

# Coin Cell Supercapacitors

## KW Series



### Description

Cooper Bussmann PowerStor supercapacitors are unique, ultra-high capacitance devices utilizing electrochemical double layer capacitor (EDLC) construction combined with new, high performance materials. This combination of advanced technologies allows Cooper Bussmann to offer a wide variety of capacitor solutions tailored to specific applications that range from a few micro-amps for several days to several amps for milliseconds.

The KW Series offers a wide range of high capacitance coin cell style products for use in memory and RTC back-up applications. End products include electricity meters, motor control units and solar inverters.

### Features & Benefits

- High specific capacitance
- Low leakage current
- Long cycle life
- Eco-friendly

### Applications

- RTC Back-up
- Electric utility meters
- Motor control units
- Solar inverters



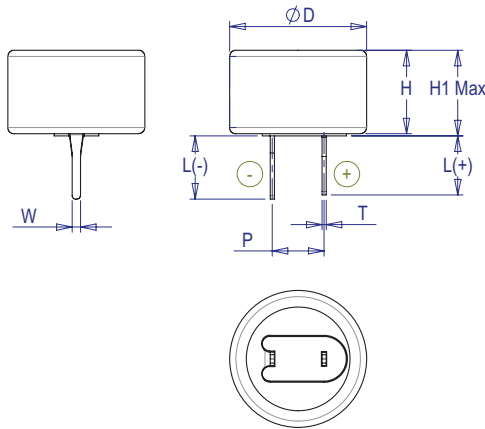
Specifications	
Working Voltage	5.5V
Surge Voltage	6.3V
Capacitance	0.1F to 1.0F
Capacitance Tolerance	-20% to +80% (20°C)
Operating Temperature Range	-40°C to 85°C

Standard Product				
Capacitance (F)	Part Number	Maximum Initial ESR (Ω) (Equivalent Series Resistance) Measured @ 1kHz	Maximum Dimensions (mm)	Typical Mass (grams/piece)
0.1	KW-5R5C104-R	50	Ø = 13.5mm; H = 8.30mm; P = 5mm	3.7
0.22	KW-5R5C224-R	50	Ø = 13.5mm; H = 8.30mm; P = 5mm	3.7
0.33	KW-5R5C334-R	50	Ø = 13.5mm; H = 8.30mm; P = 5mm	3.7
0.68	KW-5R5C684-R	30	Ø = 21.5mm; H = 9.00mm; P = 5mm	10.2
1.0	KW-5R5C105-R	30	Ø = 21.5mm; H = 9.00mm; P = 5mm	10.4

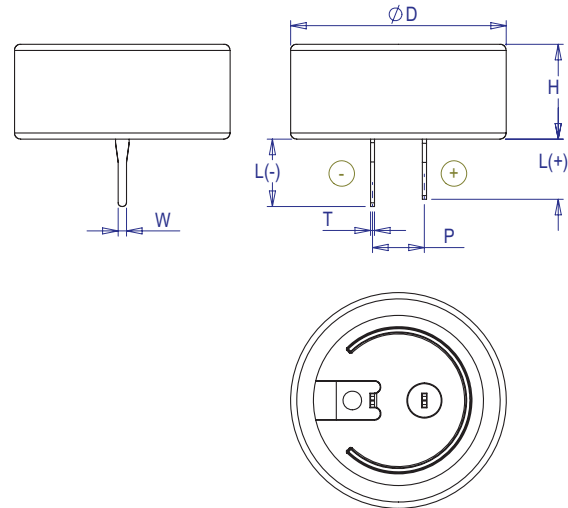
Performance		
Parameter	Capacitance Change (% of initial measured value)	ESR (% of maximum initial ESR)
Life (1000 hrs @ 85°C @ 5.5Vdc)	≤ 30 %	≤ 200 %
Storage - Low and High Temperature (1000 hrs @ -40°C and 85°C)	≤ 30 %	≤ 200 %

Dimensions - mm								
Part Number	ØD Max	H±0.20	H1 Max	L(-)±0.20	L(+) $\pm$ 0.20	P±0.30	T	W±0.10
KW-5R5C104-R	13.5	8.05	8.30	6.10	5.70	5.00	0.40	0.80
KW-5R5C224-R	13.5	8.05	8.30	6.10	5.70	5.00	0.40	0.80
KW-5R5C334-R	13.5	8.05	8.30	6.10	5.70	5.00	0.40	0.80
KW-5R5C684-R	21.5	8.80	9.00	6.50	5.80	5.00	0.40	0.80
KW-5R5C105-R	21.5	8.80	9.00	6.50	5.80	5.00	0.40	0.80

### 0.1F to 0.33F



### 0.68F to 1.0F



### Part Numbering System

KW	-	5	R	5	□	□	□	-	R
Series Code		Voltage (V) R = Decimal			Configuration	Capacitance ( $\mu$ F)			RoHS Compliant
KW Series		5R5 = 5.5V		C = Cylindrical	Value	Multiplier			
Wide Temperature					Example: 104 = 10 x 10 <sup>4</sup> $\mu$ F or 0.1F				

### Packaging Information

#### Standard bulk packaging:

KW-5R5C104-R, KW-5R5C224-R, KW-5R5C334-R - 400 units

KW-5R5C684-R, KW-5R5C105-R - 500 units

### Part Marking

#### Manufacturer

Capacitance (F)

Nominal Working Voltage (V)

Series Code (or part number)

Polarity

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