



Capacitor's Range (0.0001~2.2μF)

CAPACITOR

Polyster Film Capacitor
(63V/100V/250V/400V/630V)

Ver 1.0 (August 2024): Glomore

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		Signature with Company Seal

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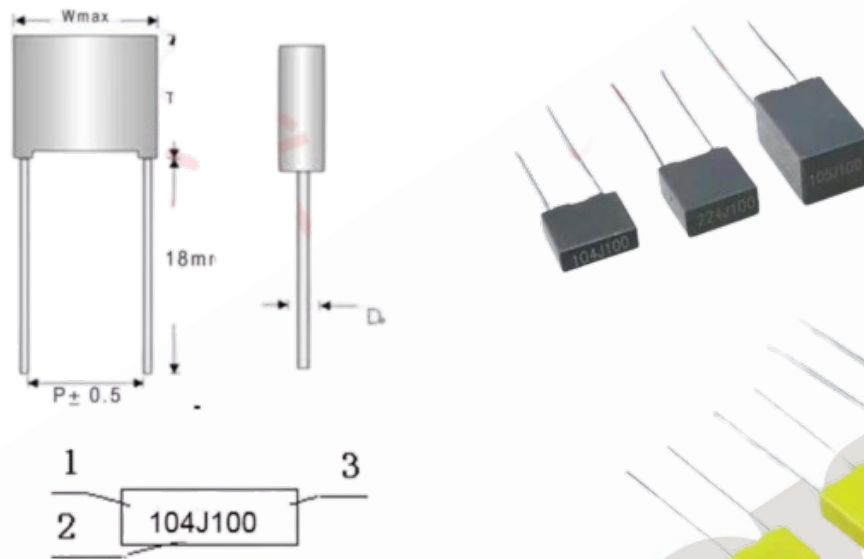
1. Characteristics and uses

The capacitor is encapsulated with exterior flame retardant shell and epoxy resin. It has good self-healing, high reliability, low loss, superior electrical performance, uniform shape and size. It is suitable for automatic assembly and can be used in all series of radial tapes. It is widely used in various DC and pulsating circuits.

2. Electrical performance

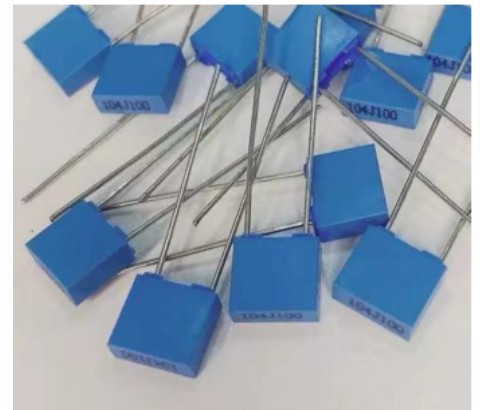
2.1	Reference Criteria	GB/T15448 (IEC384-19)
2.2	Climate Category	40/85/21
2.3	Rated Voltage	63V/100V/250V/400V/630V
2.4	Capacitance	0.0001~2.2μF
2.5	Withstand Voltage	1.4U _R (5s)
2.6	Capacitance Tolerance	J:±5% K: ±10% M:±20%
2.7	Dissipation factor	≤ 0.0100 (1KHZ, 20deg C)
2.8	Insulation resistance	UR ≤ 100V , CR ≤ 0.33μF, ≥ 3750Mohm CR > 0.33μF, ≥ 1250S (20deg C, 1min) UR > 100V , CR = 0.33μF, ≥ 7500Mohm CR > 0.33μF, ≥ 2550S (20deg C, 1min)
2.9	Structure	Pouring epoxy resin, flame retardant plastic shell packaging

