

POWERSTOR® Supercapacitors



PowerStor®, a Cooper Bussmann brand, is a family of **supercapacitors** featuring ultra-low resistance and unique high-energy storage for electronic circuits and portable devices. PowerStor devices are ideal for pulse power and electronic memory circuitry applications with an **supercapacitor** the size of an "AA" alkaline battery capable of peak current up to 35 amps. PowerStor supercapacitors come in cylindrical and coin cell packages to meet power, space and mounting requirements.

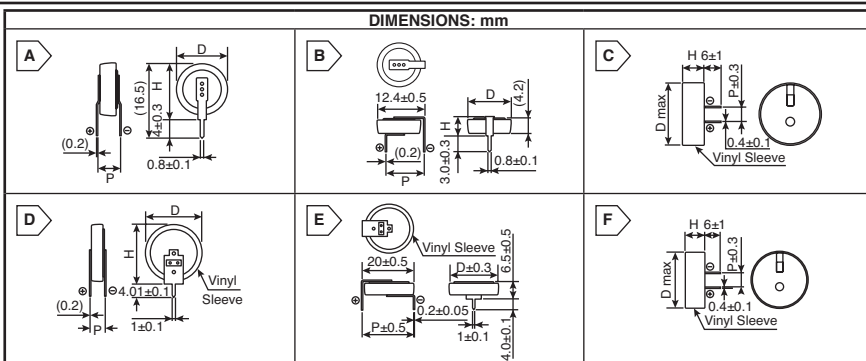
KR SERIES - COIN CELL SUPERCAPACITORS

The KR Series offers a wide range of high capacitance coin cell style products for use in memory and RTC back-up applications. End products include computers, cameras, camcorders, telephones, printers, car stereos, CCTV, set top box and PDP.

- Specifications:**
- Working Voltage: 5.5V
 - Surge Voltage: 6.3V
 - Nominal Capacitance Range: 0.1 to 1.5F
 - Capacitance Tolerance: -20% to +80% (20°C)
 - Operating Temperature Range: -25°C to 70°C
- Typical Applications:**
- Computer and peripherals
 - Telephones
 - DSL modems and routers
 - Digital Radios
 - Set top boxes

- Features and Benefits:**
- High specific capacitance
 - Low leakage current
 - Long cycle life
 - Eco-friendly

Performance		
Parameters	Capacitance Change (% of Initial Measured Value)	ESR (% of Initial Specified Value)
Life (1000hrs. @ 70°C @ 5.5Vdc)	≤ 30	≤ 400
Storage - Low and High Temperature (1000hrs. @ -25°C and 70°C)	≤ 30	≤ 400



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Bussmann Part No.	Fig.	Nominal Capacitance (F)	Nominal ESR (Ω) Measured at 1kHz	Nominal Dimensions (mm)			Typical Mass (grams/1 piece)	Price Each					
					Diameter	Height	Lead C to C		1	25	50	100	250	500
504-KR-5R5V104-R	KR-5R5V104-R	A	0.1	75	11.5	12.5	5	1.4	1.63	1.36	1.25	1.12	1.00	.98
504-KR-5R5H104-R	KR-5R5H104-R	B	0.1	75	11.5	5	10	1.4	1.63	1.36	1.25	1.12	1.00	.98
504-KR-5R5C104-R	KR-5R5C104-R	C	0.1	75	13.5	7.5	5	3.3	1.63	1.36	1.25	1.12	1.00	.98
504-KR-5R5C224-R	KR-5R5C224-R	C	0.22	75	13.5	7.5	5	3.3	1.63	1.36	1.25	1.12	1.00	.98
504-KR-5R5V334-R	KR-5R5V334-R	A	0.33	50	11.5	12.5	5	1.4	1.63	1.36	1.25	1.12	1.11	1.10
504-KR-5R5H334-R	KR-5R5H334-R	B	0.33	50	11.5	5	10	1.4	1.63	1.36	1.25	1.12	1.00	.98
504-KR-5R5C334-R	KR-5R5C334-R	C	0.33	50	13.5	7.5	5	3.3	1.63	1.36	1.25	1.12	1.00	.98
504-KR-5R5V474-R	KR-5R5V474-R	A	0.47	50	11.5	12.5	5	1.4	2.93	2.47	2.25	2.02	1.80	1.59
504-KR-5R5H474-R	KR-5R5H474-R	B	0.47	50	11.5	5	10	1.4	2.93	2.47	2.25	2.02	1.80	1.59
504-KR-5R5C474-R	KR-5R5C474-R	C	0.47	50	13.5	7.5	5	3.3	2.93	2.55	2.40	2.10	1.92	1.85
504-KR-5R5V105-R	KR-5R5V105-R	D	1.0	30	19	19.5	5	4.2	3.22	2.72	2.47	2.22	1.98	1.77
504-KR-5R5H105-R	KR-5R5H105-R	E	1.0	30	19	6.5	20	4.2	3.22	2.72	2.47	2.36	2.20	1.77
504-KR-5R5C105-R	KR-5R5C105-R	F	1.0	30	21.5	7.5	5	9.1	3.22	2.72	2.47	2.22	1.98	1.77
504-KR-5R5V155-R	KR-5R5V155-R	D	1.5	30	19	19.5	5	4.2	4.39	3.71	3.37	3.03	2.70	2.32
504-KR-5R5H155-R	KR-5R5H155-R	E	1.5	30	19	6.5	20	4.2	4.39	3.71	3.37	3.03	2.70	2.32
504-KR-5R5C155-R	KR-5R5C155-R	F	1.5	30	21.5	7.5	5	9.1	4.39	3.71	3.37	3.03	2.70	2.32

