

Description

The Cooper PowerStor® Aerogel Capacitor is a unique, ultra-high capacitance device based on a novel type of carbon form, known as carbon aerogel. Aerogel capacitors are similar to Supercapacitors, ultracapacitors and electrochemical double layer capacitor (EDLCs) with the added benefit of low ESR (Equivalent Series Resistance)

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



SPECIFICATIONS

Working Voltage	5.5 volts
Surge Voltage	6.3 volts
Nominal Capacitance Range	0.1 to 1.5 F
Capacitance Tolerance	-20% to +80% (20°C)
Operating Temperature Range	-25°C to 70°C

STANDARD PRODUCTS

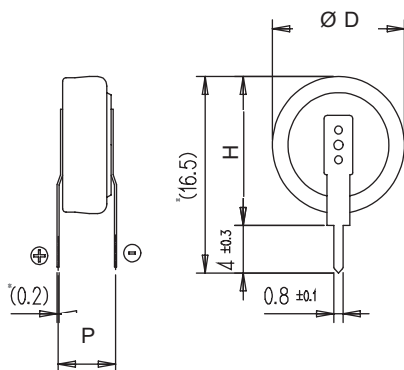
Nominal Capacitance (F)	Part Number	Nominal ESR (Equivalent Series Resistance) Measured @ 1kHz (Ω)	Nominal Dimensions	Typical Mass (grams/1 piece)
0.1	KR-5R5V104-R	75	$\varnothing=11.5\text{mm}$; L=12.5mm; P=5mm	1.4
0.1	KR-5R5H104-R	75	$\varnothing=11.5\text{mm}$; L=5mm; P=10mm	1.4
0.1	KR-5R5C104-R	75	$\varnothing=13.5\text{mm}$; L=7.5mm; P=5mm	3.3
0.22	KR-5R5V224-R	75	$\varnothing=11.5\text{mm}$; L=12.5mm; P=5mm	1.4
0.22	KR-5R5H224-R	75	$\varnothing=11.5\text{mm}$; L=5mm; P=10mm	1.4
0.22	KR-5R5C224-R	75	$\varnothing=13.5\text{mm}$; L=7.5mm; P=5mm	3.3
0.33	KR-5R5V334-R	50	$\varnothing=11.5\text{mm}$; L=12.5mm; P=5mm	1.4
0.33	KR-5R5H334-R	50	$\varnothing=11.5\text{mm}$; L=5mm; P=10mm	1.4
0.33	KR-5R5C334-R	50	$\varnothing=13.5\text{mm}$; L=7.5mm; P=5mm	3.3
0.47	KR-5R5V474-R	50	$\varnothing=11.5\text{mm}$; L=12.5mm; P=5mm	1.4
0.47	KR-5R5H474-R	50	$\varnothing=11.5\text{mm}$; L=5mm; P=10mm	1.4
0.47	KR-5R5C474-R	50	$\varnothing=13.5\text{mm}$; L=7.5mm; P=5mm	3.3
1.0	KR-5R5V105-R	30	$\varnothing=19\text{mm}$; L=19.5mm; P=5mm	4.2
1.0	KR-5R5H105-R	30	$\varnothing=19\text{mm}$; L=6.5mm; P=20mm	4.2
1.0	KR-5R5C105-R	30	$\varnothing=21.5\text{mm}$; L=7.5mm; P=5mm	9.1
1.5	KR-5R5V155-R	30	$\varnothing=19\text{mm}$; L=19.5mm; P=5mm	4.2
1.5	KR-5R5H155-R	30	$\varnothing=19\text{mm}$; L=6.5mm; P=20mm	4.2
1.5	KR-5R5C155-R	30	$\varnothing=21.5\text{mm}$; L=7.5mm; P=5mm	9.1

PERFORMANCE		
Parameter	Capacitance Change (% of initial measured value)	ESR (% of initial specified value)
Life (1000 hrs @ 70°C @ 5.5 volts DC)	≤ 30	≤ 400
Storage - Low and High Temperature (1000 hrs @ -25°C and 70°C)	≤ 30	≤ 400