3. External Shape



Printing Description: Top Laser Printing

1.Capacitance 2. Capacitance Tolerance 3. Rated Voltage



4. Shape Size

Rated Voltage (VDC)	Capacitance (μF)	External shape dimensions (mm)			Foot distance (mm)	Line diameter (mm)
		Capacitor Thickness	≤3.5	> 3.5		
		(W.H T)	±0.2	±0.4		
		Dimension Tolerance				
		W	H	T	P±1	d±0.05
63V/100V	0.0001	7.2	6.5	2.5	5	0.5
63V/100V	0.00022	7.2	6.5	2.5	5	0.5
63V/100V	0.00033	7.2	6.5	2.5	5	0.5
63V/100V	0.00047	7.2	6.5	2.5	5	0.5
63V/100V	0.00056	7.2	6.5	2.5	5	0.5
63V/100V	0.00068	7.2	6.5	2.5	5	0.5
63V/100V	0.00087	7.2	6.5	2.5	5	0.5
63V/100V	0.001	7.2	6.5	2.5	5	0.5
63V/100V	0.0015	7.2	6.5	2.5	5	0.5
63V/100V	0.0022	7.2	6.5	2.5	5	0.5
63V/100V	0.0027	7.2	6.5	2.5	5	0.5
63V/100V	0.0033	7.2	6.5	2.5	5	0.5
63V/100V	0.0047	7.2	6.5	2.5	5	0.5
63V/100V	0.0056	7.2	6.5	2.5	5	0.5
63V/100V	0.0068	7.2	6.5	2.5	5	0.5
63V/100V	0.0082	7.2	6.5	2.5	5	0.5
63V/100V	0.01	7.2	6.5	2.5	5	0.5
63V/100V	0.015	7.2	6.5	2.5	5	0.5
63V/100V	0.018	7.2	6.5	2.5	5	0.5
63V/100V	0.022	7.2	6.5	2.5	5	0.5
63V/100V	0.027	7.2	6.5	2.5	5	0.5
63V/100V	0.033	7.2	6.5	2.5	5	0.5
63V/100V	0.039	7.2	6.5	2.5	5	0.5
63V/100V	0.047	7.2	6.5	2.5	5	0.5
63V/100V	0.056	7.2	6.5	2.5	5	0.5
63V/100V	0.068	7.2	6.5	2.5	5	0.5
63V/100V	0.082	7.2	6.5	2.5	5	0.5
63V/100V	0.1	7.2	6.5	2.5	5	0.5
63V/100V	0.1	7.2	7.5	3.5	5	0.5

Rated Voltage (VDC)	Capacitance (μF)	External shape dimensions (mm)			Foot distance (mm)	Line diameter (mm)
		W	H	T		
63V/100V	0.12	7.2	6.5	2.5	5	0.5
63V/100V	0.15	7.2	6.5	2.5	5	0.5
63V/100V	0.15	7.2	7.5	3.5	5	0.5
63V/100V	0.22	7.2	6.5	2.5	5	0.5
63V/100V	0.22	7.2	7.5	3.5	5	0.5
63V/100V	0.27	7.2	7.5	3.5	5	0.5
63V/100V	0.33	7.2	9.5	4.5	5	0.5
63V/100V	0.39	7.2	7.5	3.5	5	0.5
63V/100V	0.47	7.2	7.5	3.5	5	0.5
63V/100V	0.47	7.2	9.5	4.5	5	0.5
63V/100V	0.68	7.2	10	5	5	0.5
63V/100V	0.68	7.2	11	6	5	0.5
63V/100V	0.82	7.2	11	6	5	0.6
63V/100V	1.0	7.2	10	5	5	0.5
63V/100V	1.0	7.2	11	6	5	0.6
63V/100V	1.5	7.2	11	6	5	0.6
63V/100V	2.2	7.2	11	6	5	0.6
250V	0.1	7.2	9.5	4.5	5	0.6
400V	0.0022	7.2	7.5	3.5	5	0.5
630V	0.0033	7.2	7.5	3.5	5	0.5
400V	0.0047	7.2	7.5	3.5	5	0.5
400V	0.01	7.2	7.5	3.5	5	0.5
400V	0.022	7.2	7.5	3.5	5	0.5
400V	0.047	7.2	9.5	4.5	5	0.6

5. Core Structure Diagram



6. Measuring Ways & Means

no	Items	Appliance	IL	AQL	Specifications
1	Appearance inspecting	All eyes	II	1.5	No damage, The marking shall be vindicable
2	dimensions	Vernier calipers			Compliance with Article 4
3	Capacitance	TE2617 pattern testing instrument	II	0.006 5	Clause2.6 shall be satisfied
4	Dissipation factor				Clause2.7 shall be satisfied
5	Voltage proof	CJ2672S pattern voltage proof testing instrument			Clause 2.5 shall be satisfied, there shall be no dielectric breakdown or other damage.
6	Insulation resistance(the leads)	TH2681A pattern Insulation resistance testing instrument			Clause2.8 shall be satisfied
Note: 1) Detailed Measuring ways and means refer to GB/T2693-2001, measure appliance may be replaced by the others as same function. 2) The check standard select from GB/T2828.1-2003. 3) The testing of Voltage of Capacitance, Dissipation factor: ≤1.8Vrms. 4) The testing voltage of Insulation resistance: 10V(U _R < 100V) ; 100V (100V≤U _R < 500V) ; 500V (U _R ≥500V) .					

