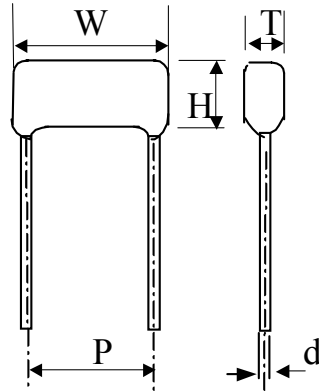


CBB21 METALLIZED POLYPROPYLENE FILM CAPACITOR

✧ Outline Drawing



✧ Dimensions

| No. | Type | Size(mm) | | | | |
|-----|-----------------|----------|-----|-----|-----|-----|
| | | W±1 | H±1 | T±1 | P±1 | d |
| 1 | MET-333-400JP10 | 12 | 8 | 5 | 10 | 0.6 |

✧ Hanway Technology (H.K.) Ltd. ordering part-number:

MET-333-400JP10

MET: Capacitor Type (MET for Metallized Capacitor)

333: Capacitor Value

400: Capacitor Voltage

J: Tolrence (J= +/-5%)

P10: Pitch Size P=10mm

Remarks: This part-number are only applicable for ordering this item from Hanway.

1、 Model/type: Only for “CBB21” Metalized Polypropylene Film Capacitor

*(*CBB21 is a material type, defined by factory)*

2、 Climate category: 40/085/21

3、 Rated Voltage: 100V、 250V、 400V、 630V 、 1200V

4、 Capacitance Range: 0.01 μ F \sim 1 μ F

Code Capacitance

103 = 10,000pf = 0.01 μ F

104 = 100,000pf = 0.1 μ F

105 = 1,000,000pf = 1 μ F

223 = 22,000pf = 0.022 μ F

474 = 470,000pf = 0.47 μ F

5、 Symbols of Capacitance Tolerance:

F=±1% J=±5%

G=±2% K=±10%

H=±3% M=±20%

6、 Printing:

- 1、 Capacitance Tolerance
- 2、 Rated Value
- 3、 Rated Voltage

400V 473 J
↓ ↓ ↓
3 2 1

7. Specification

| No. | Test | Test condition | Specifications |
|-----|-----------------------|---|--|
| 1 | Temperature | | -40□ — +85□ |
| 2 | Rated Voltage | | 100V — 1200V |
| 3 | Capacitance range | | 0.01μF — 1μF |
| 4 | Capacitance Tolerance | Frequency: 1KHz +0.1KHz. Tested Voltage: ≤1Vrms | +5% (J) , +10% (K) |
| 5 | Loss angle | Frequency: 1KHz +0.1KHz. Tested Voltage: ≤1Vrms | CR≤1μF ≤0.002 CR> 1μF ≤0.003 |
| 6 | Insulation Resistance | Tested Voltage: 100V Temperature: 20°C+5°C Duration: 60+5sec | C≤0.33μF ≥ 25000 MΩ C> 0.33μF≥7500MΩ:μF |
| 7 | Dielectric Strength | Tested Voltage: 1.6U _R , Duration: 1 — 5sec | No Damage |
| 8 | Solderability | Melting solder: 235+5°C Duration: 2.0+0.5sec Materials: 60 / 40(Tin / Lead) Solder: 25 / 75(Resin / Alcohol) | No Damage |
| 9 | Lead Pull Test | Pull: 1.5Kg Duration: 10sec | No Damage |
| 10 | Lead Bend Test | attaching a load of 1.5Kg to the end of the lead and then rotating the capacitor 90 degree from the direction of lead degrees then 180 degree to opposite direction | No Damage |
| 11 | Solder Test | Immersed Melting solder:260+5°C Duration: 10+1 sec | C / C≤3 % Δtgδ≤0.004 No Damage |
| 12 | Thermal Stability | Temperature: θA = -40°C , θB = +85°C Duration: 30min Cycles: 5 cycles | No Damage ΔC / C≤3 % Δtgδ≤0.004 |
| 13 | Libration | Frequency: 10 — 500Hz Libration: 0.75mm | No Damage ΔC / C≤3 % Δtgδ≤0.004 |
| 14 | Collision Test | Collision Times:4000 times Acceletation Speed:390m/s, Duration:6ms Temperature: 40+2°C Humidity: 90 — 95 % | No Damage ΔC / C≤3 % Δtgδ≤0.004 No Damage ΔC / C≤5 % |

| No | Test | Test Condition | Specification |
|----|---------------------------|---|--|
| 16 | Heat | +85□, Duration: 16h | No Damage |
| | Humidity | Testing Db, level b, circular one | |
| | Cold | -40□, Duration: 2h. | |
| | Temperature | Temperature:15□-35□, Barometric :8.5kPa, Duration: 10min., after the test, U _R 1mins. | |
| 16 | Barometric Test | Testing Db, level b, all circular ended, add on U _R 1 minutes. | No Damage |
| | Last Test | | No Damage $\Delta C / C \leq 5\%$ $\Delta tg\delta \leq 0.005$ $R_i \geq \text{Initial} * 50\%$ |
| 17 | Load-life continuous | +85□, RV x 125%, Duration: 1000h | No Damage $\Delta C / C \leq 5\%$ $\Delta tg\delta \leq 0.004$ $R_i \geq \text{Initial} * 50\%$ |
| 18 | Charge and discharge Test | Duration:10000cycles Charging Duration:0.5s Discharge Duration:0.5s | $\square C / C \leq 5\%$ $\Delta tg\delta \leq 0.005$ $R_i \geq \text{Initial} * 50\%$ |