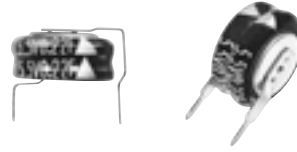


### Stacked Coin Type

Series: **SD**

#### ■ Features

- Endurance : 70 °C 1000 h
- RoHS directive compliant



#### ■ Recommended Applications

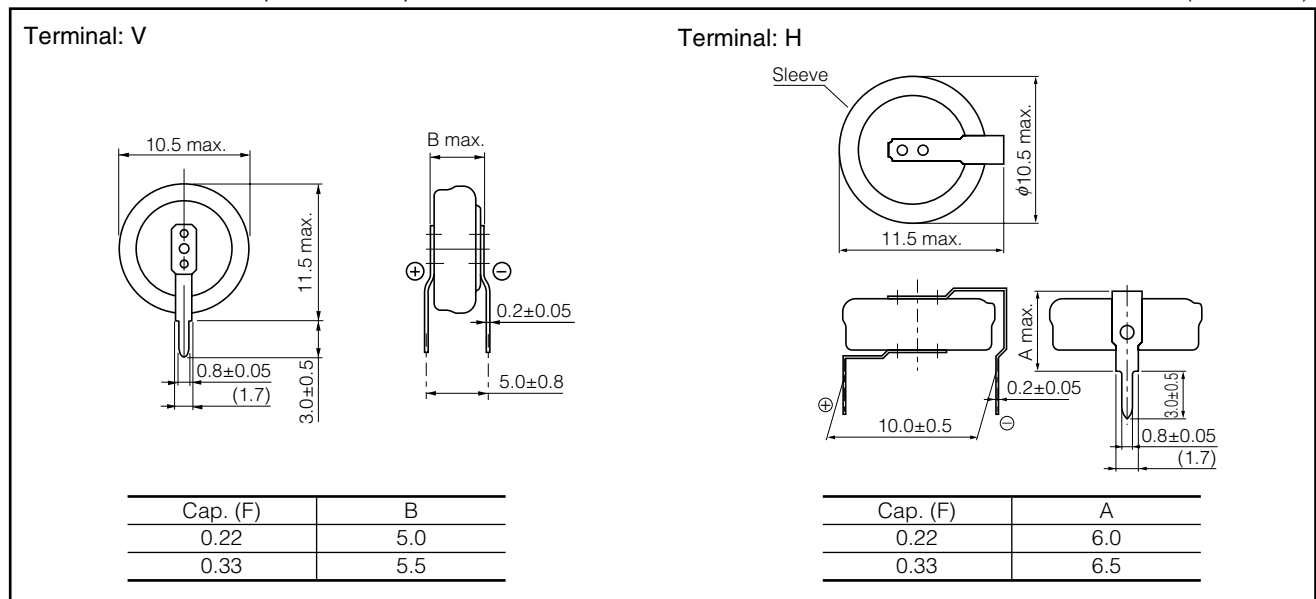
- Memory back-up for video and audio equipment, cameras, telephones, printers, data terminals, rice cookers, intelligent remote controls

#### ■ Specifications

Category Temp. Range	-25 °C to +70 °C	
Maximum Operating Voltage	5.5 V.DC	
Nominal Cap.Range	0.22 F, 0.33 F	
Characteristics at Low Temperature	Capacitance change	±30 % of initial measured value at +20 °C (at -25 °C)
	Internal resistance	≤5 times of initial measured value at +20 °C (at -25 °C)
Endurance	After 1000 hours application of 5.5 V. DC at +70 °C, the capacitor shall meet the following limits.	
	Capacitance change	±30 % of initial measured value
	Internal resistance	≤4 times of initial specified value
Shelf Life	After 1000 hours storage at +70°C without load, the capacitor shall meet the specified limits for Endurance.	

#### ■ Dimensions in mm(not to scale)

(Unit : mm)



#### ■ Standard Products

\* : Shaded part numbers have been discontinued since September 30, 2014 and we recommend alternate products for new design. Please consider more than 0.22 F.

Maximum operating voltage (V.DC)	Capacitance (F)	Capacitance tolerance (F)	Internal resistance (Initial specified value) (Ω) at 1 kHz	Recommended discharge current (μA)	Parts number	Mass (Reference value) (g)	Min. packaging Q'ty (pcs)
5.5	* 0.022	0.0176 to 0.0396	≤ 150	200 or less	EECS0HD223 ( )	–	200
	* 0.047	0.0376 to 0.0846	≤ 120	200 or less	EECS0HD473 ( )	–	200
	* 0.1	0.080 to 0.180	≤ 75	300 or less	EECS0HD104 ( )	–	200
	0.22	0.176 to 0.396	≤ 75	300 or less	EECS0HD224 ( )	1.0	200
	0.33	0.264 to 0.594	≤ 75	300 or less	EECS0HD334 ( )	1.1	200

( ) Please use V or H, to indicate the terminal style.

Note : Do not use reflow soldering. (IR, Atmosphere heating methods, etc.)

Please refer to the page of "Application Guidelines".