7. Test Method & Performance

7.1 HUMIDITY TEST CONDITIONS:

TEST TEMPERATURE: $40 \pm 2^{\circ}C$

RELATIVE HUMIDITY: $93 \pm 2\%$

TEST DURATION: 21DAYS

TEST CRITERIA:

CAPACITANCE DRIFT: $\leq \pm 5\%$ OF THE INITIAL VALUE.

DISSIPATION FACTOR: ≤ 0.005 (1KHZ)

INSULATION RESISTANCE: $\geq 50\%$ OF INITIAL SPECIFIED VALUE.

7.2 LIFE TEST CONDITIONTEST TEMPERATURE $85 \pm 2^{\circ}\text{C}$ TEST VOLTAGE: $1.25U_r$

TEST DURATION 1,000HOURS

TEST CRITERIA

CAPACITANCE DRIFT $\cong \pm 8\%$ OF THE INITIAL
VALUE

DISSIPATION FACTOR(INCREASE):

 $\cong 0.005$ (1KHz)INSULATION RESISTANCE: $\cong 50\%$ OF SPECIFIED VALUE**7.3 SOLERABILITY CONDITIONS:**SOLDER BATH TEMPERATURE: $235 \pm 5^{\circ}\text{C}$ SOLDER MATERIAL:99.96% OF TIN +0.04% OF
ARGENTINESOLDER TIME : $2 \pm 0.5\text{SEC}$

TEST CRITERIA : 90% OF THE SURFACE TINNING

7.4 SOLDERING HEAT RESISTANCE:IN ACCORDANCE WITH IEC60068 Td TEST
CONDITIONS:SOLDER BATH TEMPERATURE: $260 \pm 5^{\circ}\text{C}$ SLDER TIME : $10 \pm 1\text{ SEC.}$ CAPACITANCE BODY MAY LIE ON BRINTING
CIRCUIT BOARD

TEST CRITERIA;

APPEARANCE: NO DAMAGE AND GOOD
TINNINGCAPACITANCE CHANGE: $\cong \pm 2\%$

DISSIPATION FACTOR(INCREASE)

 $\cong 0.003$ (1KHz)INSULATION RESISTANCE: $\cong 50\%$ OF SPECIFIED VALUE**7.5 DRY “HEAT” RESISTANCE :**IN ACCORDANCE WITH IEC600 68-2-2 TESTT Ba
CONDITIONS :TEST TEMPERATURE : $85 \pm 2^{\circ}\text{C}$

TEST DURATION : 16 HOURS

TEST CRITERIA :

(1)APPEARANCE : NO VISIBLE DAMAGE AND NO
LEAKAGE.(2)CAPACITANCE CHANGE : $\cong \pm 5\%$ OF THE INITIAL
VALUE

7.6 COLD RESISTANCE

IN ACCORDANCE WITH IEC 68-2-1 TEST Aa
CONDITIONS

TEST TEMPERATURE : $-55 \pm 2^{\circ}\text{C}$

TEST DURATION : 2 HOURS

TEST CRITERIA :

(1) APPEARANCE : NO VISIBLE DAMAGE

(2) CAPACITANCE CHANGE : $\leq \pm 10\%$ OF THE INITIA

7.7 MP HEAT CYCLE TEST:

IN ACCORDANCE WITH IEC60068-2-30 TEST Db

TEST TEMPERATURE T: $+55 \pm 2^{\circ}\text{C}$

TEST HUMIDITY: 90%~95%R.H

TEST DURATION:FIVE CYCLES(ONE CYCLE FOR
24HRS)

AFTER TEST,ALLOW IT STAY ALONE FOR 1~2HRS AT
STANDARD TEMP AND HUMIDITY BEFORE MAKING
MEASUREMENTS.

TEST CRITERIA:

(1) CAPACITANCE CHANGE : $\leq +5\%$ OF THE INITIAL
VALUE

(2) DISSIPATION FACTOR(INCREASE): ≤ 0.005

(3) INSULATION RESISTANCE : $\geq 50\%$ OF INITIAL
SPECIFIED VALUE

7.8 RAPID CHANGE OF TEMPERATURE:

QA= -55°C 0.5h

QB= $+85^{\circ}\text{C}$ 0.5h

IN ACCORDANCE WITH IEC60384-1 4.16 TRANSFORMING
TIME 30 MIN FROM LOWER TEMPERATURE QA TO
UPPER TEMPERATURE QB (AS ONE CYCLE), FIVE
CYCLES IN ALL.

