# Radial lead Type

Series: **HW** 

#### ■ Features

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



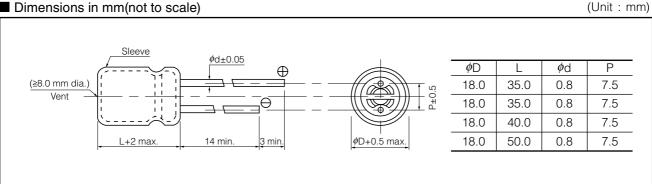
## ■ Recommended Applications

- 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	22 F		30, 50 F	70 F			
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 %	30 % of initial measured value				
	Internal resistance	≦2 tim	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)



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

Category temp.	Maximum operating voltage	Capacitance	Capacitance tolerance	Internal resistance (Initial specified value)	Recommended discharge		Mass (Reference value)	Min. Packaging Q'ty
(°C)	(V.DC)	(F)	(F)	(Ω) at 1 kHz	(A)		(g)	(pcs)
-25 to +70		22	17.6 to 30.8	≤ 0.1	1 or less	EECHW0D226	12.0	50
	2.3	30	24.0 to 42.0	≤ 0.1	1 or less	EECHW0D306	14.0	50
-25 to +60		50	40.0 to 70.0	≤ 0.1	1 or less	EECHW0D506	15.0	50
	2.1	70	56.0 to 98.0	≤ 0.1	1 or less	EECHW0D706	19.0	50

Note: 1. Do not use reflow soldering. (IR, Atmosphere heating methods, etc.)

Please refer to the page of "Application Guidelines".