# Surface Mount Type

Series: **EP** 

#### ■ Features

 Miniaturized : Dia3.8 x height 1.5 mm max. Reflow soldering method available (260 °C)

RoHS directive compliant

### ■ Recommended Applications

Mobile phones, PDAs

RTC backup



### ■ Specifications

Category Temp. Range	−10 °C to +60 °C					
Maximum Operating Voltage		2.6 V DC	3.3 V DC			
Nominal capacitance	0.033 F					
Characteristics at Low Temperature	Capacitance change	±30 % of initial measured value at 20 °C (at -10°C)				
	Internal resistance	≤10 times of initial measured value at 20 °C (at -10°C)				
Endurance	After 500 hours ap	oplication of 2.6 V at +60 °C	After 250 hours application of 3.3 V at +60 °C			
	Capacitance change	±30 % of initial measured value at 20 °C	Capacitance change	±30 % of initial measured value at 20 °C		
	Internal resistance	2 k $\Omega$ or less	Internal resistance	4 kΩ or less		
Shelf Life	After 500 hours strage at +60 °C without load (voltage)					
	Capacitance change	±30 % of initial measured value at 20 °C				
	Internal resistance	1 kΩ or less				

#### ■ Dimensions in mm(not to scale)

(Unit: mm) Terminal: A Terminal: Y  $\phi$ 3.8 max 2.0±0.

## Standard Products

Maximum Operating Voltage	Capacitance		Internal resistance (Initial specified value)	Maximum discharging current	Part number	Mass	Min. Packaging Q'ty
(V.DC)	(F)		(Ω) at 1 kHz	(μΑ)		(g)	(pcs)
2.6	0.033	– 20% to +80%	≦350	5	EECEP0E333()	0.06	4000
3.3					EECEP0F333()		

<sup>()</sup> Please use A or Y, to indicate the terminal style.

The re-flow condition / taping dimensions are explained on EE210, EE211 of our catalog.

Note: 1. Do not use reflow soldering when cell voltage is above 0.3 V.

- 2. When the capacitor is being used in a high temperature and high humidity environment for a long period, and will not affect any electrical characteristics of the capacitor.
- 3: EP series is a small capacitor that developed for the RTC backup of cellular phone. Therefore, there is a possibility that it will not be able to back up in short term depend on using condition. Please contact us before you use it