TEST CRITERIA:

(1) APPEARANCE :NO VISIBLE DAMAGE

(2) CAPACITANCE CHANGE : $\leq \pm 5\%$ OF THE INITIAL
VALUE

(3) DISSIPATION FACTOR(INCREASE): ≤ 0.005

(4) INSULATION RESISTANCE : $\geq 50\%$ OF INITIAL
SPECIFIED VAL

7.9 TENSILE STRENGTH OF TERMINALS

IN ACCORDANCE WITH IEC600 68-2-21 TEST Ua.1
CONDITIONS.

TERMINAL LOAD FORCE HOLDING
TIMES

DIA. (mm) KG (N) SEC.

> 0.5 TO ≤ 0.8 1.0 (10) 10

> 0.8 2.0 (20) 20

TEST CRITERIA:

NO WIRE BREAKAGE AND NO DAMAGE OF CAPACITOR.

7.10 BENDING OF TERMINALS

IN ACCORDANCE WITH IEC 60068-2-21 TEST Ub.
CONDITIONS

LOAD FORCE : 0.5 KG (5N)

BENDING TIME : TWO CONSECUTIVE BENDS (4 * 90 C)

TEST CRITERIA :

NO WIRE BREAKAGE AND NO DAMAGE OF CAPACITOR

7.11 CHARGE AND DISCHARGE:

CYSLE TIME:10000TIMES t

CHARGE LASTING TIME:1.0S

DISCHARGE LASTING TIME:1.0S

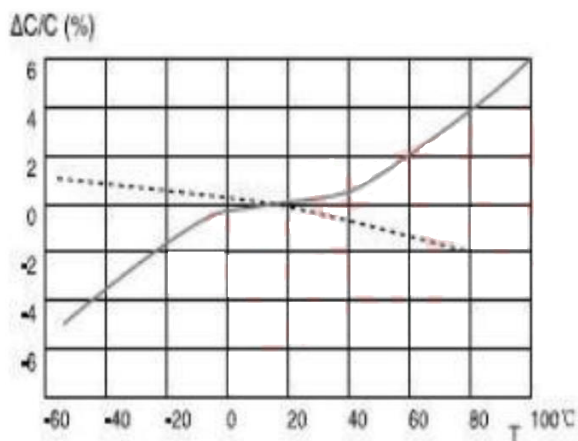
TEST CRITERIA :

CAPACITANCE CHANGE : $\leq \pm 5\%$ OF THE INITIAL

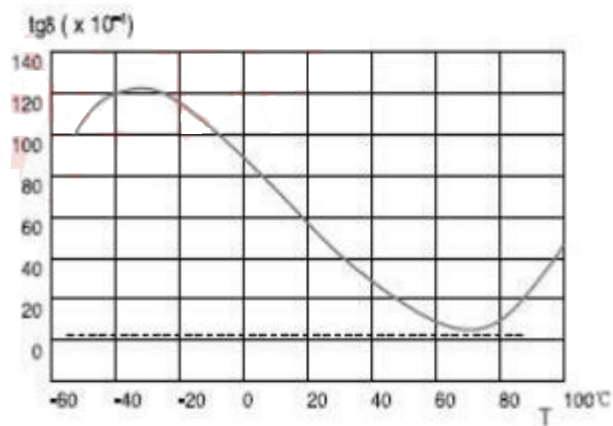
DISSIPATION FACTOR(INCREASE): ≤ 0.003 (10KHz)

INSULATION RESISTANCE : $\geq 50\%$ OF INITIAL SPECIFIED
VALUE

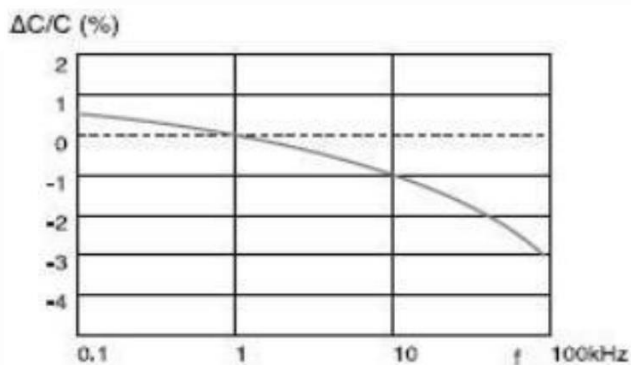
8. Typical Characteristic Curves of Capacitors



