# **Panasonic** Electric Double Layer Capacitors (Gold Capacitor)

### Stacked Coin Type

Not recommended for new design

Series : **RG** Low temperature assured product



### Features

- Endurance : +85 °C 2000 h
- Category temperature range : -40 °C to +85 °C
- RoHS compliant

### **Recommended applications**

• Backup of data/RTC of base station, electronic meter, and industrial equipment

Specifications				
Category temp. range	-40 °C to +85 °C			
Maximum operating voltage	3.6 V.DC			
Nominal capacitance	0.	22 F	1.0 F, 1.5 F	
Characteristics at	Capacitance change	±30 % of initial measured value at +20 °C (at -40 °C)		
low temperature	Internal resistance	≤ 7 times of initial measured value at +20 °C (at -40 °C)		
Endurance	After 2000 hours application of maximum operating voltage at +85 °C			
	Capacitance change	±30 % of initial measured value at 20 °C		
	Internal resistance	100 $\Omega$ or less (0.22 F) 40 $\Omega$ or less (1.0 F, 1.5 F)		
	After 2000 hours storage at +85 °C without load (voltage)			
Shelf life	Capacitance change	Capacitance change shall meet the specified limits for Endurance		
	Internal resistance	Internal resistance shall meet the specified limits for Endurance		

### Dimensions in mm(not to scale)



### **Characteristics list**

Maximum operating voltage (V.DC)	Capacitance (F)	Capacitance tolerance (F)	Internal resistance (Initial specified value) (Ω) at 1 kHz	Recommended discharge current (mA)	Parts number	Mass (Reference value) (g)	Min. packaging q'ty (pcs)
	0.22	0.176 to 0.396	≦50	300 µA or less	EECRG0V224()N	1.0	200
3.6	1.0	0.8 to 1.8	≦20	1 mA or less	EECRG0V105()N	4.1	100
	1.5	1.2 to 2.7	≦20	1 mA or less	EECRG0V155()N	4.2	100

Do not use reflow soldering. (IR, Atmospherheating methods, etc.) Please refer to the page of "Application guidelines". (): Please use V or H to indicate terminal type.

The recommended discharge current is a reference value. Please design your equipment(circuit) in consideration of IR dorop.

Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use Should a safety concern arise regarding this product, please be sure to contact us immediately.

## **Stacked Coin Type**

Series : RG



### Features

- Endurance : +85 °C 2000 h
- Can be discharged mA current
- RoHS compliant

### **Recommended applications**

- Backup of data/RTC of base station, electronic meter, and industrial equipment
- For assist of rapid load change

Specifications				
Category temp. range	−25 °C to +85 °C			
Maximum operating voltage	3.6 V.DC			
Nominal capacitance	0.	22 F	1.0 F, 1.5 F	
Characteristics at	Capacitance change	$\pm 30$ % of initial measured value at +20 °C (at –25 °C)		
low temperature	Internal resistance	≤5 times of initial measured value at +20 °C (at -25 °C)		
	After 2000 hours application of maximum operating voltage at +85 °C			
Endurance	Capacitance change	±30 % of initial measured value at 20 °C		
Lindurance	Internal resistance	100 Ω or less (0.22 F) 40 Ω or less (1.0 F, 1.5 F)		
	After 2000 hours storage at +85 °C without load (voltage)			
Shelf life	Capacitance change	e Capacitance change shall meet the specified limits for Endurance		
	Internal resistance	e Internal resistance shall meet the specified limits for Endurance		

### Dimensions in mm(not to scale)



### **Characteristics list**

Maximum operating voltage (V.DC)	Capacitance (F)	Capacitance tolerance (F)	Internal resistance (Initial specified value) (Ω) at 1 kHz	Recommended discharge current (mA)	Parts number	Mass (Reference value) (g)	Min. packaging q'ty (pcs)
	0.22	0.176 to 0.396	≦ 50	1 or less	EECRG0V224()	1.0	200
3.6	1.0	0.8 to 1.8	≦20	20 or less	EECRG0V105()	4.1	100
	1.5	1.2 to 2.7	≦20	20 or less	EECRG0V155()	4.2	100

Do not use reflow soldering. (IR, Atmospherheating methods, etc.) Please refer to the page of "Application guidelines". (): Please use V or H to indicate terminal type.

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