

Surface Mount Type

Series: **EN**

■ Features

- Re-flow soldering method available (250 °C)
- Miniaturized : Longer life and environmentally friendly
- RoHS directive compliant



■ Recommended Applications

- Memory cards(power supply to hold memory), mobile phones, PDAs, digital cameras.

■ Specifications

Category Temp. Range	-10 °C to +60 °C	
Maximum Operating Voltage	3.3 V.DC	
Nominal Capacitance	0.2 F	
Maximum Operating Current	10 µA max.	
Stability at low temperature and high temperature	Category temp. range (-10 °C)	
	Capacitance change	±30 % of initial measured value at +20 °C
	Internal resistance	≤10 times of initial measured value at +20 °C
	Category temp. range (+60 °C)	
	Capacitance change	±30 % of initial measured value at +20 °C
	Internal resistance	≤ measured value at +20 °C
Endurance	After 500 hours application of 3.3 V. DC at +60 °C, the capacitor shall meet the following limits.	
	Capacitance change	±30 % of initial measured value
	Internal resistance	4 kΩ or less
Shelf Life	After 500 hours storage at +60°C without load, the capacitor shall meet the following limits.	
	Capacitance change	±30 % of initial measured value
	Internal resistance	1 k ohm or less
High temperature High humidity	After 500 hours storage at +40 °C, 90 to 95 % R.H., the capacitor shall meet the specified limits for shelf life.	

■ Dimensions in mm(not to scale)

Type AK

Front view dimensions: 11.3±0.3, 5.9±0.1, 6.8 max., 1.4±0.2, 1.9±0.2, 1.8 max. (bottom flange), 2.5±0.3, 1.4±0.3, 2.0±0.3, 0.15±0.05, 6.8 max. (top flange).

Side view dimensions: 1.8 max., 6.8 max., 0.15±0.05.

Type RK

Front view dimensions: 10.0 max., 6.8 max., (0.1±0.3), 10.0 max., 0.20 max., 2.38±0.35, 0.5±0.1, 2±0.3, 0.5±0.1.

Side view dimensions: 1.8 max., 1.9±0.4, 2.6±0.3.

Type J2

Top view dimensions: 0.9±0.3, 6.95^{+0.1}_{-0.25}, 0.9±0.3, 6.8 max. (diameter), 5.0⁻⁰_{-0.2}, 0.15±0.03, 0.15^{+0.1}_{-0.2}, 1.85 max., 1.24 (height), 5.0⁻⁰_{-0.2}.

■ Standard Products

Maximum Operating Voltage (V.DC)	Capacitance (F)	Capacitance range (F)	Internal resistance (Ω) at 1kHz	Mass (g)	Part number	Min. Packaging Qty Reel (pcs)
3.3	0.2	0.16 to 0.36	≤ 200	0.2 (Approx.)	EECEN0F204()	2000

The re-flow condition / taping dimensions are explained on p.197, 198 of our Catalog.

Please use it as a reference guide.

() : Please use AK, RK or J2 to indicate terminal type.

Note : 1. When the capacitor is being used in a high temperature and high humidity environment for a long period, brown deposited materials might be found around the sealing area. However, the materials are insulators and will not affect any electrical characteristics of the capacitor.

2. Do not use reflow soldering when cell voltage is above 0.3 V.