

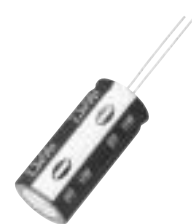
Radial lead Type

Series: HW

Country of Origin
Japan

Feature

Miniaturized, high-capacitance, low-resistance.
Can be charged and discharged with more cycles compared to secondary batteries.
Pollution free: Has activated carbon and organic electrolyte.
Does not contain polyvinyl chloride and lead.
RoHS directive compliant



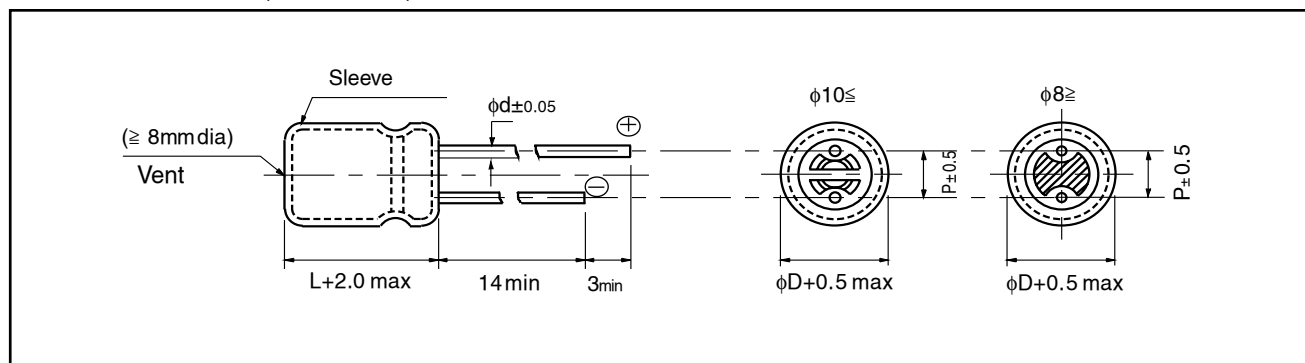
Recommended Applications

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

Specifications

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Category temp. range	-25 to +70°C		-25 to +60°C	
Maximum Operating Voltage	2.3 V .DC		2.3 V .DC	2.1V .DC
Nominal Cap. Range	1 to 22 F		30, 50 F	70F
Capacitance Tolerance	-20 to +40%			
Characteristics at Low Temperature	Capacitance change	±30% of initial measured value at +20°C (-25 to +70°C, +60°C)		
	Internal resistance	≤ 4 times of initial measured value at +20°C (at -25°C)		
Endurance	After 1000 hours application of 2.3V. 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.			
Moisture Resistance	After 500 hours storage at +55°C, 90 to 95% R.H., the capacitor shall meet the specified limits for Endurance.			

Dimensions in mm (not to scale)



Standard Products

Category temp. range (°C)	Max. Operating Voltage (V.DC)	Capacitance (F)	Internal resistance (Ω) at 1kHz	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.)