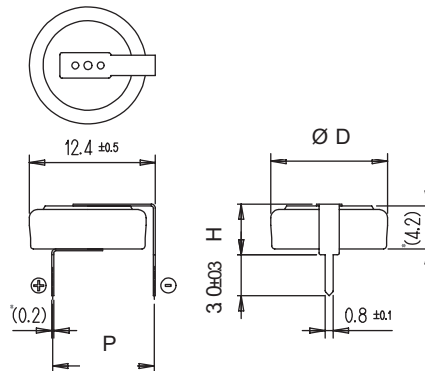
DIMENSIONS (mm)			
Part Number	Ø D	H	P
KR-5R5V104-R	11.5	12.5	5
KR-5R5H104-R	11.5	5	10
KR-5R5C104-R	13.5	7.5	5
KR-5R5V224-R	11.5	12.5	5
KR-5R5H224-R	11.5	5	10
KR-5R5C224-R	13.5	7.5	5
KR-5R5V334-R	11.5	12.5	5
KR-5R5H334-R	11.5	5	10
KR-5R5C334-R	13.5	7.5	5
KR-5R5V474-R	11.5	12.5	5
KR-5R5H474-R	11.5	5	10
KR-5R5C474-R	13.5	7.5	5
KR-5R5V105-R	19	19.5	5
KR-5R5H105-R	19	6.5	20
KR-5R5C105-R	21.5	7.5	5
KR-5R5V155-R	19	19.5	5
KR-5R5H155-R	19	6.5	20
KR-5R5C155-R	21.5	7.5	5

For parts 0.1F to 0.47F

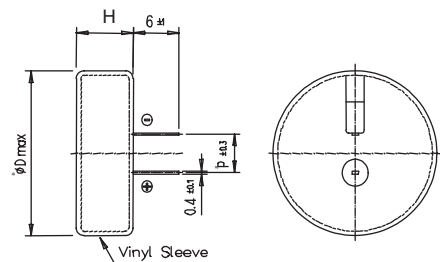
V type



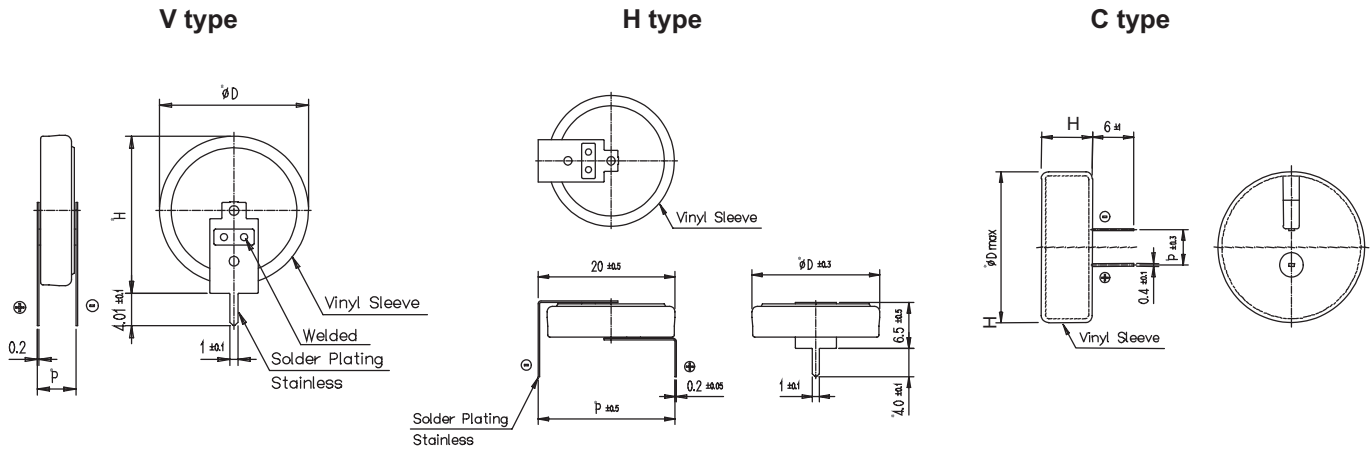
H type



C type



For parts 1.0F to 1.5F



PART NUMBERING SYSTEM

K	R	-	5	R	5			-	R
Series Code	Version		Voltage (V) R is decimal		Configuration	Capacitance (μ F)			RoHS Compliant
K = Coin Cell	R = Leaded		5R5 = 5.5V		V = Vertical H = Horizontal C = Cylindrical	Value	Multiplier	Example: 474 = $47 \times 10^4 \mu$ F or 0.47 F	

PACKAGING INFORMATION

Standard packaging: Bulk, 500 units per package.

For 0.1F to 0.47F 500 pcs/bag

For 1.0F to 1.5F 100 pcs/tray, 5 trays per box

PART MARKING

Manufacturer
Capacitance (F)
Max. Operating Voltage (V)
Polarity Marking