P SERIES AND PM SERIES - SUPERCAPACITORS

Common Features and Benefits:

- Ultra-low ESR
- High Capacitance
- Long Life Cycle
- Low Leakage Currents
- High Energy Density

P Series Specifications:

- Working Voltage: 5.0V
- Surge Voltage Rating: 6V
- Nominal Capacitance Range: 0.1F to 1.0F
- Capacitance Tolerance: -20% to +80% (20°C)
- Operating Temperature Range: -25°C to 70°C

PM Series Specifications:

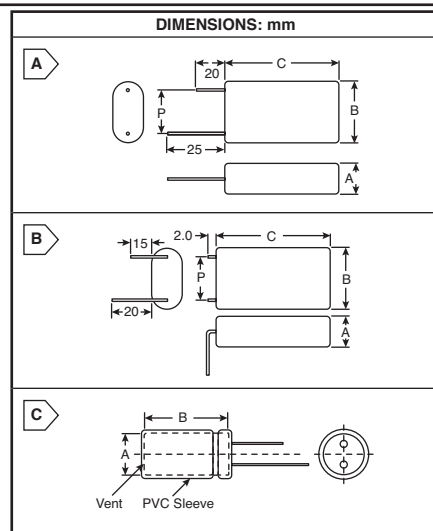
- Surge Voltage Rating: 5.5V
- Operating Temperature Range: -40°C to 85°C (max. working voltage: 3.9V)

Applications:

- Pulse Power
- Bridge or Hold-up Power

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Bussmann Part No.	Fig.	Nominal Capacitance (F)	Nominal ESR (Ω) Measured at 1kHz	Voltage	Price Each				
						1	25	50	100	250
504-PA-5R0V224-R	PA-5R0V224-R	A	0.224	0.3	5.0	7.31	6.18	5.62	5.06	4.50
504-PA-5R0V474-R	PA-5R0V474-R	A	0.47	0.2	5.0	9.26	7.83	7.12	6.41	5.82
504-PB-5R0H104-R	PB-5R0H104-R	B	1.0	1.0	5.0	3.08	2.64	2.45	2.21	2.01
504-PB-5R0H105-R	PB-5R0H105-R	B	1.0	1.0	5.0	8.82	7.57	7.01	6.33	5.77
504-PB-5R0H474-R	PB-5R0H474-R	B	0.47	2.0	5.0	5.87	5.30	4.59	4.01	3.67
504-PB-5R0V474-R	PB-5R0V474-R	A	0.47	2.0	5.0	5.36	4.53	4.12	3.71	3.37
504-PM-5R0V155-R	PM-5R0V155-R	A	1.5	0.07	5.0	14.46	12.23	11.12	10.01	8.90
504-PM-5R0V305-R	PM-5R0V305-R	A	3.0	0.05	5.0	14.46	11.92	11.12	10.01	8.90
504-PM-5R0H474-R	PM-5R0H474-R	A	0.47	0.3	5.0	10.20	8.60	7.85	7.05	6.30
504-PM-5R0H105-R	PM-5R0H105-R	A	1.0	0.15	5.0	9.91	8.38	7.62	7.02	6.65
504-PM-5R0V474-R	PM-5R0V474-R	A	0.47	0.3	5.0	10.20	8.60	7.85	7.05	6.30



