

Gold Capacitor

NF Type

NF Type Gold Capacitor provides super large capacitance by unique electrode and miniaturization technology meeting the trend of compactness.

NF Type is suitable for a memory back-up for C MOS type RAM in microcomputers.



Features

- Line-up of 0.033 farad to 1.0 farad capacitance values at 5.5 volts to meet the requirements of extremely low current flow memory back-up applications.
- A long period memory back-up is available by excellent self-discharging characteristics.
- NF Type low profile design is 7.5 mm maximum ($\phi 13.5$) and 8.0mm maximum ($\phi 21.5$) in height and has a standardized 5mm terminal spacing.
- Superior to primary or secondary batteries in operating temperature range, charge/discharge characteristics, long time reliability and performance stability.

Specifications

- Operating temperature range: $-25^{\circ}\text{C} \sim +70^{\circ}\text{C}$
- Rated working voltage: 5.5 V DC
- Surge voltage: 6.3 V DC
- Rated capacitance: 0.033~1.0F
- Capacitance tolerance: $-20 \sim +80\%$
- Leakage current:
The capacitor shall be applied 5.5 V for 30 minutes at 20°C . (Refer to standard products table for each value)
- Internal resistance:
Impedance shall be specified at 1 kHz/ 20°C . (Refer to standard products table for each value)

• Temperature characteristics:

Capacitance change	Within $\pm 30\%$ of the measured value at 20°C
Internal resistance at -25°C	Less than 5 times of the value at 20°C
Leakage current at 70°C	Less than 4 times of the value at 20°C

• Load life characteristics:

The capacitor shall meet the following specification after 1,000 hours with the rated voltage applied at 70°C .

Capacitance change	Within $\pm 30\%$ of the initial measured value
Internal resistance	Less than 4 times of the initial specified value
Leakage current	Less than 2 times of the initial specified value

• Shelf life characteristics:

The capacitor shall meet the same specification as "Load life characteristics" after 500 hours exposure at 70°C with no voltage applied.

• Humidity characteristics:

The capacitor shall meet the same specification as "Load life characteristics" after 500 hours charge of the rated working voltage at $50^{\circ}\text{C}/90 \sim 95\% \text{ R.H.}$