	P/N	HGN025M471G16PKKKS00A	470	±20	25	32	105	10*16	117	15	1210	0.083	7000

**REMARKS:**

1. Leakage Current Test: 6.3V ~100V at 20°C for 2 minutes ;
2. Operating temperature: 6.3V~50V -55°C ~ +105°C ;63V~100V -40°C ~ +105°C ;
3. Dissipation Factor Test: at 20°C, 120 Hz.
4. Capacitance Test: at 20°C, 120 Hz.
5. Ripple Current Test : at 105°C, 100K Hz ;
6. Load Life: subjected to DC voltage with the rated ripple current is applied at 105°C.  
6.3~10V ΦD≤6.3Φ 4000 hours,ΦD=8,10Φ 6000 hours,ΦD≥12.5Φ 8000 hours;  
16~100V ΦD≤6.3Φ 5000 hours,ΦD=8,10Φ 7000 hours,ΦD≥12.5Φ 10000 hours.

Capacitance Change:

Within±25% of initial value;

tanδ:

200% or less of initial specified value;

According to the specified value which stated in the catalogue to do the life testing;

Leakage Current:

Initial specified value or less;

7. Shelf Life:

The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours 105°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to them 4.1 of JIS C5101-4.

Capacitance Change :

Within±25% of initial value;

tanδ:

200% or less of initial specified value;

Leakage Current :

Initial specified value or less.

8. when have characteristic requested: Load life & shelf life test and etc. , judgment standard reference to our catalogue.

**•SPECIFICATION**

Leakage Current 洩漏電流	I≤0.01CV or 3(uA)(After 2 minutes application of DC working voltage, at 20°C )								
Dissipation Factor 散逸因素 (損失角) (tan δ)	Measurement Frequency:120Hz. Temperature: 20°C Rate Voltage(V) 6.3 10 16 25 35 50 63 100 tanδ ( MAX) 0.24 0.20 0.16 0.15 0.12 0.10 0.09 0.08								
	When nominal capacitance over 1000μF, tanδ shall be added 0.02 to the listed value with increase of every 1000μF.								
Standards 參照標準	JIS C-5101-4(IEC 60384)								

**•RIPPLE CURRENT COEFFICIENTS**

Frequency coefficient of allowable ripple current

Capacitance(uf)	Frequency(Hz)				
	50	120	300	1K	100K
≤33	0.50	0.55	0.70	0.90	1.00
47~330	0.60	0.70	0.85	0.95	1.00
470~1000	0.65	0.75	0.90	0.98	1.00
1200~18000	0.70	0.80	0.95	1.00	1.00

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise.

When long life performance is required in actual use, the rms ripple current has to be reduced.

Production date:2023.04.17