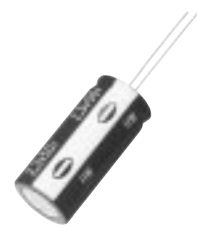


Radial lead Type

Series: **HW**



■ Features

- Can be discharged mA or more current.
- RoHS directive compliant

■ Recommended Applications

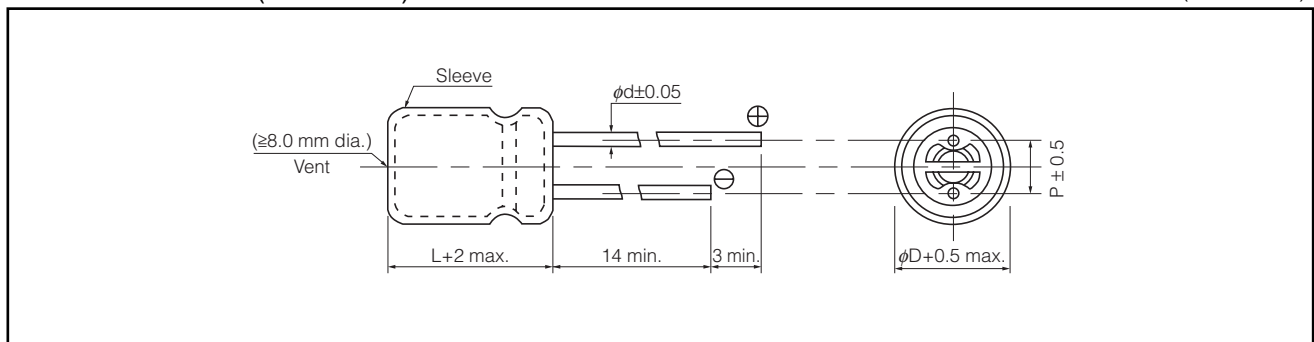
- Solar battery operated circuits (Road guidance flasher), Quick charging motor drives (Toy car)
- Back-up Power Supplies (UPS)

■ Specifications

Category	Temp. Range	-25 °C to +70 °C		-25 °C to +60 °C	
Maximum Operating Voltage		2.3 V.DC		2.3 V.DC	2.1 V.DC
Nominal Cap. Range		1 F to 22 F		30, 50 F	70 F
Capacitance Tolerance		-20 % to +40 % (1F : +80 %)			
Characteristics at Low Temperature	Capacitance change	±30 % of initial measured value at +20 °C (at -25 °C)			
	Internal resistance	≤4 times of initial measured value at +20 °C (at -25 °C)			
Endurance	After 1000 hours application of 2.3 V. DC at +70 °C (+60 °C), the capacitor shall meet the following limits.				
	Capacitance change	±30 % of initial measured value			
	Internal resistance	≤2 time of initial specified value			
Shelf Life	After 1000 hours storage at +70 °C (+60 °C) without load, the capacitor shall meet the specified limits for Endurance.				

■ Dimensions in mm(not to scale)

(Unit : mm)



■ Standard Products * : 10 F or less HW series is not recommended for new design. Please consider HZ series.

Category temp. range (°C)	Max. Operating Voltage (V.DC)	Capacitance (F)	Internal resistance (Initial specified value) (Ω) at 1 kHz	Size (mm)				Part number	Min. Packaging Q'ty (pcs)
				φD	L	φd	P		
-25 to +70	2.3	* 1.0	≤ 1.0	8.0	22.0	0.7	3.5	EECHW0D105	200
		* 3.3	≤ 0.3	12.5	23.0	0.8	5.0	EECHW0D335	200
		* 4.7	≤ 0.3	12.5	23.0	0.8	5.0	EECHW0D475	200
		* 10	≤ 0.2	12.5	35.0	0.8	5.0	EECHW0D106	100
		22	≤ 0.1	18.0	35.0	0.8	7.5	EECHW0D226	50
-25 to +60	2.1	30	≤ 0.1	18.0	35.0	0.8	7.5	EECHW0D306	50
		50	≤ 0.1	18.0	40.0	0.8	7.5	EECHW0D506	50
		70	≤ 0.1	18.0	50.0	0.8	7.5	EECHW0D706	50

Note : 1. Do not use reflow soldering. (IR, Atmosphere heating methods, etc.)
Please refer to the page of "Application Guidelines".

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.

00 Nov. 2012