Applications:

- Pulse Power
- Bridge or Hold-up Power

M SERIES SUPERCAPACITORS

- Specifications:**
- Working Voltage: 2.5V
 - Nominal Capacitance Range: 1F to 9F
 - Capacitance Tolerance: -20% to +80% (20C)
 - Surge Voltage Rating: 3V
 - Operating Temperature Rating: -40°C to +60°C

MOUSER STOCK NO.	Bussmann Part No.	Fig.	Capacitance (F)	Nominal ESR (Ω) (Equivalent Series Resistance) Measured @	DC	Nominal Dimensions (mm)		Typical Mass (grams/piece)	Price Each				
						Diameter (A)	Length (B)		1	25	50	100	250
504-M0810-2R5105-R	M0810-2R5105-R	C	1	0.15	0.2	ø8	13	1.2	3.90	3.30	3.00	2.70	2.40
504-M0820-2R5205-R	M0820-2R5205-R	C	2	0.075	0.1	ø8	20	1.5	7.80	6.60	6.00	5.40	4.80
504-M1020-2R5305-R	M1020-2R5305-R	C	3	0.035	0.05	ø10	20.5	2.8	9.75	8.25	7.50	6.75	6.00
504-M1030-2R5605-R	M1030-2R5605-R	C	6	0.025	0.035	ø10	30	3.9	11.70	9.90	9.00	8.10	7.20
504-M1325-2R5905-R	M1325-2R5905-R	C	9	0.02	0.03	ø13	26	5.6	16.70	14.10	12.85	11.55	10.30

PHB AND PHV SERIES - SUPERCAPACITORS

- Specifications:**
- Large capacitance for high energy density
 - Low ESR for high power density

Replace **V** for Vertical, **H** for Horizontal.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Bussmann Part No.	Nominal Capacitance (F)	Voltage	Maximum ESR (Ω)		Price Each			
				1kHz	100Hz	1	25	50	100
504-PHB-5R0 155-R	PHB-5R0 155-R	1.5	5	0.31	0.33	11.05	9.53	8.78	8.01
504-PHB-5R0 255-R	PHB-5R0 255-R	2.5	5	0.19	0.20	13.01	11.23	10.35	9.45
504-PHB-5R0 305-R	PHB-5R0 305-R	3	5	0.19	0.20	13.73	11.83	10.90	9.95
504-PHB-5R0 505-R	PHB-5R0 505-R	5	5	0.12	0.13	17.33	14.94	13.76	12.57
504-PHV-5R4 474-R	PHV-5R4 474-R	0.47	5.4	0.30	0.40	6.51	5.61	5.17	4.72
504-PHV-5R4 155-R	PHV-5R4 155-R	1.5	5.4	0.12	0.16	11.05	9.53	8.78	8.01
504-PHV-5R4 255-R	PHV-5R4 255-R	2.5	5.4	0.075	0.08	13.03	11.23	10.35	9.45
504-PHV-5R4 305-R	PHV-5R4 305-R	3	5.4	0.075	0.08	13.73	11.83	10.90	9.95
504-PHV-5R4 505-R	PHV-5R4 505-R	5	5.4	0.065	0.07	17.33	14.94	13.76	12.57

Nominal Capacitance (F)	A	B	C	d'	D	D'	E	E'	F	P
	0.47	9.0	17.3	14.5	0.5	20	15	25	20	2.0
1.5	9.0	17.3	22.0	0.5	20	15	25	20	2.0	11.8
2.5	11.0	21.3	23.0	0.6	20	15	25	20	2.0	5.3
3.0	9.0	17.3	32.5	0.5	20	15	25	20	2.0	11.8
5.0	11.0	21.3	32.5	0.6	20	15	25	20	2.0	5.3
	Maximum			±0.02	Minimum			±0.5		