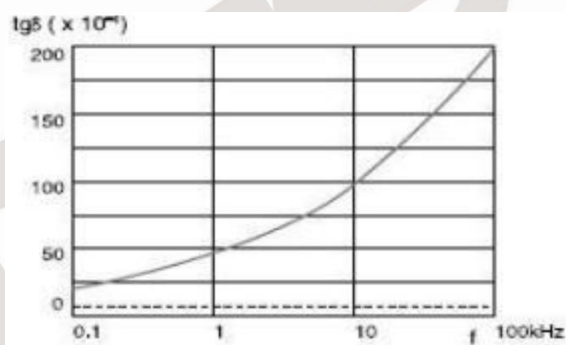
Capacity and temperature curve



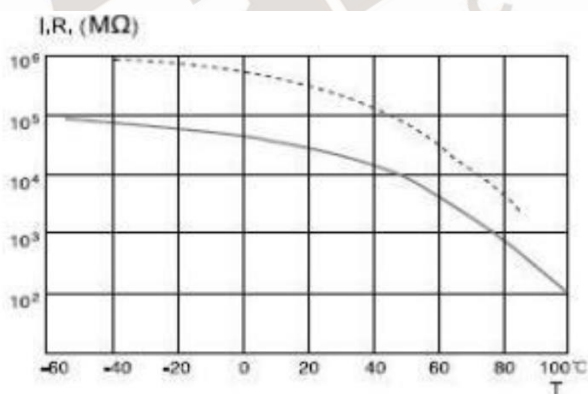
Dissipation and temperature curve



Capacity and frequency curve



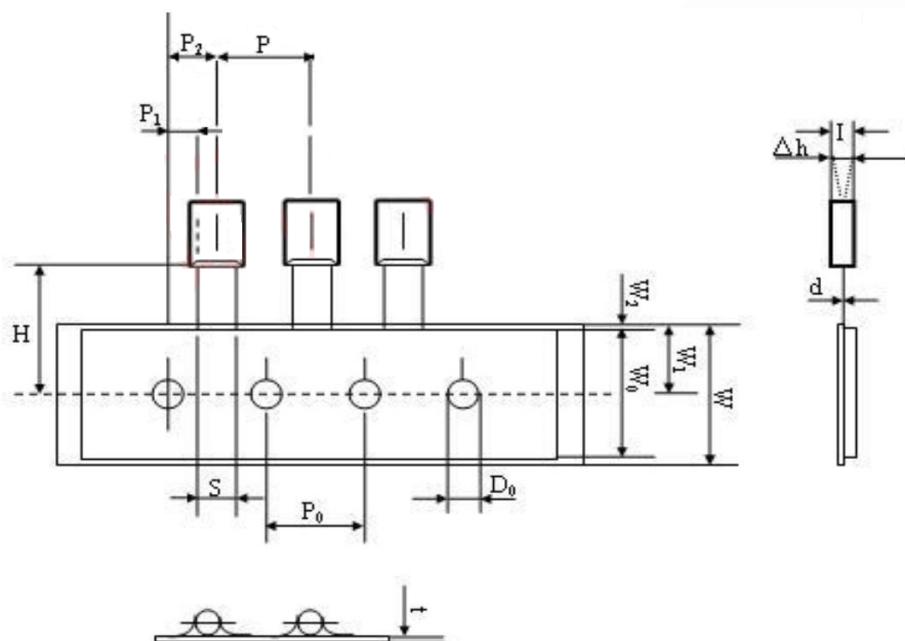
Dissipation and frequency curve



Insulation resistance and temperature curve

----- (polypropylene film)
————— (polyester film)

9. Shape and Dimension Requirement of Braided Type



Name	sign	size (mm)
Capacitor spacing	P	12.7 ± 1.0
Socket spacing	P_0	12.7 ± 0.3
Position and deviation of Jack	P_1	3.85 ± 0.7
	P_2	6.35 ± 1.3
	W_1	9.0 ± 0.5
Lead spacing	S	$5.0_{-0.2}^{+0.6}$
Product skewness	Δh	± 1.0
Paper bandwidth	W	18.0 ± 0.5
Product Offline Height	H	19 ± 1
Jack diameter	D_0	4.0 ± 0.2
Total Tape Thickness	t	0.7 ± 0.2
tape width	W_0	10max
Belt position offset	W_2	0~3