PowerStor™

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.

Leaded Coin Cell Device

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

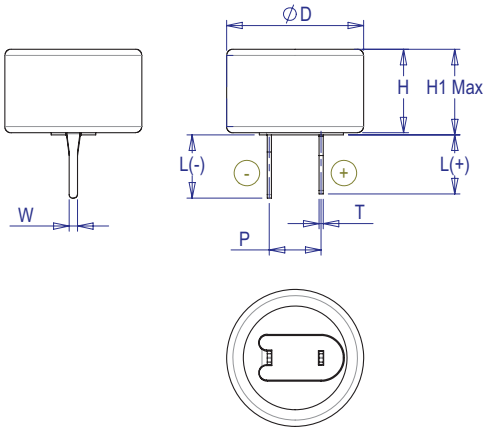
Standard Product				
Capacitance (F)	Part Number	Maximum Initial ESR (Ω) (Equivalent Series Resistance) Measured @ 1kHz	Maximum Dimensions (mm)	Typical Mass (grams/piece)
0.1	KW-5R5C104-R	50	Ø = 13.5mm; H = 8.30mm; P = 5mm	3.7
0.22	KW-5R5C224-R	50	Ø = 13.5mm; H = 8.30mm; P = 5mm	3.7
0.33	KW-5R5C334-R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

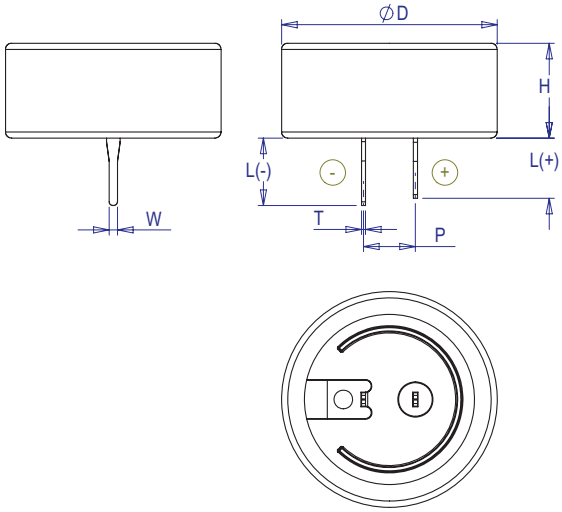
COOPER Bussmann

Dimensions - mm								
Part Number	ØD Max	H±0.20	H1 Max	L(-)±0.20	L(+)±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 (µF)**				
						Value		Multiplier		
KW Series Wide Temperature		5R5 = 5.5V			C = Cylindrical	Example: 104 = 10 x 10^4µF or 0.1F				RoHS Compliant

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

North America
Cooper Bussmann
1225 Broken Sound Parkway NW
Suite F
Boca Raton, FL 33487-3533
Tel: 1-561-998-4100
Fax: 1-561-241-6640
Toll Free: 1-888-414-2645

Cooper Bussmann
P.O. Box 14460
St. Louis, MO 63178-4460
Tel: 1-636-394-2877
Fax: 1-636-527-1607

Europe
Cooper Bussmann
Cooper (UK) Limited
Burton-on-the-Wolds
Leicestershire • LE12 5TH UK
Tel: +44 (0) 1509 882 737
Fax: +44 (0) 1509 882 786

Cooper Bussmann
Avda. Santa Eulalia, 290
08223
Terrassa, (Barcelona), Spain
Tel: +34 937 362 812
+34 937 362 813
Fax: +34 937 362 719

Asia Pacific
Cooper Bussmann
1 Jalan Kilang Timor
#06-01 Pacific Tech Centre
Singapore 159303
Tel: +65 278 6151
Fax: +65 270 4160

COILTRONICS™ COOPER Bussmann™ PowerStor™